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Decades of research have focused on the negative impact multiple roles can have on workplaces and homes. Little attention has been given to the individual benefits that may result from simultaneous participation in these roles. Fortunately, a recent construct (i.e., work-family enrichment) has emerged which considers positive influences that one domain (i.e., work, family) has on another. This study utilized the 18-item Carlson et al. (2005) scale to study work-to-family enrichment, health, and selected demographics.

Keywords: Work-family enrichment; Work-family conflict; Health

Work-family issues have been under the microscopes of researchers over the past few decades. There is ongoing evidence suggesting that a lack of work and family balance leads to work-family conflict (Grzywacz & Bass, 2003; Major, Klein, & Ehrhart, 2002). Hence researchers have focused on the negative aspects of simultaneously participating in work and family roles. Research (e.g., Greenhaus & Buetell, 1985) suggests that through dual participation in work and family roles an individual's life will become stressed and depleted. The resulting conflict has been found to negatively influence employee well-being (Frone, 2000; Frone, Russell, & Cooper, 1997; Madsen, John, & Miller, 2005; Major et al., 2002) and organizational performance (Allen, Herst, Bruck, & Sutton, 2000). Understandably attention has primarily focused on the time-, stress-, and behavior-based spillover between these roles as well as the work-to-family and family-to-work interference (Carlson, Kacmar, & Williams, 2000; Greenhaus & Buetell, 1985). Therefore, decades of research have focused on the negative impact multiple roles have had on workplaces and homes, while little attention has been given to the individual benefits that may result from simultaneous participation in these roles.

Researchers (e.g., Carlson, Kacmar, Wayne, & Grzywacz, 2006; Greenhaus & Powell, 2006) are beginning to shift the focus from these negative aspects to discovering the positive potential available to those who choose to juggle both work and family roles. Coming to the rescue of those enjoying a full and joyful life through combining work and family roles, an emerging body of research is exposing the benefits derived from multiple role participation. This research reveals that individuals can experience various benefits and an increase in the quality of life (Carlson et al., 2006; Greenhaus & Powell, 2006). This new construct is called work-family enrichment. Greenhaus and Powell (2006) have recently conceptualized this construct and defined it as the extent to which experiences in one role improve the quality of life in another role. Work-family enrichment occurs when resources gained in one role either directly improve performance in the other role (instrumental) or indirectly through the influence on positive affect (affective) (Carlson et al., 2006).

The Department of Labor is calling flexibility and family one of the three major challenges facing workers and employers in the 21st century (U.S. Department of Labor, 1999; Grzywacz & Bass, 2003). An increasing number of dual career and single parent families are entering the workforce, while the care giving needs of the aging population is rising. These trends provide new challenges and responsibilities for men and women to unify work and family commitments (Grzywacz, 2000). Additionally, the Families and Work Institute reported that work-life balance was ranked among one of the most important factors considered by individuals in accepting new positions (Parasuraman & Greenhaus, 1997). In order for employers to attract and retain the most capable human resources, attention must be focused on the interdependencies of the work-family interface. Understanding the benefits of combining work and family will assist men and women in their quests for greater satisfaction in life. It will also help employers understand how to cultivate greater job satisfaction among their employees and improve individual and organizational performance.

Theoretical Framework

The theoretical framework for enrichment focuses on the generation and application of resources gained through participating in work and family roles that, when applied, result in improved performance or positive affect in the Copyright © 2007 Misti Stoddard & Susan R. Madsen

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other role (Carlson et al., 2006). There are three main components that outline the theoretical framework of work-family enrichment: resources generated in work and family roles, paths that promote enrichment in each role, and enrichment directions and dimensions.

First, Greenhaus and Powell (2006) describe a resource as "an asset that may be drawn on when needed to solve a problem or cope with a challenging situation" (p. 80). Greenhaus and Powell (2006) have identified and defined five types of resources that have the ability to promote enrichment: skills and perspectives, psychological and physical resources, social-capital resources, flexibility, and material resources. Skills and perspectives refer to cognitive and task related interpersonal skills; perspective deals with handling situations and respecting differences. Psychological and physical resources include self-esteem and self-efficacy, as well as positive emotions about the future. Social-capital resources are interpersonal relationships developed at work or through family participation that help an individual achieve their goals. Flexibility refers to an individual's ability to determine the timing, pace, and location that role requirements are met. Material resources include money and gifts obtained from work and family roles. Enrichment occurs when resources generated through participation in Role A (i.e., work or family) are applied and promote either increased performance or positive affect in Role B (i.e., work or family), thus increasing the quality of life in Role B.

Second, Greenhaus and Powell (2006) found that resources promote enrichment primarily through two different paths: instrumental and affective (see Figure 1). The instrumental pathway is illustrated through prior research revealing that employees believe their family involvement has prepared them with resources necessary to handle coworkers or these resources have increased their ability to perform on the job (Crouter, 1984; Carlson et al., 2006). In the instrumental path, resource gains have a direct effect and the application results in improved performance in the other role. For example, managers who learn greater communication skills through work experience are able to apply this skill with their families, thus decreasing conflict and increasing the quality of family life. In addition, the affective path promotes enrichment indirectly through influence on moods and emotions resulting from role participation (Greenhaus & Powell, 2006; Carlson et al., 2006). More specifically, as individuals gain greater resources through ongoing participation in one role (i.e., work or family) their mood or emotional state in that role has increased. This can aid their performance in the other role (Greenhaus & Powell, 2006). For example, as an employee receives a promotion their emotional state or mood at work has increased and this positive affect will likely carry over to home life thus increasing the quality of his or her performance at home (Carlson et al., 2006). Therefore, the affective path promotes positive affect in the same role it was generated (positive mood at work) and results in an increased performance in the other role (greater positive mood at home).

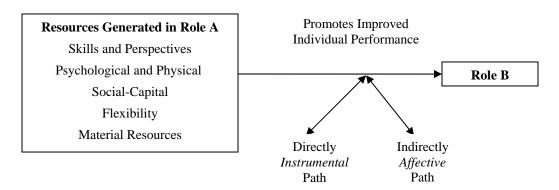


Figure 1. Work-family enrichment resources

Third, work-family enrichment is conceptualized as being multidimensional, meaning work can provide resources gains that enhance performance in the family domain or family can provide resources gains that improve performance in the work domain (Carlson et al., 2006). It considers the resources gained through work experience that are *transferred* to family life resulting in either increased performance or positive affect in the family role, and it looks at family experiences that translate to increased performance or affect at work. In addition to the directions (i.e., work-to-family enrichment and family-to-work enrichment), Carlson et al. (2006) further investigated three dimensions for each direction of enrichment. These dimensions were defined by Carlson et al. (2006) as follows:

- 1. Work-to-family direction:
 - *Development* occurs when involvement in work leads to the acquisition or refinement of skills, knowledge, behaviors, or ways of viewing things that help and individual be a better family member.

- Affect is defined when involvement in work results in a positive emotional state or attitude which helps the individual be a better family member.
- *Capital* occurs when involvement in work promotes levels of psycho-social resources such as a sense of security, confidence, accomplishment, or self-fulfillment that helps the individual be a better family member.

2. Family-to-work direction:

- *Development* occurs when involvement in family leads to the acquisition or refinement of skills, knowledge, behaviors or ways of viewing things that help an individual be a better worker.
- Affect occurs when involvement in family results in a positive emotional state or attitude which helps the individual be a better worker.
- Efficiency occurs when involvement with family provides a sense of focus or urgency which helps the individual be a better worker.

Literature Review

Although work-family enrichment is a new construct, researchers have previously examined the positive effects of work and family roles. These constructs are namely positive spillover (Crouter, 1984; Grzywacz, 2000), facilitation (Grzywacz, 2002) and enhancement (Sieber, 1974). Throughout the literature these constructs have been used interchangeably to describe the positive associations between work and family (Frone, 2003; Carlson et al., 2006). A review of this literature reveals interesting relationships between the positive side of the work-family interface and various constructs.

Several studies have found relationships between work-family facilitation and health (mental, emotional, and physical). Most of the findings suggest facilitation contributes to increased physical and mental health. For example, Grzywacz and Bass (2003) found that work-family facilitation was associated with lower risk of mental illness, depression, and problem drinking. In fact, each unit increase in family-to-work facilitation was associated with a 15 percent decrease of reporting depression and a 38 percent decrease in reporting problem drinking. Hanson, Hammer and Colton (2006) discovered the more resources available to an individual at home, the higher their level of mental health. Grzywacz (2000) also found that positive spillover was related to lower levels of problem drinking and was associated with better self-reported mental health. Interestingly, even in the 1980s, Baruch and Barnett (1986) stated that "empirical evidence and theory are converging to suggest that, for women as well as men, involvement in a multiplicity of roles yields a net gain of benefits over costs with respect to both physical and mental health" (p. 578). In other words, participating in multiple roles may have additive effects on an individual's physical health.

Studies have also found relationships between work-family conflict and adverse health outcomes. Most of the findings suggest the opposite of enrichment—that conflict contributes to a decrease in physical and mental health. For example, Frone et al., (1997) and Frone, Russell, and Barnes (1996) reported that conflict is related to increased levels of depression, poor physical health, hypertension and heavy alcohol consumption. Major et al. (2002) also found significant correlations between work-family conflict and somatic complaints as well as depression. Madsen, John, and Miller (2005) also found a significant relationship between higher employee perceptions of both work-to-family and family-to-work conflict and their own perceptions of personal mental and physical health. In combination these studies present persuasive evidence that both work-family enrichment and work-family conflict are related either favorably (e.g., enrichment) or unfavorably (e.g., conflict) to health outcomes.

In regards to demographics, a study conducted by Grzywacz and Marks (2000) research found interesting individual characteristics in relationship to work-to-family positive spillover. Their findings report that younger men experience less positive spillover than older men from both the work-to-family and family-to-work direction and that younger women experience greater positive spillover form the work-to-family direction than older women. In addition, this study reports that men with children experience a higher level of positive spillover from the work-to-family direction than men without children. An examination of work-family conflict literature and demographics reveal employee age is weakly, yet significantly related to work-to-family conflict (Madsen et al., 2005). However, little research has been reported on possible relationships between work-family enrichment and age.

Several studies have examined the relationships between the work-family interface (positive and negative) and gender. Some researchers have found no significant differences across gender (Frone et. al, 1996; 1997; Grzywacz 2000). However, other studies (e.g., Grzywacz & Marks 2000; Rothbard 2001) have shown that women report a higher positive emotional reaction from the work-to-family direction than men. Additionally, work-to-family conflict research has found no significant findings in relation to conflict and gender (Frone et al., 1996; Frone et al., 1997). Therefore, the findings tend to be inconsistent.

Purpose and Hypotheses

The purpose of this current study is threefold: 1) to examine the degree to which employees at retail establishments perceive work-family enrichment in their lives; 2) to contrast these perceptions with participants' perceptions of their own mental, physical and overall health; and 3) to investigate the relationship between enrichment perceptions and the following employee demographics: gender, number of children, marital status, work status, employee age, and educational level. The proposed hypotheses are as follows:

Hypothesis 1a-i: Overall health, mental-emotional health, and physical health will be positively related to perceived work-to-family enrichment (a), family-to-work enrichment (b), work-to-family development (c), work-to-family affect (d), work-to-family capital (e), family-to-work development (f), family-to-work affect (g), family-to-work affect (h), and family-to-work efficiency (i).

Hypothesis 2: The perceived enrichment felt from family-to-work will be significantly higher than work-to-family.

As outlined previously, in addition to the two proposed hypotheses, we were also interested in exploring the various relationships between the demographics listed previously and each of the study variables (enrichment and health).

Research Methods

The sample for this research study included sales employees from two different branches of a large retail business within the state of Utah. Both branch managers distributed the survey and an approved letter of consent to employees at a weekly sales meeting where most were in attendance. The employees completed the survey and personally deposited it into a large envelope provided. A key contact at each branch immediately sealed the envelope after all the surveys were collected. A researcher picked up the envelope the following week.

Two scales were used to measure the variables of this study—enrichment and health. Both used a 5-point scale where "1" was strongly disagree and "5" was strongly agree. First, an 18-item work-family enrichment scale, recently developed and validated by Carlson et al. (2006), was used to measure the degree of enrichment. This multidimensional measure of work-family enrichment scale measured resource gains in both directions (work-tofamily and family-to-work) of the work-family interface. With each direction, scale items also included the three dimensions (i.e., development, affect, and capital/efficiency) outlined previously. Since resource generation is essential to the enrichment process, Carlson et al. (2006) included resource gains as outlined by Greenhaus and Powell (2006). This included the instrumental (e.g., skills, self efficacy) and affective (e.g., moods and attitudes) paths. Carlson et al. (2006) reported, "Ultimately, we produced a list of 14 potential resource gain through which enrichment might occur including perceptions by others, behavior, skills, knowledge, perspectives, time, energy, resources, support, self-fulfillment, self-esteem/self-efficacy, moods and attitudes" (p. 9). As previously mentioned, enrichment is different from other constructs examining the positive side of the work-family interface in the way it requires a transfer of resources gained in one role that results in improved performance in the other role. Therefore, Carlson et al. (2006) developed this scale to capture the resource, application and positive result. For example, the first question asks, "My involvement in work helps me to understand different viewpoints and this helps me be a better family member." In order to strongly agree to this item the participant must first agree that work involvement helps to understand different viewpoints AND then agree that these different viewpoints transfer to home life making that participant a better family member. Carlson et al. (2006) pilot tested two versions of this scale and the Cronbach's alpha for the nine work items was .92, nine family items was .86, and the full scale (all 18 items) was .92. Of course this indicates strong internal consistency. Reliability in this study was similar to Carlson et al.'s with overall enrichment (alpha=.91), work-family items (alpha=.89) and family-work items (alpha=.88).

The second scale was an adapted 7-item health instrument developed by Madsen, John, and Miller (2005). It was used to measure overall health perceptions (i.e., mental, emotional, physical). It was originally adapted from subscales within Hanpachern's (1997) Revised Margin in Life instrument (Madsen et al., 2005). The Cronbach's alpha of this scale in this study was .85.

Six demographic questions were added to the final instrument. These included work status, age, gender, marital status, education level and number of children.

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-family enrichment and health constructs) and the combination of applicable demographic (predictor) variables for the sample.

Results

Of the 190 distributed questionnaires, 119 were returned; and 116 were deemed usable and were included in the study results for a return rate of 61 percent. Three surveys were returned to incomplete to use. Selected demographic results were gathered and compiled (see Table 1). In summary, most employees surveyed were male, worked full-time, had no children and were either attending college presently or had some college experience.

Table 1. Demographic Frequencies of the Sample

Demographic	Category	Frequencies	%	
Sample	Total number	116	100	
Gender	Male	86	74.1	
	Female	30	25.9	
Age range	Less than 21	07	6.0	
	21-30	66	56.8	
	31-40	20	17.2	
	41-54	16	14	
	55+	07	6.0	
Marital status	Single	24	20.7	
	Married	91	78.4	
	Divorced	01	.9	
Highest educational level	High School	09	7.7	
	Some College	54	46.6	
	Associate Degree	31	26.7	
	Bachelor Degree	19	16.4	
	Masters/PhD	03	2.6	
Number of children	0	48	41.4	
	1	20	17.2	
	2	15	12.9	
	3	15	12.9	
	4+	18	15.6	
Work Status	Full-Time	97	83.6	
	Part-Time	04	3.5	
	Three-quarter Time	15	12.9	

Overall, employees in this study perceived themselves as having moderate levels of enrichment with a statistical mean (M) of 3.45 on the 5-point scale described. In addition, employees gain a higher positive emotional state from family involvement (M=3.92) than from work involvement (M=2.72) and acquire more skills, knowledge and behaviors from family involvement (M=3.68) than from work involvement (M=3.46). Employees have a moderate sense of focus or urgency (M=3.59) from family that helps them be a better worker. These employees have strong overall health (M=4.16), with stronger mental/emotional health (M=4.23) than physical health (M=4.04) (see Table 2). Additionally, mean levels of family-to-work enrichment (M=3.73) were statistically higher than work-to-family mean levels (M=3.17).

A Pearson's correlation statistical test was used to analyze the relationship between enrichment from both the work-to-family and family-to-work directions, health (mental-emotional, physical, overall) and demographics. Significance was determined at the p < .05 level. Pearson's test revealed statistically significant relationships between enrichment and all three health variables examined: mental-emotional (WFE, r = .228; FWE, r = .393), physical health (WFE, r = .221), overall health (WFE, r = .228; FWE, r = .393). Through this analysis a stronger correlation is revealed in the family-to-work direction when compared to the work-to-family direction (see Table 3).

Table 2. Constructs, Means, and Standard Deviations

Variable	M	SD
Enrichment	3.45	.63
Work-to-family enrichment (WFE)	3.17	.72
Family-to-work enrichment (FWE)	3.73	.72
Work-to-family development (WFD)	3.46	.79
Work-to-family affect (WFA)	2.72	.92
Work-to-family capital (WFC)	3.32	.92
Family-to-work development (FWD)	3.68	.82
Family-to-work affect (FWA)	3.92	.92
Family-to-work efficiency (FWEF)	3.59	.95
Overall Health	4.16	.68
Mental -emotional health (MEH)	4.23	.75
Physical health (PH)	4.04	.82

Table 3: Intercorrelations Among Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	10a	10b	11	12	13	14	15
1. Enrichment																	
2. WFE	.87																
3. FWE	.88	.54															
4. WFD	.73	.76	.52														
5. WFA	.70	.85	.38	.43													
6. WFC	.75	.87	.45	.49	.62												
7. FWD	.69	.42	.80	.49	.23	.32											
8. FWA	.72	.47	.79	.42	.38	.36	.42	-									
9. FWEF	.73	.43	.85	.36	.30	.40	.56	.47									
10. Health	.35	.23	.39	.22	.18	.17	.33	.31	.32								
a. MEH	.35	.23	.40	.25	.14	.19	.35	.29	.33	.88							
b. PH	.21	.13	.24	.08	.15	.09	.17	.20	.20	.87	.56						
11. Work status	.10	.09	.11	.08	.05	.08	.13	.06	.08	.01	01	.03	-				
12. Age	.07	.18	06	.08	.19	.16	.05	09	09	11	01	15	12	1			
13. Gender	00	05	.04	.02	04	09	.12	.02	02	16	28	02	.24	16	1		
14. Children	.07	.16	03	.12	.11	.15	.06	02	09	07	02	10	10	.70	21		
15. Marital	03	08	.03	02	15	03	02	.04	.05	.06	.15	03	04	.06	33	.22	
16. Education	04	09	.01	01	11	09	01	.01	.02	.09	.08	.08	.02	.03	19	.19	.21

 $r \ge [.19], p < .05; r \ge [.24], p < .01; r \ge [.29], p < .001; n=116$

Table 3 also reveals one significant correlation between age and work-to-family affect but no other significant statistics were found between the core study constructs and the six demographic variables. Multiple regressions were used to analyze the relationship between enrichment and demographics (i.e. work status, age, gender, number of children, marital status, and education level). Again, the only statistically significant correlation discovered was between work-to-family affect and age (r = .192). The other variables had no predictive power.

The findings of this study should be viewed in light of its limitations. First, the sample size was small with only 116 participants. Second, the study only examined two stores in one industry. Third, the instrument was a survey questionnaire and it did not ask or collect any in-depth and insightful responses from participants.

Discussion

As Carlson et al. (2006) and Greenhaus and Powell (2006) have argued, the findings of this study suggest that employees do perceive a positive connection between work and family. They believe (moderately to strongly) that work can enrich family and that family can enrich work. These results also suggest that enrichment exists in this sample from both the work-to-family and family-to-work direction. However, it is clear that the influence of family-to-work enrichment is stronger. This finding supports current research of Greenhaus and Powell (2006) also stating a substantially stronger family-to-work relationship than work-to-family relationship. This means that family provides more resources to enrich work than does work provide for enriching family. The *affect* variable is of particular

interest with a mean from family-to-work being substantially higher (by over a full point, the difference between 2.72 to 3.92) compared to work-to-family affect. Again, affect refers to a one domain providing a positive emotional state or attitude that assists in the other domain. In this sample participants perceive much greater positive influences coming from home with regard to affect or their emotional states.

This study also suggests that enrichment and health may influence one another. Overall health and mental-emotional health were strongly correlated to enrichment in the family-to-work direction, suggesting that family participation supports the mental-emotional and overall health of an individual. It is important to note that this study did not examine the direction of this relationship. These findings also support those of Grzywacz and Bass (2003), Hanson et al. (2006), Grzywacz (2000), and Baruch and Barnett (1986) who also found positive health behaviors (lower mental illness, depression, and problem drinking; higher overall mental and physical health). Of course the current study measured only the employees' perceptions of health, not actual health. However, it is clear that perceptions are an important measure of various dimensions of health and overall wellbeing. Most of the previously health-related studies (e.g., Frone et al., 1997; Frone et al., 1996; Madsen et al., 2005; Major et al., 2002) have researched the relationship between work-family conflict and stress with decreased wellbeing. This also supports the notion that employees who have lower levels of enrichment also have lower perceptions of mental and physical health.

The limitations of this study, particularly the sample size, possibly contributed to the lack of significant findings with regard to the various demographics studied in this research. As mentioned previously, the only relationship discovered was between work-to-family affect and age. In other words, the older the participant the more the more work involvement results in a positive emotional state or attitude. It is difficult to posit a specific reason for this finding. It could be that older employees have worked in these branches longer and have stayed longer because the job brings them satisfaction. We did not study length of time with the employer so this may or may not be the case. It may also be that younger employees have no or fewer children. The age and number of children has been shown to affect work-to-family conflict. Intuitively then, the lack or fewer number of children (particularly young children) may influence employees' perceptions of positive or negative emotional states or attitudes. A final explanation may be that with age and experience comes insight and reflective skills that may result in increased abilities to bring more positive work-related feelings and attitudes home. This finding is generally supported by Grzywacz and Marks (2002) research findings that older men experienced more positive spillover from work-to-family. However, they also found the same from family-to-work which did not appear in this study. Some past literature also reported gender differences but the current study found none. Again this may be related to small sample size and lower number of women participants.

Contributions, Implications, and Suggestions for Future Research

This study offers contributions to the human resource development literature. First, it provides support for some of the existing literature outside the HRD arena that presents some new constructs for consideration in this area. Second, the concept of work-family enrichment is in its infancy with regard to research and literature. Carlson et al.'s (2006) 18-item instrument was published in 2006 and, at the time of this research, no other researchers had published studies utilizing the newly created scale. This study provides support for the scale and its continued use to measure these constructs. Third, it supports the premise that (as with work-family conflict) work-family enrichment and health are complex phenomenon and influential factors need to be explored for progress in both research and practice. Finally, although cause-effect conclusions can only be suggested from these findings, practitioners may begin to consider this information as they assess, design, and evaluate new and existing workplace programs or initiatives in the work-life realm.

The results of this study suggest recommendations for practitioners. First, as training and development programs and organization development interventions are designed, knowledge of enrichment will aid in understanding the types of resources and skills employees are able to utilize to increase performance in their work and family roles. This understanding provides practitioners additional tools to strategically utilize enrichment to achieve organizational goals. Effective interventions based on work-family enrichment may have positive implications for career development, retention, and job satisfaction which are linked to the increase of individual and organizational effectiveness. Second, many organizational leaders consider work-family enrichment interventions as nonessential or unrelated to the bottom line. Yet, it is clear that there is a relationship between work-family enrichment and health. Yet in today's workplaces health is seen as directly influencing 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 and

work-life issues). Overall, interventions focused on these relationships should be considered. This research can also provide support for human resource professionals who are writing proposals for such initiatives.

There are several recommendations for future research. First, research needs to be continued to determine the casualty of enrichment construct with other variables; specifically, an investigation into the perceptions of a stronger link between family-to-work enrichment and a variety of possible moderating and influential factors. This research only addressed a few. Further investigation into the role of gender and enrichment (Greenhaus & Powell, 2006) is also needed as well as a deeper understanding of the relationship between age and enrichment. Research is also needed on the types of different resources that provide the greatest enrichment for individuals.

References

- Allen, T. D., Herst, D. E., Bruck, C. S., & Sutton, M. (2000). Consequences associated with work-family conflict: A review and agenda for future research. *Journal of Occupational Health Psychology*, *5*(2), 278-308.
- Barnett, R. C., & Baruch, G. K. (1986). Role quality, multiple role involvement, and psychological well-being in midlife women. *Journal of Personality and Social Psychology*, *51*(3), 578-585.
- Carlson, D. S., Kacmar, M. K., Wayne, J. H., & Grzywacz, J. G. (2006). Measuring the positive side of the work-family interface: Development and validation of a work-family enrichment scale. *Journal of Vocational Behavior*, 68(1), 131-164.
- Carlson, D. S., Kacmar, M. K., & Williams, L. J. (2000). Construction and validation of a multidimensional measure of work–family conflict. *Journal of Vocational Behavior*, 56(2), 249–276.
- Crouter, A. (1984). Participative work as an influence on human development. *Journal of Applied Developmental Psychology*, 5(1), 71-90.
- Frone, M. R. (2000). Work-family conflict and employee psychiatric disorders: The National Comorbidity Survey. *Journal of Applied Psychology*, 85(6), 888–895.
- Frone, M. R., Russell, M., & Barnes, G. M. (1996). Work-family conflict, gender and health related outcomes: A study of employed parents in two community samples. *Journal of Occupational Health Psychology*, 1(1), 57-69.
- Frone, M. R., Russell, M., & Cooper, M. L. (1997). Relation of work-family conflict to health outcomes: A four-year longitudinal study of employed parents. *Journal of Occupational and Organizational Psychology*, 70(4), 325-335.
- Hanpachern, C., Morgan, G. A., & Griego, O. V. (1998). An extension of the theory of margin: A framework for assessing readiness for change. *Human Resource Development Quarterly*, 9(4), 339-350.
- Hanson, G. C., Hammer, L. B., & Colton, C. L. (2006). Development and validation of a multidimensional scale of perceived work-family positive spillover. *Journal of Occupational Health Psychology*, 11(3), 249-265.
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, 10(1), 76-88.
- Greenhaus, J. H., & Powell, G. N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review*, 31(1), 72-92.
- Grzywacz, J. G., & Bass, B. L. (2003). Work, family, and mental health: Testing different models of work-family fit. *Journal of Marriage and Family*, 65(1), 248-262.
- Grzywacz, J. G. (2000). Work-family spillover and health during midlife: Is managing conflict everything? *American Journal of Health Promotion*, 14(14), 236-243.
- Madsen, S. R., John, C. R., & Miller, D. (2005). Work-family conflict and health: A study of workplace, psychological, and behavioral correlates. *Journal of Behavioral and Applied Management*, 6(3), 225-247.
- Major, V. S., Klein, K. J., & Ehrhart, M. G. (2002). Work time, work interference with family, and psychological distress. *Journal of Applied Psychology*, 87(3), 427-436.
- Parasuraman, S., & Greenhaus, J. H. (1997). The changing world of work and family. In S. Parasuraman & J. H. Greenhaus (Eds.), *Integrating work and family: Challenges and choices for a changing world* (pp. 3-14). Westport: Praeger.
- Rothbard, N. (2001). Enriching or depleting? The dynamics of engagement in work and family roles. *Administrative Science Quarterly*, 46(4), 655-684.
- Sieber, S. D. (1974). Toward a theory of role accumulations. *American Sociological Review*, 39(4), 567-578.
- U.S. Department of Labor. (1999). *Futurework: Trends and challenges for work in the 21st century*. Washington DC: U.S. Department of Labor.