Antecedents of the Positive Work-Family Interface – A Meta-Analysis

Master’s Thesis

Yanhong Li

Supervisor: Dr. Laurent Lapierre

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ABSTRACT

This study meta-analyzed relationships between proposed antecedents and both directions of work-family enrichment (i.e., work-to-family enrichment and family-to-work enrichment). Proposed antecedents, which were derived from three existing theoretical models on the positive interface between work and family, include contextual and personal characteristics from both work- and family-domains. Primary studies included in the meta-analyses were from both published and unpublished sources between 1990 and 2016. The results suggest that several contextual and personal characteristics are significantly related to work-family enrichment. Gender’s moderating effect on the relationship between contextual characteristics and work-family enrichment received little support. Comparisons between examined antecedents of work-family enrichment and antecedents of work-family conflict supported the notion that work-family enrichment and work-family conflict are distinct constructs; in other words, enrichment is not merely the opposite of conflict. Practical implications and suggestions on future research are discussed.
INTRODUCTION

Recent decades have witnessed changing employment patterns and family roles. Increasing representation of dual-earner families and the growing number of employees with multigenerational caring responsibilities (Fox, Han, & Waldfogel, 2013; Fredriksen & Scharlach, 1999) have attracted researchers to devote their work to explain the work-family interface (Barnett, 1998; Barnett, 1999; Edwards & Rothbard, 2000; Lambert, 1990). Previously, the work-family literature had been heavily skewed towards the conflict perspective, which assumes that the multiple roles of an individual inevitably lead to the experience of conflict and stress (Barnett, 1998). Corresponding to the growing attention on positive psychology, which emphasizes strengths and health rather than weakness and illness, work-family scholars have increasingly recognized the positive side of the work-family interface (Barnett, 1998; Frone, 2003; Greenhaus & Powell, 2006; Wayne, Grzywacz, Carlson, & Kacmar, 2007; ten Brummelhuis & Bakker, 2012).

As a result, research focused on work-family enrichment has grown substantially and suggested that it is an important predictor of work, family, and life outcomes (Casper, Eby, Bordeaux, Lockwood, & Lambert, 2007). Greenhaus & Powell (2006) define work-family enrichment as “the extent to which experiences in one role improve the quality of life in the other role”. A variety of labels are used in the literature to describe the positive side of the work-family interface, including positive spillover, enhancement, and facilitation. The present study adopted Greenhaus and Powell’s (2006) definition of “work-family enrichment” as its study construct. Greenhaus and Powell’s (2006) review of nineteen studies reveals that although most researchers used terms other than enrichment (e.g., positive spillover), the measures used by those researchers indicate that the concept is consistent with Greenhaus and Powell’s definition of
work-family enrichment. Calson, Kacmar, Wayne, and Grzywacz (2006) have also suggested that constructs like positive spillover and facilitation can be grouped under enrichment. Therefore, work-family enrichment appears to be the most inclusive construct to study the positive interface of the work and family domains.

Work-family enrichment is a bi-directional construct. In other words, work can enrich family, which is termed as work-to-family enrichment (WFE); family can enrich work, which is termed as family-to-work enrichment (FWE). A meta-analysis on the consequences associated with work-family enrichment reveals that work-family enrichment is related to increased job satisfaction, increased affective commitment, higher family satisfaction, and improved physical and mental health (McNall, Nicklin, & Masuda, 2010). Furthermore, in terms of work-related outcomes, individual empirical studies have also shown that work-family enrichment is related to lower levels of turnover intention, improved job performance, and decreased burnout (Carlson, Kacmar, Zivnuska, & Ferguson, 2011; Liu & Cheung, 2015; Wayne, Randel, & Stevens, 2006). With respect to non-work related consequences, work-family enrichment is shown to be associated with greater family satisfaction, marital satisfaction, and life satisfaction (Hanson, Hammer, & Colton, 2006; Masuda, McNall, Allen, & Nicklin, 2012; van Steenbergen, Kluwer, & Karney, 2014). Regarding health-related outcomes, research suggests that work-family enrichment is related to reduced depression, reduced depression of spouse, better physical health, and a lower level of psychological distress (Carlson, Hunter, Ferguson, & Whitten, 2014; Carlson et al., 2011; Hammer, Cullen, Neal, Sinclair, & Shafiro, 2005). Due to its significant outcomes, it is important to examine the factors that influence employees’ experience of enrichment between their work and family roles (i.e., antecedents of work-family enrichment).
A number of scholars have theorized that individual characteristics, work- and family-domain variables play important roles in predicting work-family enrichment (Greenhaus & Powell, 2006; Grzywacz, Carlson, Kacmar, & Wayne, 2007; Rothbard, 2001; ten Brummelhuis & Bakker, 2012); however, relationships between potential antecedents and work-family enrichment revealed by individual empirical studies often vary considerably (Grzywacz, Almeida, & McDonald, 2002; Heller & Watson, 2005; Powell & Greenhaus, 2010; Wayne, Musisca, & Fleeson, 2004). Conflicting results in the literature could raise concern in theory construction. Moreover, conflicting results are not beneficial for practitioners when developing policies to improve employee experiences and performance. To address this issue, the purpose of the present study was to empirically examine those relationships using meta-analyses. Specifically, I examined contextual and personal characteristics in work- and family-domains as antecedents for work-family enrichment. I also examined gender’s moderating effect on the relationships between work-family enrichment and its antecedents.

**THEORY AND HYPOTHESES**

**Work-Family Enrichment Theory**

Several theoretical models have been developed to help explain the process of work-family enrichment and guide research in the area (Greenhaus & Powell, 2006; Wayne, Grzywacz, Carlson, & Kacmar, 2007; ten Brummelhuis & Bakker, 2012). This section builds on the existing models to provide a theoretical model of work-family enrichment and its antecedents. The model is displayed in Figure 1.

Greenhaus and Powell’s (2006) model of work-family enrichment proposes that resources generated in role A can promote high performance and positive affect in role B
through two different paths. A resource can 1) be transferred directly from role A to role B and thus enhances performance in role B, a mechanism referred to as the instrumental path, and 2) promote positive affect within role A, which in turn, produces high performance and positive affect in role B, a mechanism referred to as the affective path.

It is suggested that the generation of resources, which is likely to be determined by role characteristics and personal characteristics, plays a crucial role in driving the enrichment process. Five types of resources are proposed that can be generated in a role, including *skills and perspectives* (e.g., cognitive and interpersonal skills, coping skills, respecting individual differences, valuing differences in cultural background), *psychological and physical resources* (e.g., self-efficacy, personal hardiness, physical health), *social-capital resources* (e.g., influence, information), *flexibility* (e.g., flexible work arrangements), and *material resources* (e.g., money, gifts). When such resources are acquired in one role, individuals may be able to transfer them into another role through the instrumental or the affective path. For example, an employee’s time-management skill acquired at work may directly improve his/her performance at home (instrumental path). It is also possible that resources in one role produce enrichment to another role through positive affect. For example, one’s time-management skill acquired at work helps improve the individual’s performance in the work domain, which produces positive affect and in turn enhances one’s performance at home.

**The Resource-Gain-Development perspective (RGD).** The RGD (Wayne et al., 2007) termed the positive work-family interface as “work-family facilitation”. The authors extended from Positive Organizational Scholarship, Ecological Systems Theory, and Conservation of Resources Theory and developed the Resource-Gain-Development perspective to explain work-family facilitation. The model proposes that work-family facilitation occurs when gains acquired
in one domain (i.e., work/family) are transferred to and therefore enhance functioning of the other domain (i.e., family/work). Four categories of gains can be acquired in each domain, including developmental gains (i.e., the acquisition of skills, knowledge, values, or perspectives), affective gains (i.e., alteration in moods, attitudes, confidence, or other aspects of emotion), capital gains (i.e., the acquisition of economic, social, or health assets), and efficiency gains (i.e., the enhanced focus or attention induced by multiple role responsibilities).

According to the RGD (Wayne et al., 2007), personal characteristics and environmental characteristics that contribute to gains in one domain are key enablers for facilitation. In other words, the greater resources an individual has, the greater the potential for facilitation. Personal characteristics refer to aspects of an individual that promote and cause him/her to experience and seek more positivity, such as positive emotion and positive developmental experiences. These gains then contribute to better functioning in the other domain and thus complete the facilitation process. Environmental resources that promote positive, dynamic, and enriching domain experiences allow an individual to acquire gains and therefore enable facilitation. Additionally, the RGD also proposes that an individual’s demand characteristics can influence the type and degree of environmental resources available to him/her and therefore influence the potential for facilitation. Different individuals may also utilize similar resources in different ways. For example, when family supportive resources are available, women more readily utilize them compared to men, resulting in greater likelihood of facilitation (Wayne et al., 2007).

**The Work-Home Resources (W-HR) model.** Using conservation of resources (COR) theory (Hobfoll, 1989, 2002), the Work-Home Resources (W-HR) model (ten Brummelhuis & Bakker, 2012) provides an integrative perspective on the work-home interface (Greenhaus & ten Brummelhuis, 2013). The W-HR model suggests that resources are essential in the enriching
processes between work and family. Resources are categorized into two types by the source, or origin of the resources. Contextual resources are resources that are located outside of the self and are found in the social context, while personal resources are proximate to the self. It is proposed that, in the enriching processes, personal resources act as the messengers that positively link the work and family domains. Specifically, in consonance with the idea of a gain spiral, which suggests that resources can produce other resources, contextual resources in one domain generate more personal resources that consequently facilitate performance in the other domain. For example, support from one’s supervisor at work (a contextual resource) may lead to enhanced self-esteem (a personal resource), which can subsequently facilitate one’s performance at home. Another type of resources, termed as key resources, play an important role in the work-family enrichment process. Key resources are “management resources that facilitate the selection, alteration, and implementation of other resources” (p. 548). Individuals who possess certain key resources are more likely to collect new resources and therefore more likely to experience enrichment. For example, employees who are more engaged in their work role are more likely to take on new challenges and thus generate new skills and perspectives to be transferred to their home roles.

In addition, the W-HR model also proposes ways in which contextual demands, either from work or from family, inhibit the processes of work-family enrichment (ten Brummelhuis & Bakker, 2012). In contrast to the idea of a gain spiral, a loss spiral is a process “in which stress develops and resources further deplete” (p. 547). Contextual demands lead to a loss in personal resources, which makes it less likely for someone to collect more contextual resources, which makes it more difficult for someone to collect additional resources (Hobfoll, 2002). For example, family overload consumes one’s time and energy (personal resources), which results in a lower
likelihood of the individual gaining other contextual resources to be turned into, for instance, skills and knowledge (personal resources), and thus ultimately reduces the potential for the enriching processes to the work domain. Hence, the W-HR model suggests that contextual demands in domain A (work or family) make the occurrence of A-to-B enrichment less likely by depleting resources that could be used in the other role.

All three theoretical models discussed above recognize resources as an essential element in the work-family enrichment process. Contextual characteristics and personal characteristics are proposed to influence the degree and types of resources available to an individual and therefore influence the potential of work-family enrichment. Contextual characteristics, which are characteristics outside of the self, are referred to as role characteristics in Greenhaus & Powell’s (2006) model, environmental characteristics in the RGD (Wayne et al., 2007), and contextual resources in the W-HR model (ten Brummelhuis & Bakker, 2012). Personal characteristics, which are psychological characteristics of one self, are referred to as personal characteristics in Greenhaus & Powell’s (2006) model and the RGD, and key resources in the W-HR model (ten Brummelhuis & Bakker, 2012). Specifically, regarding potential antecedents for work-family enrichment, it is proposed that contextual and personal characteristics that generate resources enable the enrichment process; on the other hand, contextual and personal characteristics that deplete resources reduce the potential for work-family enrichment.

**Resource Providing Contextual Characteristics in the Work Domain**

The first group of resource providing work contextual characteristics consists of support in the work domain, including general support from either one’s supervisors or coworkers, general support from one’s organization, family-friendly policies that are available at one’s workplace, and work-family culture. Social support can lead to a more positive mood, which in
turn contributes to better performance in the other domain. Additionally, social support may even lead to the acquisition of skills (e.g., interpersonal skills) and perspectives (e.g., respect for individual differences) in the long run and consequently contributes to better performance in the other domain (ten Brummelhuis & Bakker, 2012; Greenhaus & Powell, 2006). Furthermore, family-friendly policies such as flexible scheduling, telecommuting, day care assistance, and job sharing have been shown to indirectly affect employees’ general health in a positive way (Thomas & Ganster, 1995), a resource that is essential for the better performance in the home domain. Work-family culture describes the extent to which the shared assumptions, beliefs, and values in an organization support and value the integration of employees’ work and family lives (Thompson, Beauvais, & Lyness, 1999). The work-family culture in an organization could influence the potential of an employee’s resource acquisition. For example, in an organization where the work-family culture values its employees’ family lives, the employees are more likely to utilize available family-friendly policies, which may help free their time and energy in order to benefit their experience at home. Moreover, employees who uses family-friendly policies such as flexible time will feel less stress in an organization that has high work-family culture, which may result in a better mood and ultimately benefit the family domain.

**Hypothesis 1:** General supervisor support, family-focused supervisor support, general coworker support, family-focused coworker support, general overall organizational support, family-friendly policies, and work-family culture are positively related to WFE.

The second group consists of various job characteristics, including job tenure, organization tenure, and autonomy (or freedom, latitude). Job and organization tenure might give the individual the advantages in acquiring resources in the work domain. For example, the longer the job and organization tenure an individual has, the more familiar he/she might be about other
individuals in the workplace in terms of their skills and knowledge, and thus have a better understanding of who to go to for help; employees might also attain a better understanding of policies and procedures in an organization as their tenure increases (Zenger & Lawrence, 1989). Jobs with higher levels of job autonomy offer employees freedom, independence, and discretion in scheduling their work and in determining the procedure to be used in carrying it out (Hackman & Oldham, 1975), providing time resources to contribute to one’s performance at home. Moreover, skills learned through job autonomy in terms of scheduling and arranging work tasks can be applied in the home domain. Job autonomy has also been linked with higher job-related affect (Stewart & Barling, 1996). Therefore, job autonomy generates time, skills, and positive affect which can benefit the family domain.

Hypothesis 2: Job tenure, organization tenure, and autonomy/freedom/latitude are positively related to WFE.

Resource Providing Personal Characteristics in the Work Domain

This group consists of job (or work) involvement, work centrality (or salience, identity), and work engagement. Job involvement is the extent to which an individual identifies psychologically with his/her job (Lodahl & Kejner, 1965). Work centrality is the degree of importance work plays in one’s life (Paullay, Alliger, & Stone-Romero, 1994). Work engagement is a positive and fulfilling state of mind related to work that is characterized by vigor, dedication, and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Although the three constructs are distinct, they are similar in the sense that they all capture the extent to which an individual is attached to his/her job. The more one is involved, identifies, or is engaged with one’s job, the more likely one will acquire resources at work, such as skills and knowledge (Bakker & Demerouti, 2008), through for example extra-role activities (e.g.,
leadership development training in active listening can be applied to parent-child interaction), as well as better health (Schaufeli, Taris, & Van Rhenen, 2008), which can benefit one’s family role.

**Hypothesis 3**: Job/work involvement, work centrality/salience/identity, and work engagement are positively related to WFE.

**Resource Depleting Contextual Characteristics in the Work Domain**

This group includes hours worked, work role overload, and job insecurity. The more work hours one has, the less time there is to spend with one’s family. Additionally, number of hours worked can be considered as work role time demand, which is often seen as a precursor to role overload and thus induces stress on the individual (Michel, Kotraba, Mitchelso, Clark, & Baltes, 2011). Similarly, job insecurity also induces stress. When such situations are encountered, resource drain is likely to occur (Michel, et al., 2011). Therefore, the potential for the enriching process from work to family is reduced (ten Brummelhuis & Bakker, 2012). For example, job insecurity is shown to be related to worse personal mental and physical health (Sverke, Hellgren, & Näswall, 2002), which in turn negatively effects one’s acquisition of other resources and ultimately reduces the potential for WFE.

**Hypothesis 4**: Hours worked, work role overload, and job insecurity are negatively related to WFE.

**Resource Providing Contextual Characteristics in the Family Domain**

Aside from workplace social support, individuals can also experience social support from family members. The sources of social support in the family domain may be the spouse and/or the family as a whole. Support from one’s family such as information and advice generates
resources such as knowledge and perspective; encouragement provided by one’s family may lead to better mood; help provided by family in household responsibilities may free one’s time. All these resources acquired can then be applied to one’s work role and complete the enriching processes. Previous single studies have provided empirical evidence in supporting the positive relationship between family support and FWE (e.g., Aryee, Srinivas, & Tan, 2005; Nicklin & McNall, 2013).

*Hypothesis 5: Family support is positively related to FWE.*

The W-HR model (ten Brummelhuis & Bakker, 2012) proposes marriage as a condition that serves as a means for the attainment of other resources. Assuming an individual is involved in a healthy marriage, one’s marriage provides social support such as skills, health (Schoenborn, 2004), knowledge, perspectives, experiences, and positive affect (Stack & Eshleman, 1998) that can benefit one’s work role and thus complete the FWE processes.

*Hypothesis 6: Marital status is positively related to FWE.*

**Resource Providing Personal Characteristics in the Family Domain**

This group includes family involvement, family centrality (or salience, identity), family support, and marital status. Similar to work involvement and centrality, family involvement and centrality overlap in the sense that they both capture the extent to which an individual is attached to his/her family. The more one is involved or identifies with one’s family, the more likely they are to acquire resources in the family role which can be applied to the work role. For example, similar to the work domain, skills and knowledge as well as positive mood can be gained through one’s involvement and attachment in the family role in order to benefit one’s work role.
Hypothesis 7: Family involvement and family centrality/salience/identity are positively related to FWE.

Resource Depleting Contextual Characteristics in the Family Domain

This group includes hours spent in the family role, family role overload, number of children, age of youngest child, spouse employment, and hours of spouse working. Consistent with the linkage between resource depleting work characteristics and WFE, resource depleting family characteristics consume one’s time and energy, which influences the availability of resource gains, and therefore influences the potential for FWE (Wayen et al., 2007). The number of children one has and the age of one’s youngest child may affect the amount of time, energy, and attention required to be devoted to family responsibilities; having a spouse who also works full time might indicate that there are more family responsibilities to be taken on compared to employees whose spouses do not hold full-time employment. By the same logic, hours of one’s spouse working is negatively related to the amount of time the spouse can devote to the shared family responsibilities. All of these factors might drain one’s time and energy and induce stress, which are likely to affect one’s resource acquisition and thereby reduce the potential for FWE (Michel, et al., 2011; ten Brummelhuis & Bakker, 2012).

Hypothesis 8: Hours spent in the family role, family role overload, number of children, age of the youngest child, spouse employment, and hours of spouse working are negatively related to FWE.

Gender as a Moderator of the Relationship between Contextual Characteristics and Work-Family Enrichment
Greenhaus and Powell (2006) argued that individual differences may moderate the relationship between resources and enrichment. The decision to apply resources from one role to another role is likely to be intentional (Edwards & Rothbard, 2000). Regarding the instrumental path, individuals who strongly value a particular role are inclined to utilize resources gained from the other role to enrich the former. Regarding the affective path, positive affect in one role leads to an individual’s tendency of being more engaged, psychologically available, and energetic; however, these tendencies may not be applied to the other role if it is not salient (Greenhaus & Powell, 2006). Gender is the most frequently studied demographic variable in the work-family interface research (Korabik, McElwain, & Chappell, 2008). Research suggests that the family role is more likely to be highly salient for women than men and the work role is more likely to be highly salient for men than women (Cinamon & Rich, 2002; Powell & Greenhaus, 2010). This is consistent with Wayne and colleagues’ (2007) model as well as ten Brummelhuis & Bakker’s (2012) call for examination of differences between gender in the work-family interface. Similarly, contextual demands in role A may more easily limit the enrichment process to role B for the gender group who view role B as more salient (Michel, et al., 2011).

**Hypothesis 9a:** Relationships between work contextual resources and WFE are stronger among women than among men.

**Hypothesis 9b:** Relationships between work contextual demands and WFE are stronger among women than among men.

**Hypothesis 9c:** Relationships between family contextual resources and FWE are stronger among men than among women.
Hypothesis 9d: Relationships between family contextual demands and FWE are stronger among men than among women.

METHODS

Meta-analytic techniques were chosen to empirically integrate existing literature on antecedents of work-family enrichment for the following reasons. First, meta-analyses are superior to single studies in examining the true relationships between antecedents and work-family enrichment. Hunter & Schmidt (2004) suggest that “conflicting results in the literature may be entirely artifactual” (p. 8). One of the common artifacts found in most studies is sampling error. Single studies tend to be conducted on relatively small samples and hence yield estimates that depart by some random amount from the value of the population parameters. The law of large numbers justifies the use of meta-analyses as it states that parameter estimates yielded from a large number of samples should be close to the population values. In other words, meta-analyses are subject to less sampling error when compared to single studies. Measurement error can also contribute to the different conclusions between studies. Meta-analyses allow correction for measurement error in each study (Hunter & Schmidt, 2004). Second, meta-analyses are also superior to systematic reviews/narrative subjective reviews in integrating findings in the literature. Such reviews are inadequate to integrate findings across large numbers of studies due to limitations of human capabilities, which results in reviewers fishing for the “best” studies to include in their reviews based on subjective and idiosyncratic criteria. Therefore, such reviews are still subject to sampling errors and artifacts as different reviewers will likely to arrive at different conclusions due to the differences in the “best” studies selected.

Literature Search and Inclusion Criteria
To identify studies to be included in this meta-analysis, a computerized search of three databases (ABI-INFORM, PsycINFO, and ProQuest Dissertations and Theses) was conducted for the years up to and including 2016. Articles with correlation matrices that contained variables of interest were located. Keywords used include “enhancement”, “enrichment”, “facilitation”, “positive spillover”, “work-family”, “work-home”, and “work-life”.

Articles published between 1990 and 2016 in the following journals where work-family research is often published were then manually scanned: Administrative Science Quarterly, the Academy of Management Journal, Community, Work and Family, Human Relations, the Journal of Applied Psychology, the Journal of Management, the Journal of Marriage and the Family, the Journal of Occupational Health Psychology, the Journal of Occupational and Organizational Psychology, the Journal of Organizational Behavior, the Journal of Vocational Behavior, Organizational Behavior and Human Decision Processes, and Personnel Psychology. The year 1990 was chosen because the first scale of role enhancement from work to family was developed and published in 1990 (Tiedje et al., 1990). The reference lists of all the identified articles, the conceptual paper of Greenhaus and Powell (2006) as well as the meta-analytic study of McNall and colleagues (2010) was examined for other relevant studies. Some authors published different studies with the same data set, reporting the same correlation in more than one study. In these cases, the correlation in question was recorded only once based on the largest sample size. If a study contained multiple independent samples, the correlations of the variables of interest were obtained from each sample. In terms of longitudinal studies, where the variables were measured multiple times in the same samples repeatedly, the correlations were recorded only once from the time point with the largest sample size; if the sample sizes were the same across different times, the correlation associated with larger alphas was recorded; if both the sample sizes and alphas
were the same, the average of the correlations was computed and recorded. The Divisions of Careers, Gender and Diversity in Organizations at the Academy of Management, and researchers who are active in the field of work-family interface were contacted for unpublished or in press studies in order to minimize publication bias. Finally, I performed a manual search of the AoM and SIOP annual conference programs from 1990 to 2016 to locate conference papers.

Studies were included if a measure of WFE and/or FWE was administered, and correlations between enrichment and antecedents were provided. Studies were omitted if they included only qualitative data, no correlations are obtained after contacting the authors, or work–family enrichment direction was not indicated.

**Meta-Analytic Procedures**

After gathering all the data, three members of the project team independently coded the identified variables. In situations where there was disagreement, discussion was conducted to reach a consensus. The relationship between a certain antecedent and work-family enrichment was meta-analyzed if there were more than two independent samples in the literature that examined the correlation between the constructs. I employed the meta-analytic procedure suggested by Hunter and Schmidt (2004), such that the effect size is the product-moment correlation coefficient ($r$) reported in each study.

I corrected each correlation for unreliability in the measurement by using the Cronbach’s alpha values ($\alpha$) provided in each study with the exception of measures that were assumed to be perfectly reliable, such as job tenure, and organization tenure. When an alpha value was unavailable, the average alpha value was calculated from the remaining studies using the similar if not identical scales. For studies that reported the correlations and alpha values between
proposed antecedents and sub-dimensions of work-family enrichment measures rather than the overall work-family enrichment measure, I calculated the correlation values and alpha values of the composites based on Hunter and Schmidt’s (2004) recommendation. To correct for sampling error, I calculated the sample size weighted average corrected correlation by weighing each corrected correlation by the product of its corresponding sample size and its squared compound attenuation factor (corrected correlation divided by the product of the square root of each measure’s reliability; Hunter & Schmidt, 2004). This approach gives more weight to correlations that are based on larger samples and on more reliable measures. A mean corrected correlation was considered statistically significant at $\alpha = .05$ when its 95% confidence interval excluded zero. I also computed an 80% credibility interval that provides an estimate of the variability of correlations attributable to moderators. In addition, I calculated the percentage of total variance across corrected correlations explained by study sampling error and measurement unreliability, which indicates the possibility of potential moderators being at play. When the percentage is over 75%, it is believed that the likelihood of moderators being present is unlikely (Hunter & Schmidt, 2004).

Moderator effects were examined by regressing corrected correlations on the proportion of women in the corresponding sample. Weighted regression analyses were performed (with weights being the same as those used to compute mean corrected correlations) for relationships involving at least 10 samples (cf. Michel et al., 2011).

RESULTS

Following the recommendations of Hunter & Schmidt (2004), I base the discussion of bivariate relationships on $\rho$ (mean true score correlation – sample size weighted mean observed validity corrected for unreliability).
Bivariate meta-analytic findings

The results of the bivariate meta-analyses of the relationships between proposed antecedents and both directions of work-family enrichment are summarized in Table 1 (WFE) and Table 2 (FWE).

**Resource-providing contextual characteristics.** Social support was predicted to be positively related to work-family enrichment. Specifically, Hypothesis 1 predicted social support from the work domain would be positively related to WFE; while Hypotheses 5 & 6 predicted social support from the family domain would be positively related to FWE. Results fully support both hypotheses. Regarding the work domain, informal social supports, such as supervisor support (both general and family-focused), coworker support (both general and family-focused), overall organizational general support, and family-friendly work culture, had medium to large positive relationships with WFE ($\rho$ range from .24 to .36); formal support (i.e., family-friendly organizational policies) had a relatively small positive relationship with WFE. The non-overlapping 95% confidence intervals suggest that the relationships between informal social supports and WFE were significantly stronger than that between formal support and WFE. Regarding the family domain, family support had a relatively large positive relationship with FWE ($\rho = .49$, $k = 27$, $N = 11,748$), while marital status had a relatively small positive relationship with FWE ($\rho = .10$, $k = 24$, $N = 9,959$). Moreover, the results also suggest that the difference in magnitude was statistically significant, as indicated by the non-overlapping confidence interval.

Hypothesis 2 predicted that job tenure, organization tenure, and autonomy/freedom/latitude would be positively related to WFE. The relationships between job and organization tenures and WFE were not statistically significant as the 95% confidence
intervals include zero. Autonomy/freedom/latitude had a medium positive relationship with WFE ($\rho = .30$, $k = 31$, $N = 21,110$). Therefore, hypothesis 2 was partially supported.

**Resource-providing personal characteristics.** Domain involvement, centrality/salience/identity, and engagement were predicted to be positively related to work-family enrichment. Specifically, Hypothesis 3 predicted job/work involvement, work centrality/salience/identity, and work engagement would be positively related to WFE, while Hypothesis 7 predicted family involvement and family centrality/salience/identity would be positively related to FWE. The results fully support both hypotheses. Work involvement ($\rho = .34$, $k = 7$, $N = 1,993$) and work centrality/salience/identity ($\rho = .38$, $k = 9$, $N = 4,057$) had moderate positive relationships with WFE while work engagement ($\rho = .51$, $k = 19$, $N = 10,493$) had a relatively strong positive relationship with WFE. However, the magnitude of the differences was not statistically significant. Both family involvement ($\rho = .34$, $k = 8$, $N = 2,474$) and family centrality/salience/identity ($\rho = .21$, $k = 7$, $N = 2,307$) had moderate positive relationships with FWE.

**Resource-depleting contextual characteristics.** Regarding the work domain, Hypothesis 4 predicted that hours worked, work role overload, and job insecurity would be negatively related to WFE. However, the results show that the relationships between work hours and role overload and WFE were not statistically significant. Job insecurity had a relatively small negative relationship with WFE ($\rho = -.08$, $k = 2$, $N = 1,925$). Thus, hypothesis 4 was partially supported.

Regarding the family domain, Hypothesis 8 predicted that hours spent in the family role, family role overload, number of children, age of the youngest child, spouse employment, and hours of spouse working would be negatively related to FWE. The results partially support this
hypothesis. Only family role overload had a statistically significant relationship with FWE in the direction proposed (small to moderate negative relationship; \( \rho = -.16, k = 9, N = 4,230 \)). Number of children (\( \rho = .04, k = 33, N = 9,863 \)) and spouse work hours (\( \rho = .12, k = 2, N = 281 \)) had statistically significant relationships with FWE in the opposite direction as proposed, while other proposed antecedents were not related to FWE in a statistically significant way. Therefore, hypothesis 8 was only partially supported.

**Moderator analysis findings**

Moderator analyses for WFE and FWE are presented in Table 3. Moderator analyses were only conducted if less than 75% of the variance was accounted for and if there were 10 or more independent samples available for the specific relationship.

Hypothesis 9 predicted that the relationships between proposed antecedents in the work domain and WFE would be stronger for women than for men, while the relationships between proposed antecedents in the family domain and FWE would be stronger for men than for women. Of the 16 moderator analyses conducted, gender, measured as percentage of female participants within the sample, only moderated the relationship between coworker support (general) and WFE. However, the direction of the moderator effect was the opposite as proposed (\( \beta = -.79, p < .01, k = 11 \)). In other words, the results suggest that the relationship between coworker support (general) and WFE was stronger in samples with more male participants than in samples with more female participants. Therefore, Hypothesis 9 was not supported.

**DISCUSSION**

The purpose of this study was to provide a more thorough picture of the work-family enrichment literature by investigating the relationships between work-family enrichment and
work-related, family-related, and personal characteristics associated with both work and family domains using meta-analysis. Although there have been meta-analyses conducted prior to this study synthesizing the research on antecedents of work-family enrichment (Michel, et al., 2011), to the best of my knowledge, the present study is the first attempt to empirically integrate the existing literature on antecedents of the positive side of the work-family interface from both work and family domains, which contributes to further the theoretical development of the work-family enrichment model.

Given the findings, I present a modified model in Figure 2. Following the structure of the work-family conflict model presented by Michel, et al. (2011), antecedents in bold font represent variables that predicted both directions of work-family enrichment, while antecedents in regular font represent variables that predicted same domain enrichment only (i.e., work-related characteristics predicted WFE, family-related characteristics predicted FWE). Overall, the findings suggest: (1) support from work (formal and informal) and family, family-friendly work culture, work autonomy, work and family involvement, work engagement, and number of children are predictors of both WFE and FWE; (2) Work centrality/salience/identity, job insecurity, and family hours predict WFE; (3) Marital status, family centrality, family role overload, and spouse work hours are predictors of FWE; and (4) Gender moderates the relationship between general coworker support and WFE in the opposite direction as expected.

The results showed that a number of contextual characteristics positively predicted work-family enrichment, with social support consisting of a large group of such characteristics and having relatively large magnitudes in terms of relationship strength. Regarding the family domain, results showed that family support and marital status are predictors of FWE, with family support having a statistically significantly stronger magnitude, as indicated by the non-
overlapping 95% confidence intervals. Regarding the work domain, results in this study showed that informal support, such as support from one’s supervisor and coworkers (both in general and family-focused), was more beneficial than organizational formal support (i.e., family-friendly organizational policies) based on the non-overlapping 95% confidence intervals. This finding is consistent with existing reviews suggesting that the existence of formal family-friendly organizational policies is a necessary but insufficient condition to improve employees’ experience of the work-family interface (Hammer, Kossek, Zimmerman, & Daniels, 2007). For example, previous research has suggested that organizational policies intended to help employees meet family responsibilities have not always had the desired impact. Employees may be worried that utilizing such policies might bring them negative supervisory repercussions (Judiesch & Lyness, 1999) and coworker resentment (Kirby & Krone, 2002), which may weaken the effect of family-friendly policies on WFE by either preventing the individuals from utilizing the benefits or causing negative rather than positive mood. On the other hand, it is possible that workplace social support might contribute to the enrichment process through not only the acquisition of positive mood, skills and knowledge (ten Brummelhuis & Bakker, 2012; Greenhaus & Powell, 2006), but also facilitation of the operation of family-friendly policies and programs by reducing resentment, as it legitimizes the existence of work-family benefits as a means to enhance the collective, even though not all workers may use them (Hegtvedt, Clay-Warner, & Ferrigno, 2002).

The present study tested the relationships between proposed resource-depleting characteristics and work-family enrichment. Job insecurity was shown to be negatively related to WFE; family role overload was shown to be negatively related to FWE. Interestingly, number of children and spouse work hours positively, rather than negatively as hypothesized, predicted
FWE. It is possible while having more children increases family demands on an individual and thus leading to higher degree of family-to-work conflict (Michel, et al., 2011), it could, on the other hand, provide the individual with more resources (e.g., better time-management skills), which contributes to the process of FWE. Moreover, comparing to meta-analytic correlations between work-family conflicts and its antecedents (Michel, et al., 2011), relationships between resource-providing characteristics and work-family enrichment tend to be stronger than relationships between such characteristics and work-family conflict; while relationships between resource-depleting characteristics and work-family conflict tend to be stronger than relationships between such characteristics and work-family enrichment. Therefore, these findings support the notion that work-family enrichment, as a construct, is not merely the opposite of work-family conflict (Powell & Greenhaus, 2006).

Regarding personal characteristics, on the work side, effect sizes of the relationships between work involvement, work centrality, and work engagement and WFE were well above .3; on the family side, the relationship between family involvement and FWE was above .3. Since several resource-providing personal characteristics were shown to be predictors of work-family enrichment, these findings support the work-family enrichment models discussed previously about the notion that personal characteristics that contribute to resource generating promote the enrichment process (Greenhaus & Powell, 2006; ten Brummelhuis & Bakker, 2012; Wayne, et al., 2007). Previous research has shown that individuals with higher degrees of the personal characteristics tested in the present study are more likely to acquire resources such as positive emotions, skills and knowledge. For example, engaged workers are more likely to go the extra mile to participate in extra-role activities (Bakker & Demerouti, 2008), and thus more likely to develop new skills and knowledge through such experiences, benefiting the instrumental path of
the enrichment process (Greenhaus & Powell, 2006). Moreover, engaged workers are also more likely to experience positive emotions (Fredrickson & Joiner, 2002), contributing to the enrichment process through the affective path (Greenhaus & Powell, 2006).

Interestingly, regarding the analyses to test whether gender acts as a moderator for the relationships between the antecedents and work-family enrichment, the findings showed that the moderator effect was only statistically significant in one relationship out of the 16 tested, with the direction of significant moderator effect being the opposite as hypothesized. These findings do not necessarily contradict the enrichment theory since gender is not a direct measure of role salience, especially in the current society with changing gender roles where classical gender theories are obsolete (Barnett & Hyde, 2001).

Regarding the significant moderator effect, it was shown that the relationship between general coworker support and WFE was stronger among the samples with a higher percentage of males than the samples with higher percentage of females. According to Powell and Greenhaus (2006), for a resource in the work domain to promote WFE, it has to be applied to or have an influence on the family domain. Research has shown that men reported receiving more informational and instrumental support when it comes to social support (Olson & Shultz, 1994). Since other sources of potential instrumental support in the work place might be disadvantaged towards men, for example, men are less likely to utilize family-friendly policies due to stigma against usage among men (Lundquist, Misra, & O’Meara, 2012), it is possible that they are more likely to apply support from their coworkers to the family domain than their female counterparts who have more sources of resources available to them, and thus resulting in a stronger relationship between general coworker support and WFE than among their female counterparts.
CONTRIBUTIONS AND PRACTICAL IMPLICATIONS

The present study contributes to the literature on work-family enrichment and practice of the field in the following ways. First, this study merged and tested several work-family enrichment theories, incorporated contextual and personal characteristics from both work and family domains, and investigated gender as a moderator between the relationships between antecedents and work-family enrichment. Second, none of the previous meta-analyses investigating antecedents of work-family enrichment, to my knowledge, have been as exhaustive in terms of the antecedents tested as the present study. In doing so, this study provides an informative empirical summary of the literature, and thus contributes to the development and advancement of work-family enrichment theories.

Third, with the findings and better understanding of antecedents of work-family enrichment, the present study can provide insights to changes in practice to improve employees’ experience of the work-family interface. For example, one of the findings suggests that informal social support at the workplace, such as supervisor and coworker support, is more beneficial than formal organizational policies. This finding can be particularly insightful for small-medium enterprises, which are large contributors to the labour market and where formal family-friendly supports such as dependent care resource and referrals and alternative work arrangements are less available due to the size and financial resources of the company (Hammer, Cullen, & Shafiro, 2006). Decision makers in such organizations can encourage more social support among their employees and receive more beneficial outcomes with little financial burden on the company. In addition to encouraging social support in the workplace, employers can also provide, to the best of their ability, more family-friendly policies and encourage usage, therefore
creating a family-friendly work culture, which benefits employee’s work-family enrichment, a construct associated with various beneficial outcomes.

**LIMITATIONS AND FUTURE RESEARCH**

Although utilizing meta-analysis procedures helps reduce the probability of study findings being due to sampling error, the present study still has the following limitations. First, the data used in the meta-analyses were cross-sectional, and the relationships assessed were correlational, and thus do not imply causality. Future research should adopt longitudinal designs to investigate the relationships between variables tested in the present studies and work-family enrichment. Second, several relationships, though they were meta-analyzed, had small numbers of independent samples and sample sizes (e.g., job insecurity and WFE, spouse employment status and both directions of enrichment, spouse work hours and both directions of enrichment, coworker support (family-focused) and FWE, age of youngest child and FWE). Therefore, results for such relationships should be interpreted with caution.

Third, the analyses conducted in the present study did not differentiate enrichment in terms of the instrumental or the affective paths (Greenhaus & Powell, 2006). Moreover, social support in either work or family domains can be further categorized into instrumental or emotional support. It would be interesting to investigate whether different antecedents, for example, different types of social support (i.e., instrumental support vs. emotional support), influence different paths of the enrichment process. Unfortunately, considering the number of variables included in the study as well as the number of studies that measured the subdimensions of the constructs, the data did not sufficiently support such a level of analysis. Therefore, future research should investigate whether certain contextual and personal characteristics influence
different paths of enrichment differently, which would provide further insights to the validation and development of the work-family enrichment model.

Fourth, the results in the present study indicate that the strength of the relationship between an antecedent and work-family enrichment varies among different variables. For example, workplace informal social support has a stronger association with WFE than workplace formal support does. The interplay between these two types of support is discussed to potentially explain the difference in relationship strength. Therefore, it would be interesting for future research to investigate the interplay among different antecedents and how such interplay may affect work-family enrichment using structural equation modeling.

Fifth, regarding the moderator analyses conducted in this study, I chose gender as a representative for role salience since it is among the most commonly measured demographic variables in the literature due to the limited number of studies which measured antecedents, role salience, and enrichment all in the same study. Future research should test the work-family enrichment theory using role salience directly as a moderator.

Finally, the majority of the primary studies included in the present study originated from western developed countries. Ten Brummelhuis and Bakker (2012) suggest that the wider macro context could also act as a moderator on the work-family enrichment process. Therefore, it would be interesting for future research to examine, for example, the moderator effect of culture norms on the relationship between work-family enrichment and its antecedents.

CONCLUSION

This study intended to empirically summarize the literature on the antecedents of work-family enrichment through meta-analysis. In doing so, the findings suggested that various
resource-generating characteristics (contextual and personal) are related to higher degrees of work-family enrichment. Such characteristics include support from individuals in the work and the family domains and one’s organization, as well as personal characteristics associated with one’s attachment to both roles.
Table 1

Effects of the Proposed Antecedents on Work-to-Family Enrichment (WFE).

<table>
<thead>
<tr>
<th>Variable</th>
<th>$k$</th>
<th>$N$</th>
<th>$r$</th>
<th>$SD_r$</th>
<th>$p$</th>
<th>$SDp$</th>
<th>$SDr_c$</th>
<th>95% Confidence Interval</th>
<th>80% Credibility Interval</th>
<th>%Artifact</th>
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<td>Resource-generating contextual characteristics in work domain</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
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<td>Supervisor support (general)</td>
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<td>9,335</td>
<td>.30</td>
<td>.12</td>
<td>.36*</td>
<td>.12</td>
<td>.13</td>
<td>(.30, .41)</td>
<td>(.20, .51)</td>
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<td>Supervisor support (family-focused)</td>
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<td>.28</td>
<td>.10</td>
<td>.34*</td>
<td>.10</td>
<td>.11</td>
<td>(.30, .38)</td>
<td>(.21, .46)</td>
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<td>Coworker support (general)</td>
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<td>.09</td>
<td>.28*</td>
<td>.10</td>
<td>.12</td>
<td>(.21, .35)</td>
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<td>Coworker support (family-focused)</td>
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<td>.29*</td>
<td>.07</td>
<td>.09</td>
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<td>(.21, .38)</td>
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<td>.10*</td>
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<td>(.06, .13)</td>
<td>(.10, .10)</td>
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<td>Family-friendly work culture</td>
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<td>8,955</td>
<td>.19</td>
<td>.15</td>
<td>.24*</td>
<td>.17</td>
<td>.18</td>
<td>(.16, .32)</td>
<td>(.02, .46)</td>
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<td>.08</td>
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<td>.08</td>
<td>(-.06, .04)</td>
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<td>.08</td>
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<td>.06</td>
<td>.08</td>
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<td>(-.09, .07)</td>
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<td>.30*</td>
<td>.10</td>
<td>.11</td>
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<td>(.18, .43)</td>
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<td>Variable</td>
<td>k</td>
<td>N</td>
<td>r</td>
<td>SD</td>
<td>p</td>
<td>SDp</td>
<td>SDr</td>
<td>95% Confidence Interval</td>
<td>80% Credibility Interval</td>
<td>%Artifact</td>
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<td></td>
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<td>1,993</td>
<td>.27</td>
<td>.11</td>
<td>.34*</td>
<td>.11</td>
<td>.13</td>
<td>(.24, .48)</td>
<td>(.19, .48)</td>
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<td>.30</td>
<td>.18</td>
<td>.38*</td>
<td>.21</td>
<td>.22</td>
<td>(.24, .52)</td>
<td>(.11, .64)</td>
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<td>.42</td>
<td>.14</td>
<td>.51*</td>
<td>.15</td>
<td>.15</td>
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<td>(.32, .70)</td>
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<tr>
<td>Work hours</td>
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<td>25,793</td>
<td>-.02</td>
<td>.08</td>
<td>-.02</td>
<td>.07</td>
<td>.09</td>
<td>(-.04, .00)</td>
<td>(-.11, .07)</td>
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<td>-.03</td>
<td>.11</td>
<td>-.04</td>
<td>.13</td>
<td>.14</td>
<td>(-.09, .00)</td>
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<td>-.07</td>
<td>.03</td>
<td>-.08*</td>
<td>.00</td>
<td>.03</td>
<td>(-.12, -.05)</td>
<td>(-.08, -.08)</td>
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<td><strong>Resource-generating contextual characteristics of family domain</strong></td>
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<tr>
<td>Family support</td>
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<td>10,444</td>
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<td>.13</td>
<td>.21*</td>
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<td>.15</td>
<td>(.16, .27)</td>
<td>(.03, .40)</td>
<td>15.05</td>
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<td>.08</td>
<td>.02</td>
<td>.08</td>
<td>.09</td>
<td>(-.01, .05)</td>
<td>(-.08, .12)</td>
<td>33.05</td>
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<td>Family involvement</td>
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<td>2,678</td>
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<td>.16</td>
<td>.14*</td>
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<td>.20</td>
<td>(.01, .27)</td>
<td>(-.10, .38)</td>
<td>12.55</td>
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<td>.05</td>
<td>.10</td>
<td>.07</td>
<td>.11</td>
<td>.13</td>
<td>(-.03, .16)</td>
<td>(-.08, .21)</td>
<td>26.35</td>
</tr>
<tr>
<td>Variable</td>
<td>$k$</td>
<td>$N$</td>
<td>$r$</td>
<td>$SD_r$</td>
<td>$\rho$</td>
<td>$SD_\rho$</td>
<td>$SD_{r_c}$</td>
<td>95% Confidence Interval</td>
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<td>%Artifact</td>
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<td>Resource-depleting contextual characteristics of family domain</td>
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<td>Family hours</td>
<td>14</td>
<td>4,604</td>
<td>.04</td>
<td>.07</td>
<td>.05*</td>
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<td>.07</td>
<td>(.01, .09)</td>
<td>(-.01, .1)</td>
<td>67.62</td>
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<td>Family role overload</td>
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<td>-.01</td>
<td>.04</td>
<td>-.01</td>
<td>.00</td>
<td>.05</td>
<td>(-.05, .03)</td>
<td>(-.01, -.01)</td>
<td>100.00</td>
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<td>Number of children</td>
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<td>15,379</td>
<td>.04</td>
<td>.07</td>
<td>.05*</td>
<td>.05</td>
<td>.08</td>
<td>(.02, .07)</td>
<td>(-.02, .11)</td>
<td>58.76</td>
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<td>Age of youngest child</td>
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<td>1,496</td>
<td>.01</td>
<td>.08</td>
<td>.01</td>
<td>.06</td>
<td>.09</td>
<td>(-.06, .09)</td>
<td>(-.06, .09)</td>
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<td>.01</td>
<td>.01</td>
<td>.00</td>
<td>.01</td>
<td>(-.00, .03)</td>
<td>(.01, .01)</td>
<td>100.00</td>
</tr>
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<td>Spouse work hours</td>
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<td>281</td>
<td>.04</td>
<td>.04</td>
<td>.04</td>
<td>.00</td>
<td>.04</td>
<td>(-.01, .09)</td>
<td>(.04, .04)</td>
<td>100.00</td>
</tr>
</tbody>
</table>

*Note. $k$ = number of independent samples cumulated; $N$ = cumulative sample size; $r$ = sample size weighted mean observed correlation; $SD_r$ = standard deviation of the observed correlations; $\rho$ = mean true score correlation; $SD_\rho$ = standard deviation of the true score correlation; $SD_{r_c}$ = observed standard deviation of the corrected correlations; %Artifact = percentage of variation in the observed correlations attributable to sampling error and other artifacts. * 95% confidence interval excludes zero.*
Table 2

Effects of the Proposed Antecedents on Family-to-Work Enrichment (FWE).

<table>
<thead>
<tr>
<th>Variable</th>
<th>$k$</th>
<th>$N$</th>
<th>$r$</th>
<th>$SD_r$</th>
<th>$p$</th>
<th>$SD_p$</th>
<th>$SD_{Dr}$</th>
<th>95% Confidence Interval</th>
<th>80% Credibility Interval</th>
<th>%Artifact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource-providing contextual characteristics of work domain</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor support (general)</td>
<td>13</td>
<td>4,861</td>
<td>.14</td>
<td>.08</td>
<td>.16*</td>
<td>.08</td>
<td>.10</td>
<td>(.11, .22)</td>
<td>(.06, .26)</td>
<td>36.79</td>
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<tr>
<td>Supervisor support (family-focused)</td>
<td>11</td>
<td>4,705</td>
<td>.21</td>
<td>.05</td>
<td>.24*</td>
<td>.03</td>
<td>.06</td>
<td>(.20, .28)</td>
<td>(.20, .28)</td>
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<td>2,532</td>
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<td>.06</td>
<td>.22*</td>
<td>.05</td>
<td>.08</td>
<td>(.15, .28)</td>
<td>(.15, .28)</td>
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<tr>
<td>Coworker support (family-focused)</td>
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<td>.03</td>
<td>.56*</td>
<td>.00</td>
<td>.06</td>
<td>(.48, .64)</td>
<td>(.56, .56)</td>
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<td>Overall support (general)</td>
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<td>.09</td>
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<td>Family-friendly organizational policies</td>
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<td>.07*</td>
<td>.00</td>
<td>.04</td>
<td>(.05, .10)</td>
<td>(.07, .07)</td>
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<td>.08</td>
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<td>.08</td>
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<td>.06</td>
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<td>.07</td>
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<td>.17</td>
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<td>(.02, .43)</td>
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<td>k</td>
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<td>r</td>
<td>SD_r</td>
<td>p</td>
<td>SD_p</td>
<td>SD_r_c</td>
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<td>80% Credibility Interval</td>
<td>%Artifact</td>
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<td>-0.05</td>
<td>.15</td>
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<td>(-.18, .07)</td>
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<td>.06</td>
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<td>(.32, .43)</td>
<td>(.31, .44)</td>
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<td>.00</td>
<td>.05</td>
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<td>(-.02, .03)</td>
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<td>.03</td>
<td>.10</td>
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<td>.20</td>
<td>.49*</td>
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<td>.26</td>
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<td>(.16, .81)</td>
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<td>.14</td>
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<td>.16</td>
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<td>(.15, .53)</td>
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<td>.15</td>
<td>.21*</td>
<td>.18</td>
<td>.19</td>
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<td>(-.02, .44)</td>
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<tr>
<td>Variable</td>
<td>k</td>
<td>N</td>
<td>r</td>
<td>SD&lt;sub&gt;r&lt;/sub&gt;</td>
<td>p</td>
<td>SD&lt;sub&gt;ρ&lt;/sub&gt;</td>
<td>SD&lt;sub&gt;r&lt;/sub&gt;&lt;sup&gt;c&lt;/sup&gt;</td>
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<td>80% Credibility Interval</td>
<td>%Artifact</td>
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<td>-----------</td>
</tr>
<tr>
<td>Resource-depleting contextual characteristics in family domain</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>Family hours</td>
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<td>.09</td>
<td>.03</td>
<td>.08</td>
<td>.10</td>
<td>(-.03, .08)</td>
<td>(-.08, .13)</td>
<td>38.57</td>
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<td>Family role overload</td>
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<td>4,230</td>
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<td>.14</td>
<td>-.16*</td>
<td>.19</td>
<td>.20</td>
<td>(-.29, -.03)</td>
<td>(-.41, .08)</td>
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<td>.09</td>
<td>.04*</td>
<td>.08</td>
<td>.10</td>
<td>(.00, .07)</td>
<td>(-.06, .14)</td>
<td>41.52</td>
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<tr>
<td>Age of youngest child</td>
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<td>807</td>
<td>.02</td>
<td>.09</td>
<td>.02</td>
<td>.08</td>
<td>.11</td>
<td>(-.10, .14)</td>
<td>(-.08, .12)</td>
<td>43.39</td>
</tr>
<tr>
<td>Spouse employment status</td>
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<td>.03</td>
<td>.02</td>
<td>.00</td>
<td>.04</td>
<td>(-.02, .07)</td>
<td>(.02, .02)</td>
<td>100.00</td>
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<tr>
<td>Spouse work hours</td>
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<td>281</td>
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<td>.03</td>
<td>.12*</td>
<td>.00</td>
<td>.03</td>
<td>(.08, .17)</td>
<td>(.12, .12)</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Note. k = number of independent samples cumulated; N = cumulative sample size; r = sample size weighted mean observed correlation; SD<sub>r</sub> = standard deviation of the observed correlation; ρ = mean true score correlation; SD<sub>ρ</sub> = standard deviation of the true score correlation; SD<sub>r</sub><sup>c</sup> = observed standard deviation of the corrected correlations; %Artifacts = percentage of variation in the observed correlations attributable to sampling error and other artifacts.

* 95% confidence interval excludes zero.
Table 3

Tests of Gender as a Moderator

<table>
<thead>
<tr>
<th>Relationships</th>
<th>k</th>
<th>β</th>
<th>Regression F-value</th>
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</thead>
<tbody>
<tr>
<td>Resource-providing contextual characteristics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisor support (general)-WFE</td>
<td>21</td>
<td>-.39</td>
<td>3.44</td>
</tr>
<tr>
<td>Supervisor support (family)-WFE</td>
<td>29</td>
<td>-.17</td>
<td>.83</td>
</tr>
<tr>
<td>Coworker support (general)-WFE</td>
<td>11</td>
<td>-.79**</td>
<td>14.90</td>
</tr>
<tr>
<td>Coworker support (family)-WFE</td>
<td>10</td>
<td>-.03</td>
<td>.01</td>
</tr>
<tr>
<td>Overall support (general)-WFE</td>
<td>14</td>
<td>.06</td>
<td>.04</td>
</tr>
<tr>
<td>Family-friendly work culture-WFE</td>
<td>19</td>
<td>-.33</td>
<td>2.04</td>
</tr>
<tr>
<td>Job tenure-WFE</td>
<td>10</td>
<td>-.145</td>
<td>.171</td>
</tr>
<tr>
<td>Organizational tenure-WFE</td>
<td>15</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>Work autonomy-WFE</td>
<td>31</td>
<td>-.27</td>
<td>2.24</td>
</tr>
<tr>
<td>Family support-FWE</td>
<td>27</td>
<td>.22</td>
<td>1.29</td>
</tr>
<tr>
<td>Marital status-FWE</td>
<td>23</td>
<td>.25</td>
<td>1.41</td>
</tr>
<tr>
<td>Resource-providing personal characteristics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work engagement-WFE</td>
<td>19</td>
<td>.12</td>
<td>.24</td>
</tr>
<tr>
<td>Resource-depleting contextual characteristics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work hours-WFE</td>
<td>59</td>
<td>-.19</td>
<td>2.12</td>
</tr>
<tr>
<td>Work role overload-WFE</td>
<td>31</td>
<td>-.16</td>
<td>.746</td>
</tr>
<tr>
<td>Family hours-FWE</td>
<td>14</td>
<td>.01</td>
<td>.00</td>
</tr>
<tr>
<td>Number of children-FWE</td>
<td>32</td>
<td>-.17</td>
<td>.88</td>
</tr>
</tbody>
</table>

Note. *k* = number of samples in regression analysis; *β* = standardized beta weight for moderator.

Gender was measured as percentage of female participants within the sample, with values ranging from 0 to 100.

** *p < .01**
Figure 1
Hypothesized model for antecedents and moderator of work-family enrichment

- **Resource Providing Contextual Characteristics**
  - Supervisor Support (General)
  - Supervisor Support (Family-Focused)
  - Coworker Support (General)
  - Coworker Support (Family-Focused)
  - Overall Support (General)
  - Family-friendly Policies
  - FSOP / Work-Family Culture
  - Job Tenure
  - Organization Tenure
  - Autonomy / Freedom / Latitude

- **Resource Providing Personal Characteristics**
  - Work / Job Involvement
  - Work Centrality / Salience / Identity
  - Work Engagement

- **Resource Depleting Contextual Characteristics**
  - Hours Worked
  - Work Role Overload
  - Job Insecurity

- **Resource Providing Personal Characteristics**
  - Family Involvement
  - Family Centrality / Salience / Identity

- **Resource Providing Contextual Characteristics**
  - Family Support
  - Marital Status

- **Resource Depleting Contextual Characteristics**
  - Hours of Family
  - Family Role Overload
  - Number of Children
  - Age of Youngest Child
  - Spouse Employment
  - Hours of Spouse Working
Figure 2
Modified model for antecedents and moderator of work-family enrichment

**Resource Providing Contextual Characteristics**
- **Supervisor Support** (General) [WFE = 0.36; FWE = 0.16]
- **Supervisor Support** (Family-Focused) [WFE = 0.34; FWE = 0.24]
- **Coworker Support** (General) [WFE = 0.28; FWE = 0.22]
- **Coworker Support** (Family-Focused) [WFE = 0.29; FWE = 0.56]
- **Overall Support** (General) [WFE = 0.31; FWE = 0.19]
- **Family-friendly Policies** [WFE = 0.10; FWE = 0.07]
- **FSOP / Work-Family Culture** [WFE = 0.24; FWE = 0.11]
- **Autonomy / Freedom / Latitude** [WFE = 0.30; FWE = 0.23]

**Resource Providing Personal Characteristics**
- **Work / Job Involvement** [WFE = 0.34; FWE = 0.08]
- **Work Centrality / Salience / Identity** [WFE = 0.38]
- **Work Engagement** [WFE = 0.51; FWE = 0.38]

**Resource Depleting Contextual Characteristics**
- **Job Insecurity** [WFE = -0.08]

**Resource Providing Personal Characteristics**
- **Family Involvement** [WFE = 0.34; FWE = 0.14]
- **Family Centrality / Salience / Identity** [FWE = 0.21]

**Resource Providing Contextual Characteristics**
- **Family Support** [WFE = 0.34; FWE = 0.14]
- **Marital Status** [FWE = 0.10]

**Resource Depleting Contextual Characteristics**
- **Hours of Family** [WFE = 0.05]
- **Family Role Overload** [FWE = -0.16]
- **Number of Children** [WFE = 0.05; FWE = 0.04]
- **Hours of Spouse Working** [FWE = 0.12]
References


Primary Studies


Major, D. A. *Work-Family Leadership Project*. Available from Debra Major at Old Dominion University, Norfolk, VA.


Proost, K., De Witte, H., Taillieu, T., & De Witte, K. (2004, April). Not only negative but also positive spillover from work to family: The combined influence of job characteristics and type A-behavior. Paper presented at the annual meeting of the Society for Industrial and Organizational Psychology, Chicago, Illinois.


