

A resource-based perspective on work–family conflict: meta-analytical findings

Resource-based perspective on WFC

37

Eko Yi Liao and Victor P. Lau

Department of Management, The Hang Seng University of Hong Kong, Shatin, Hong Kong

Ray Tak-yin Hui

Lee Shau Kee School of Business and Administration, Open University of Hong Kong, Kowloon, Hong Kong, and

Kaylee Hao Kong

Department of Management, The Hang Seng University of Hong Kong, Shatin, Hong Kong

Received 21 December 2017

Revised 26 August 2018

27 November 2018

Accepted 3 December 2018

Abstract

Purpose – The purpose of this paper is to provide an updated and theory-driven meta-analysis of work–family conflict (WFC). The authors quantitatively review the relationships between WFC and three pairs of antecedents and several consequences.

Design/methodology/approach – A meta-analysis was conducted to investigate the research model. Specifically, the authors adopt a resource-based perspective (i.e. conservation of resources (COR) theory) to investigate the relationships between three pairs of antecedents (demand/control, autonomy/hours spent at both work and family domains and role overload/flexibility) and WFC. While COR theory argues that resource loss perceptions would generate much more influential impact on individuals comparing to that of resource gain, both favourable and unfavourable antecedents, representing resource gain and resource loss, respectively, are incorporated in each pair of antecedents. This inclusion of contrary antecedents allows the authors to investigate the comparison of the relationships between the favourable antecedents – WFC relationships and the unfavourable factors – WFC relationships. In addition, the authors analyse how and to what extent WFC influences employees' attitudes (i.e. commitment), behaviours (i.e. performance) towards both work and family, and their career consequences.

Findings – The meta-analytical findings generally support the hypotheses. Work and family demands are found positively related to WFC, while having a control at either work or family would be negatively related to WFC. Perceiving a high level of autonomy at work is negatively related to WFC, and hours spend at work has a positive relation with WFC. Role overload at both work and family are associated with WFC, while having flexibility from work schedule would be negatively related to WFC. In addition, WFC is negatively related to employee career development outcomes.

Originality/value – First, the authors adopt a resource-based view to organise both favourable and unfavourable antecedents of WFC. Second, this paper aims at extending the investigation on WFC consequences to performance at both work and family, commitment to both work and family, and employee career outcomes, because all of them are critical consequences but not fully explored in previous meta-analyses. Third, this paper has incorporated newly explored correlates of WFC (e.g. employee career development-related outcomes) and quantitatively reviewed their relationships with WFC.

Keywords Meta-analysis, Work–family conflict, Conservation of resources

Paper type Research paper

Employees are facing unprecedented challenges and stress in coping with work and family interfaces. For example, job tasks are becoming more complicated such as multi-cultural communication has become a norm. Employees are often expected to work from home with tasks like dealing with instant messaging or video conferencing at night with overseas clients,



Career Development International

Vol. 24 No. 1, 2019

pp. 37-73

© Emerald Publishing Limited

1362-0436

DOI 10.1108/CDI-12-2017-0236

The work described in this paper was supported by a grant from the Research Grants Council of the Hong Kong Special Administrative Region, China (Project No. UGC/FDS14/B09/17).

which may sacrifice their time with family. Likewise, changes in family characteristics such as the increase in dual-earner couples or single parents may impede working life in the way that employees would find less energy and time reserved for work tasks. Accordingly, people may be experiencing work–family conflict (WFC) more than ever before (e.g. Pluut *et al.*, 2018). WFC refers to employees' perception of conflicts arising from the clashes and challenges of work and family issues, which may occur in two directions, with work interfering with family (WIF) or family interfering with work (FIW) (French *et al.*, 2018). WFC has been examined in hundreds of empirical, experimental and review studies. In the literature, various antecedents and consequences of WFC have been identified (Frone *et al.*, 1992). To our knowledge, there are 20 published meta-analyses related to WFC (Table I). Of these studies, the majority (15 out of 20) focussed on examining its antecedents, such as social supports (Byron, 2005; Ford *et al.*, 2007; Kossek *et al.*, 2011), contextual factors (Allen *et al.*, 2013, 2015; Mesmer-Magnus and Viswesvaran, 2006), role stressors (Michel and Hargis, 2008; Michel *et al.*, 2009, 2010) and personality traits (Allen *et al.*, 2012; Michel, Clark and Jaramillo, 2011; Michel, Kotrba, Mitchelson, Clark and Baltes, 2011). Relatively fewer studies (9 out of 20) focussed on examining its consequences, such as job satisfaction, family satisfaction and life satisfaction (cf. Allen *et al.*, 2000; Amstad *et al.*, 2011; Kossek and Ozeki, 1998). Four of the studies included both antecedents and consequences in the same model, with three of these studies examining antecedents such as social supports and consequences such as family satisfaction (cf. Ford *et al.*, 2007; Michel and Hargis, 2008; Michel *et al.*, 2009) and one study examining strain as both an antecedent and consequence (Nohe *et al.*, 2015). Furthermore, some meta-analyses have examined moderators, such as time spent at work (Amstad *et al.*, 2011), or mediators, such as work/family hours (Shockley *et al.*, 2017).

Different meta-analyses may draw on different theoretical perspectives. Informed by social support theory, French *et al.* (2018) dissected the effects of the different forms – behaviours and perceptions, sources – supervisor, co-worker and spouse and types – instrumental and emotional – of social support on WFC. Building upon personality theory, Michel, Clark and Jaramillo (2011) examined the effects of the Five Factor Model on work–non-work spillover. Using two competing theoretical perspectives, namely, segmentation theory and conflict theory, Michel *et al.* (2009, 2010) tested whether the same-domain or the cross-domain perspective is a more robust theoretical underpinning by comparing the effects of WIF and FIW on various forms of satisfactions. It is worth noting that several meta-analyses of WFC were interested in the comparisons of the same-domain and the cross-domain perspectives. Over two decades ago, based on the WFC model of Frone *et al.* (1992), Ford *et al.* (2007) quantitatively reviewed the permeability of the boundary between the work and family domains and found family satisfaction to be explained by work domain-specific variables (e.g. job involvement, job stress, work support and work hours), but job satisfaction to be explained by family domain-specific variables (e.g. family conflict, family stress, family support and family hours), suggesting cross-domain relations of the work–family interface. Several subsequent meta-analytic findings, however, have supported segmentation theory with direct effect links or same-domain satisfaction rather than conflict theory with indirect WFC links or cross-domain satisfaction. That is, WIF is a better predictor of job satisfaction, whereas FIW is a better predictor of family satisfaction (cf. Amstad *et al.*, 2011; Michel and Hargis, 2008; Michel *et al.*, 2009; Nohe *et al.*, 2015; Shockley and Singla, 2011).

Despite these meta-analyses advancing our knowledge of WFC, three notable research gaps remain. First, an overarching theoretical underpinning that explains the logic across both the antecedents and consequences of WFC is lacking, with the exception of Nohe *et al.* (2015), who used conservation of resources (COR) theory (Hobfoll, 1989) as a theoretical lens to meta-analyse the reciprocal effects between WFC and strain, and Michel and Hargis (2008) and Michel *et al.* (2009), who compared whether the same-domain perspective or conflict theory (a cross-domain perspective) provides a better rationale behind the models. Most meta-analyses

Article	Theoretical underpinnings	Antecedents	Moderators	Mediators	Consequences	Key findings
French <i>et al.</i> (2018)	Social support theory	Forms (behaviours and perceptions), sources (supervisor, co-worker and spouse) and types (instrumental and emotional) of social support	Cultural values and economic factors	Nil	Nil	All antecedents are significantly negative predictors of WIF and FIW (except for the relationships between work instrumental support and WIF, between family instrumental support and WIF, and between work instrumental support and FIW)
Shockley <i>et al.</i> (2017)	Rational view Sensitisation perspective Boundary theory	Gender	Full-time, same job, parental status and dual-earner status	Work/family hours, work/family salience and work/family boundaries	Nil	Gender is a significant (but weak) predictor of WIF and FIW Same job, parental and dual-earner status and type of WFC are significant moderators Work/family hours and work/family boundaries are significant mediators
Allen <i>et al.</i> (2015)	Nil	National context	Nil	Nil	Nil	Collectivism, gender gap and non-US countries are significantly positive predictors of FIW WIF and FIW are significantly positive predictors of strain
Nohe <i>et al.</i> (2015)	Conservation of resources theory	Strain	Nil	Nil	Strain	Strain is a significantly positive predictor of WIF and FIW WIF has a stronger effect on work-related strain than FIW, supporting the matching hypothesis rather than the cross-domain perspective
Allen <i>et al.</i> (2013)	Resource drain theory	Flexible work arrangements	Nil	Nil	Nil	Flexible work arrangements are significantly negative predictors of WIF Flexitime is more negatively associated with WIF than with flexplaces Flexplace use is more negatively associated with WIF than flexplace availability
Allen <i>et al.</i> (2012)	Resource drain theory	Dispositions	Time, strain- and behaviour-based WFC	Nil	Nil	Most dispositions are significant predictors of WIF and FIW Time, strain- and behaviour-based WFC are significant moderators

(continued)

Table I. Summary of the antecedents and consequences in previous meta-analyses of work-family conflict

Article	Theoretical underpinnings	Antecedents	Moderators	Mediators	Consequences	Key findings
Amstad <i>et al.</i> (2011)	Nil	Nil	and demographics Parenthood and time spent at work	Nil	Work-related (e.g. work satisfaction and organisational commitment), family-related (e.g. family satisfaction and family performance) and domain-unspecific (e.g. life satisfaction, health and psychological strain) outcomes	WIF and FIW are significant predictors of work-related, family-related and domain-unspecific outcomes WIF is more strongly associated with work-related outcomes and FIW is more strongly associated with family-related outcomes, supporting the matching hypothesis rather than the cross-domain perspective Time spent at work is a significant moderator between WIF and family-related outcomes and between FIW and domain-unspecific outcomes
Kossek <i>et al.</i> (2011)	Perceived organisational support theory	General and work-specific supervisory and organisational support	Nil	General and work-family-specific organisational support	Nil	Work-family-specific support (organisational and supervisory) is a stronger predictor of WIF than general support (organisational and supervisory) Organisational support (general and work-family-specific) is a significant mediator of supervisory support (general and work-family-specific)
Michel, Clark and Jaramillo (2011)	Personality theory	"Big Five" personality traits	Nil	Nil	Nil	Extraversion, agreeableness, conscientiousness and neuroticism are significant predictors of work-non-work spillover (e.g. WFC)
Michel, Kotrba, Mitchelson, Clark and Baltzes (2011)	Work-family theories	Work role stressors, family role stressors, work role involvement, family role involvement, work social support, family social support, work characteristics, family characteristics and personality	Marital status, parental status and gender	Nil	Nil	Work role stressors, work role involvement, work social support and work characteristics are significant predictors of WIF Family role stressors, family role involvement, family social support and family characteristics are significant predictors of FIW Locus of control and neuroticism are significant predictors of WIF and FIW Marital status, parental status and gender are significant moderators of WIF and FIW

(continued)

Article	Theoretical underpinnings	Antecedents	Moderators	Mediators	Consequences	Key findings
Shockley and Singla (2011)	Domain specificity perspective Source attribution perspective	Nil	Gender	Nil	Family satisfaction and job satisfaction	WIF is a stronger predictor of job satisfaction than of family satisfaction and FIW is a stronger predictor of family satisfaction than of job satisfaction, supporting the source attribution perspective rather than the domain specificity perspective Gender is a significant moderator
Michel <i>et al.</i> (2010)	Role theory	Work/family role conflict, time demands, role ambiguity, social support and role involvement	Nil	Work/family social support, role involvement, role conflict, time demands and role ambiguity	Nil	Work/family social support and role involvement are significant predictors of WIF and FIW, mediated by work/family role conflict, time demands and role ambiguity
Michel <i>et al.</i> (2009)	Conflict theory Segmentation theory	Work/family social support, involvement, role conflict, time demands and role ambiguity	Nil	Nil	Job satisfaction, family satisfaction and life satisfaction	WIF and FIW are better predictors of same-domain than of cross-domain satisfaction (e.g., WIF is a better predictor of job satisfaction), supporting segmentation theory (direct effect links) rather than conflict theory (indirect WFC links)
Michel and Hargis (2008)	Conflict theory Segmentation theory	Work/family social support, involvement, role conflict, time demands and role ambiguity	Nil	Nil	Job satisfaction and family satisfaction	WIF and FIW are better predictors of same-domain than of cross-domain satisfaction, supporting direct effect links rather than indirect WFC links
Ford <i>et al.</i> (2007)	Nil	Job involvement, job stress, work support and work hours Family conflict, family stress, family support and family hours	Nil	Nil	Job satisfaction and family satisfaction	Job involvement, job stress, work support and work hours are significant predictors of WIF Family conflict, family stress, family support and family hours are significant predictors of FIW WIF and FIW are significant predictors of family satisfaction and job satisfaction, respectively, supporting cross-domain satisfaction

(continued)

Table I.

Article	Theoretical underpinnings	Antecedents	Moderators	Mediators	Consequences	Key findings
Mesmer-Magnus and Viswesvaran (2006)	Nil	Family-friendly work environment	Nil	Nil	Nil	Family-friendly work environment is a stronger predictor of global WFC and WIF than of FIW
Byron (2005)	Conflict theory	Work domain, non-demographic and individual variables	Percentages of females and parents and coding of antecedents	Nil	Nil	Work variables (job involvement, hours spent at work, work support, schedule flexibility and job stress) are stronger predictors of WIF than of FIW Non-work variables (hours of non-work, family stress, number of children and marital status) are stronger predictors of FIW than of WIF Job stress, family stress and family conflict are the strongest predictors of both WIF and FIW WIF and FIW have similar but distinct correlations with the eight consequences
Mesmer-Magnus and Viswesvaran (2005)	Nil	Nil	Nil	Nil	Job stressors, non-work stressors, supportive work environment, organisational withdrawal, job satisfaction, life satisfaction and health	Work variables (job involvement, hours spent at work, work support, schedule flexibility and job stress) are stronger predictors of WIF than of FIW Non-work variables (hours of non-work, family stress, number of children and marital status) are stronger predictors of FIW than of WIF Job stress, family stress and family conflict are the strongest predictors of both WIF and FIW WIF and FIW have similar but distinct correlations with the eight consequences
Allen <i>et al.</i> (2000)	Nil	Nil	Nil	Nil	Work-related (e.g. job satisfaction and organisational commitment), non-work-related (e.g. life satisfaction and family satisfaction) and stress-related (e.g. depression and burnout) consequences	Intention to turnover, life satisfaction and work-related stress are the strongest predictors of work-related, non-work-related and stress-related consequences, respectively
Kossek and Ozeke (1998)	Nil	Nil	Nil	Nil	Job satisfaction and life satisfaction	WFC, WIF and FIW are all significantly negative predictors of job satisfaction and life satisfaction

have either examined the antecedents (e.g. Allen *et al.*, 2012, 2013; French *et al.*, 2018; Shockley *et al.*, 2017) or the consequences (Shockley and Singla, 2011). Also, most of them have only quantitatively reviewed the effect sizes without a clear overarching theoretical framework (e.g. Amstad *et al.*, 2011; Kossek and Ozeki, 1998; Mesmer-Magnus and Viswesvaran, 2005, 2006). As such, two problems remain unsolved. One is the need for a sound overarching theoretical underpinning that supports the typologies of the antecedents and consequences of WFC. Another is the lack of differentiation between the favourable and unfavourable conditions of WFC, where favourable conditions are beneficial in reducing conflicts and unfavourable conditions may increase the perception of conflicts.

Second, the inclusion of WFC consequences in existing meta-analyses has been limited, with mainly satisfaction towards family/work/life and stress-related outcomes being included (e.g. Amstad *et al.*, 2011; Michel and Hargis, 2008). Other critical outcomes, such as employee commitment in both the family and work domains and career consequences, have generally been overlooked, except by Allen *et al.* (2000) and Amstad *et al.* (2011). This may hinder researchers from developing more robust nomological networks of WFC in the future. Furthermore, although meta-analyses have investigated both work- and family-related outcomes, inclusions and comparisons of parallel antecedents from these two domains have often been ignored. For example, although Amstad *et al.* (2011) did include organisational commitment as an outcome of WFC, they did not examine the potentially negative influence of WFC on employees' commitment to family functioning.

Third, an updated meta-analysis is warranted, as the new correlates of WFC (e.g. career consequences) from the latest empirical studies must be incorporated. Inconsistent findings of correlates from previous empirical research must also be incorporated to investigate the true effect sizes. For example, significant negative relationships between WFC and employee job performance have been found in some studies (e.g. Hoobler *et al.*, 2009), whereas non-significant relationships have been indicated in others (e.g. Kossek *et al.*, 2006). An integrative quantitative review (i.e. a meta-analysis) would help aggregate the empirical findings of individual studies and correct for different research artefacts in calculating more approximate effect sizes.

To address the above-mentioned research gaps, we have three objectives in conducting this study. First, we draw upon COR theory as an overarching theoretical underpinning to organise both the favourable and unfavourable antecedents of WFC. Specifically, we propose three pairs of WFC antecedents, each of which includes both favourable (e.g. perceived control at work) and unfavourable (e.g. perceived work demand) conditions. Second, we aim to extend the investigation on WFC consequences to both work performance and family performance, commitment to both work and family and employee career outcomes, all of which are critical consequences that have not been fully explored in previous meta-analyses. Specifically, individuals' performances both at work and at home are the two most important functions to achieve work effectiveness and family harmony. Likewise, individuals' commitment to both the work and family domains is important, as highly committed employees are more valued by their organisations and a high level of family commitment demonstrates loyalty and dedication to family roles. Employees' career outcomes also help indicate the extent to which WFC may interfere with individuals' career paths or become a critical obstacle to achieving career success. Despite their importance, these three types of outcomes have been discussed less in previous WFC meta-analytic reviews. Third, we aim to incorporate newly explored correlates of WFC such as employee career development-related outcomes and quantitatively review their relationships with WFC. Combining the results of this study and those of previous WFC meta-analyses, a more comprehensive nomological network of WFC is developed and investigated.

Theoretical underpinning and research model

We adopt COR theory to interpret the relationships between WFC and its correlates. COR theory argues that resources – conditions, personal characteristics, energy and objects – are

instrumental for individuals to cope with stressful events and challenging situations (Hobfoll, 1989, 2001). Thus, people are inclined to develop and maintain important and critical resources across different situations to assist them in accomplishments and other expected outcomes. COR theory is an appropriate theoretical framework for this study for two reasons. First, COR theory provides arguments for the impact of resource gain vs resource loss on individuals' perceptions and behaviours. WFC studies have largely focussed on either positive or negative antecedents of WFC or have not distinguished between the two types of antecedents. Thus, we contribute to the WFC literature by incorporating and comparing both types of WFC antecedents. To this end, the COR framework is helpful, as it clearly indicates how and to what extent individuals should be influenced by resource gain (i.e. favourable or positive antecedents) and resource loss (i.e. unfavourable or negative antecedents). Second, COR theory provides an overarching framework guiding the process through which individuals experience resource change (i.e. three groups of WFC antecedents), develop relevant perceptions (i.e. having high, medium or low levels of WFC perception) and in turn undergo attitudinal and behavioural consequences. We draw upon COR theory to develop the research model of this study (Figure 1).

To investigate the specific conditions of resource loss/gain related to WFC, we propose three pairs of antecedents (i.e. demand/control, hours spent/autonomy and role overload/flexibility). These three pairs of critical factors are related to employees' perception of resource change. In each pair, both favourable conditions (e.g. perception of control at work) and unfavourable conditions (e.g. work demand) are proposed in a parallel and contrasting manner. For example, when employees face intense task demands at work, the more control they have, the better the performance and perception outcomes they may experience. To this end, the perception of control at work would be a contrasting force to the work demand. Consistent with COR theory, we argue that favourable conditions at work generate the perception of resource gain, whereas unfavourable conditions lead to negative perceptions, specifically the perception of resource loss (Hobfoll, 1989, 2011). For resource gain signals, we argue that having sufficient control over both work and family, acquiring independent decision-making latitude (i.e. job autonomy) and allowing flexible work arrangements (i.e. flexibility) are three critical situations that can help alleviate negative WFC perceptions. Of these three pairs of antecedents, except for autonomy and flexibility which only apply to work-related issues, all constructs pertain to both the family and work domains. Unfavourable conditions, such as facing intense work or family demands, spending long hours on various tasks (i.e. hours spent at work/with family) and being overburdened with tasks (i.e. work and family role overload), however

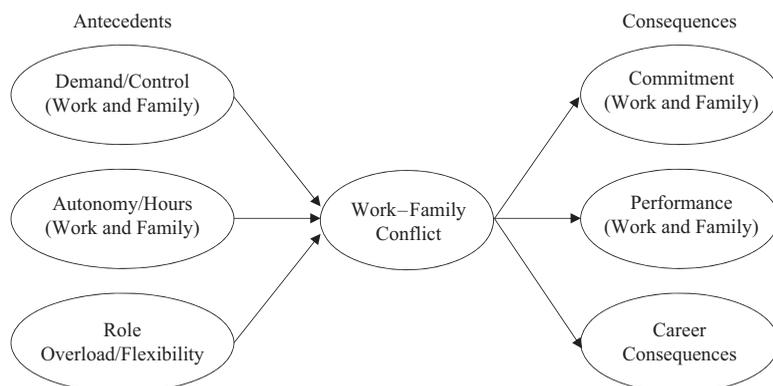


Figure 1.
Proposed research
model

imply resource loss to employees. As a result, employees are left with less power and energy to balance their work and family issues.

In terms of WFC consequences, from a COR perspective, WFC is stressful and challenging to employees because it implies more time, effort and energy needed to achieve the balance and compatibility between work and family issues. In turn, employees face potential and actual resource loss both at work and at home. Such resource loss is manifested in three ways. Employees' positive attitudes are influenced such that they show less commitment to family and work. Furthermore, their functional behaviours (e.g. performance) at work and home decrease. Finally, their career development results are threatened. In the following section, we present our hypotheses.

Antecedents and WFC

According to Hobfoll's (1989) COR theory, individuals seek to acquire, maintain and allocate resources (Hobfoll, 2001). Conditions are resources sought after particular situations such as employment, marriage and birth of children. They also represent the resource needs confined within or between such different roles at home and at work (Luk and Shaffer, 2005). Referring to Ahmad (2008), conditions are WFC predictors that can be classified into two types: job-related (e.g. work demand, work control, role overload, job autonomy and flexibility) and family-related (e.g. family demand, family control and family role overload). When individuals experience the fear of losing their job or family status due to insufficient or lack of resources to fulfil the needs of either their work or family roles, they may be forced to re-allocate their resources by drawing from one role to another (Grandey and Cropanzano, 1999). When individuals perceive their resources as insufficient to maintain the balance of resource needs (i.e. condition) between their work and family roles, they subsequently experience WFC.

Role demands and control

Work demand is defined as the resource commitment required to fulfil work responsibilities (McElwain *et al.*, 2005), whereas family demand refers to the household maintenance and childcare responsibilities at home (McManus *et al.*, 2002). Due to the limited nature of resources, higher demands in one role result in fewer resources for another role, which may be related to WFC. Research has provided strong empirical support for the negative impacts of work demand (e.g. Bhave *et al.*, 2010; Boyar *et al.*, 2007; Ilies *et al.*, 2015; Pal and Saksvik, 2008; Westring and Ryan, 2011) and family demand (e.g. Bakker *et al.*, 2008; Boyar *et al.*, 2008; Choi, 2008) on WFC. As time and energy demands in the workplace or at home increase, the likelihood of those demands intruding upon the opposite domain increases, leading to WFC. For example, when employees are heavily occupied by family tasks like newborn baby care, home renovations or taking care of a sick family member, they experience a psychological burden and physical challenges that drain their time and energy from fully engaging in job tasks. Due to increasing demands either at home or at work interfering with their commitment to fulfil their responsibilities in another role, employees may experience negative perceptions of time and energy loss. This may lead to the perception of conflict arising from clashes in resource allocation to maintain a good balance between work and family. Thus, we propose the following hypotheses:

H1a. Employees' perceived work demand is positively related to WFC.

H1b. Employees' perceived family demand is positively related to WFC.

Despite work and family demands, the amount of control experienced by employees both at work and at home is also related to WFC (Kossek *et al.*, 2006, 2012; Lapiere and Allen, 2012). Work control represents employees' freedom to decide and self-manage the ways, the work

goals and the arrangements of schedules to perform their work tasks by imposing their personal initiative and judgment. Family control represents employees' degree of influence over home-related goals and responsibilities and over how and when to perform home-related tasks such as doing the laundry, purchasing groceries or planning a family outing on a given day. People may vary in the amount of control they have at work or at home. Greater control enables people to arrange and allocate their resources more easily to avoid interference between their work and family roles, reducing the potential for WFC. Thus, we propose the following hypotheses:

H2a. Employees' perceived work control is negatively related to WFC.

H2b. Employees' perceived family control is negatively related to WFC.

Time and autonomy

Time is an important resource that is exhaustible in nature. Individuals may spend and allocate their time to different roles in a mutually exclusive manner (Luk and Shaffer, 2005). In other words, once the time is spent on the tasks in one role, less time is available to spend on other tasks in another role. Therefore, when the average number of hours spent at work or home increases, the degree of WFC experienced by employees is likely to increase due to the increasing imbalance of the time allocation in performing well in both the work and family roles (Beham *et al.*, 2011; Buonocore and Russo, 2013; Butts *et al.*, 2015; Casper *et al.*, 2011; Choi, 2008). Thus, we propose the following hypotheses:

H3a. Employees' work hours are positively related to WFC.

H3b. Employees' family hours are positively related to WFC.

Job autonomy is defined as the degree of control people have over when and how their work gets done (Behson, 2005). Job autonomy allows employees to use and allocate resources, such as time and energy, in more effective ways, which in turn may impact their ability to minimise their experience of WFC (e.g. Beham *et al.*, 2012, 2014; Lambert and Haley-Lock, 2004). For example, employees can postpone less critical work tasks to handle family issues, such as taking sick children to see the doctor. Previous research has shown that perceived job autonomy may reduce WFC (Ahuja *et al.*, 2007; DiRenzo *et al.*, 2011; Hosking and Western, 2008; Lu *et al.*, 2008). Thus, we propose the following hypothesis:

H4. Employees' perceived job autonomy is negatively related to WFC.

Overload and work flexibility

Overload is a state in which an individual's capacity is not enough to handle and complete all of the demands they face at work (i.e. work role overload) or at home (i.e. family role overload; Aryee, Luk, Leung and Lo, 1999). When employees perceive that they have too many tasks to perform in a role but have insufficient time and energy to perform them, they are likely to experience overload (Caplan *et al.*, 1975). Therefore, overload indicates a lack of resources to successfully perform work and family roles.

Based on Eckenrode and Gore's (1990) spillover theory, Dierdorff and Ellington (2008) proposed that work/family overload caused by increased interdependence, responsibility for others and interpersonal conflict may lead to a significant resource drain in the work/family roles. The negative spillover effects between work and family boundaries refer to the reciprocal influence of individuals' work and family roles (Grzywacz and Marks, 2000; Hanson *et al.*, 2006). Such negative effects lead to employees' emotional exhaustion and create the perception of losing critical resources, such as positive emotions (Wayne *et al.*, 2017). The perceived deficiency of psychological and physiological resources needed to fulfil

work/family role obligations may lead to employees' increased fatigue and emotional exhaustion. Such exhaustion can subsequently increase the perceived conflict between work and family roles (Aryee *et al.*, 2005). Studies have found both work role overload (Boyar *et al.*, 2008; Dierdorff and Ellington, 2008; Reinardy, 2007) and family role overload (Aryee *et al.*, 2005; Bakker *et al.*, 2008; Matthews, Winkel and Wayne, 2014) to be related to WFC. Thus, we propose the following hypotheses:

H5a. Employees' work role overload is positively related to WFC.

H5b. Employees' family role overload is positively related to WFC.

In the WFC literature, flexibility at work is associated with a wide range of flexible work arrangements, such as flexible work hours, flexible workplaces, flexible work schedules and compressed workweeks (Allen, 2001; Shockley and Allen, 2007). Studies have also found that flexibility at work can help reduce WFC (Dierdorff and Ellington, 2008; Pal and Saksvik, 2008; Rimi, 2014; Shockley and Allen, 2007). For example, although five-day workweeks are not adopted worldwide, including many organisations in Hong Kong, such a workweek policy allows employees to spread their total work hours over five days or fewer and enjoy two-day weekends with family, resulting in a better work–family balance. Therefore, flexibility at work allows employees to use their resources such as time and energy more effectively to fulfil both their work and family roles, leading to the reduction of WFC. More importantly, flexible work arrangements also allow employees to handle unexpected, short-term increases in demands in their work or family roles, such as urgent projects or sick family members, with the flexible allocation of resources between different roles. For example, employees may be allowed to work at home so that they can take care of their children who are ill. Thus, we propose the following hypothesis:

H6. Employees' flexibility at work is negatively related to WFC.

WFC and outcomes

WFC represents an incompatibility between the demands of work and family roles (Kahn *et al.*, 1964; Katz and Kahn, 1978). In accordance with a COR perspective, the incompatibility of time and energy needed to meet demands from both domains is perceived as stressful and challenging. Employees may face potential and actual psychological and behavioural resource loss when they have to meet different demands.

Work/family commitment

Employees' commitment to work is defined as their desire to devote time and energy to work roles (Cinamon and Rich, 2002). Employees' commitment to family is defined as the "degree of time and effort they spent in activities with their family/spouse" (Shaffer *et al.*, 2001, p. 109). Both types of commitment require employees' resources, namely, their time and energy for both physical and psychological conducts. In the case of WFC, the two domains are both salient and dependent on each other for resources (e.g. Greenhaus and Beutell, 1985). High demand on either the work or family domain requires employees' resources to fulfil that demand, which in turn may drain resources from another domain (Shaffer *et al.*, 2001). Inevitably, employees would need to reduce their engagement and expend less personal temporal and psychological resources on another domain (Mowday *et al.*, 1982), thereby also reducing their commitment. Empirical findings also provide support for this prediction (e.g. Day and Chamberlain, 2006; Parasuraman *et al.*, 1996; Shaffer *et al.*, 2001; Van Steenbergen *et al.*, 2007). Thus, we propose the following hypotheses:

H7a. WFC is negatively related to employees' commitment to work.

H7b. WFC is negatively related to employees' commitment to family.

Work/family performance

In addition, in accordance with the COR perspective, WFC is regarded as stressful and challenging, as it causes the threat of or an actual loss of resources. For instance, when faced with WFC, employees' level of stress increases, as they may perceive that the resources they need to fulfil demands in a particular domain are lost because they have depleted their resources in the other domain. Inevitably, stressed employees may withdraw either psychologically or physically from their work/family tasks. More specifically, mutually incompatible demands from the work and family domains cause employees to have insufficient psychological and behavioural resources to be devoted to their work. As such, they may not be able to fully meet the requirements associated with their jobs. At the same time, employees' family performance may also suffer, as they cannot devote enough resources to fulfilling their family responsibilities. Empirical evidence (e.g. Frone *et al.*, 1997; Kossek *et al.*, 2001; Van Steenbergen *et al.*, 2007) also suggests that WFC leads to decreased performances in both domains. Thus, we propose the following hypotheses:

H8a. WFC is negatively related to employees' work performance.

H8b. WFC is negatively related to employees' family performance.

Employees' career outcomes

Finally, WFC also affects employees' career perceptions, in terms of both satisfaction and development opportunities. When individuals are faced with conflicts between their work and family, the stressors from both domains may lead to a negative evaluation of the satisfactoriness of their career progress and work life success. Past findings support this negative relationship between WFC and career satisfaction (e.g. Gordon *et al.*, 2007; Greenhaus and Parasuraman, 1986; Parasuraman *et al.*, 1996; Richardsen *et al.*, 1997). Additionally, employees consider their jobs promising if they can see their career development opportunities and consequences. Anderson *et al.* (2002) defined this as employees' perceived consequences related to future career or advancement opportunities. Employees would feel overwhelmed by competing work tasks and in fulfilling role requirements if they continuously struggled between two roles. In turn, they would experience fewer opportunities for future career advancement. Thus, we propose the following hypotheses:

H9a. WFC is negatively related to career satisfaction.

H9b. WFC is negatively related to career development consequences.

Method*Literature search and measures*

A comprehensive search was conducted for field studies that examined the relationships between WFC and its correlates and that were published in or before 2017. Searches for relevant articles were conducted in the EBSCOhost and ProQuest databases, using keywords, such as "work–family conflict", "work interfering with family", "family interfering with work" and "work–family interference". The reference lists of previous WFC meta-analyses were also considered to locate articles missed in previous processes. The inclusion criteria of this meta-analysis were as follows: whether any form of WFC (e.g. general WFC, WIF/FIW or time/strain-based WFC) was measured and whether the study reported sufficient information about effect sizes and measurements for analyses. The literature search yielded 1,074 empirical research papers. Overall, 228 research papers that included the constructs of our research model were included in our meta-analysis with 243 independent samples. Two of the authors and a trained research assistant were

responsible for the coding process. The level of agreement among the three coders for this coding section was relatively high, with a κ value higher than 0.90. As such, they agreed on all of the literature included upon discussion. All of the coders used the same protocols to code the first ten research papers. They then discussed any discrepancies from their independent coding and agreed on consistent approaches in the coding process.

A variety of operationalisations, largely consistent with prior research, were used to measure WFC. Studies were limited to those concerning the relationships between general WFC and its correlates – the same relationship used in previous meta-analytical research (e.g. Allen *et al.*, 2000). For WFC correlates, Table AI shows the WFC antecedents and consequences included in this meta-analysis.

Meta-analytical procedures

Comprehensive meta-analysis software version 3.0 developed by Borenstein, Hedges, Higgins and Rothstein was used to conduct meta-analytical tests. Random effects model was used to estimate the population parameters. To address the artefact issue and calculate the true effect sizes from individual studies, Hunter and Schmidt's (2004) meta-analysis technique was adopted. First, an effect size corrected for measurement unreliability was calculated for each reported correlation between WFC and its correlates using the Cronbach's α values reported in each study. Second, the disattenuated correlations were corrected for sampling error by calculating the corrected correlations weighted by sample size. For the cases requiring combined effect sizes, such as combining time-based WFC with strain-based WFC for an effect size of general WFC, the average of individual effect sizes was calculated. Two indices are reported to help estimate the variability of true correlation: confidence interval (CI) and credibility interval (CrI). A 95% CI is presented for each corrected correlation. A 90% CrI is also reported. If the 90% two-tailed CrI does not include zero, at least 95% of the individual correlations should also be nonzero (Judge and Ilies, 2002). In addition, the random effects variance component (REVC) value was reported, which estimates the variance of "infinite-sample effect sizes" (Lipsey and Wilson, 2001).

Moderation analysis

In investigating the distinct relationships between the WIF–correlate and FIW–correlate relationships, subgroup meta-analyses were performed. Specifically, the 80% CrI index was adopted as a moderator indicator, such that the subgroup tests were conducted with those effect sizes when 80% CrI included zero. For example, the studies that reported the correlation between WIF and work demand were organised into one group, whereas those that reported the correlation between FIW and work demand were classified into another group. This was followed by conducting separate meta-analyses for both groups.

Results

Table II shows the results of the meta-analysis. For each relationship, the total sample size accumulated across studies (n), the number of studies including an analysis of that relationship (k), the sample size weighted uncorrected correlation (r), the standard deviation of r (SD), the sample size weighted corrected correlation (r_c), the standard deviation of r_c (SD_c), the 95% CI, the 90% CrI and REVC are reported. Q -statistics value was also incorporated in the moderation analysis. Regarding the interpretation of effect sizes, an absolute value of 0.10 to 0.23 is regarded as small, 0.24–0.36 as medium and 0.37 or higher as large (Cohen, 1988).

H1a–b and *H2a–b*, which argue that work demand and family demand are positively related to WFCm and that work control and family control are negatively related WFC, respectively, are fully supported. WFC is found to be positively related to work demand

Correlate	<i>n</i>	<i>k</i>	<i>r</i>	SD	<i>r_c</i>	SD _{<i>c</i>}	95% CI	90% CrI	REVC
Work demand	19,869	41	0.24	0.24	0.30	0.29	(0.22, 0.38)	(-0.18, 0.78)	0.05
Family demand	15,803	25	0.18	0.13	0.22	0.17	(0.16, 0.28)	(-0.06, 0.50)	0.01
Work control	11,929	32	-0.10	0.20	-0.12	0.26	(-0.19, -0.04)	(-0.55, 0.31)	0.02
Family control	7,220	11	-0.20	0.20	-0.24	0.23	(-0.34, -0.13)	(-0.62, 0.14)	0.02
Job autonomy	21,521	30	-0.11	0.13	-0.14	0.16	(-0.19, -0.10)	(-0.40, 0.12)	0.01
Hours at work	56,318	106	0.17	0.14	0.18	0.16	(0.15, 0.20)	(-0.08, 0.44)	0.01
Hours at home	8,851	14	0.02	0.08	0.02	0.09	(-0.04, 0.08)	(-0.13, 0.17)	0.00
Role overload at work	16,898	38	0.40	0.12	0.52	0.15	(0.47, 0.57)	(0.27, 0.77)	0.01
Role overload at home	1,300	5	0.27	0.12	0.31	0.14	(0.16, 0.44)	(0.08, 0.54)	0.00
Flexibility (work time/ schedule)	20,932	39	-0.11	0.17	-0.14	0.21	(-0.20, -0.08)	(-0.49, 0.21)	0.02
Work commitment	8,228	22	-0.12	0.15	-0.15	0.14	(-0.22, -0.08)	(-0.38, 0.08)	-0.01
Family commitment	1,775	7	-0.09	0.07	-0.11	0.18	(-0.15, -0.06)	(-0.41, 0.19)	0.01
Work performance	6,750	22	-0.10	0.11	-0.13	0.14	(-0.19, -0.07)	(-0.36, 0.10)	0.00
Family performance	1,918	4	-0.20	0.12	-0.23	0.08	(-0.28, -0.19)	(-0.36, -0.10)	0.01
Career satisfaction	2,697	10	-0.13	0.08	-0.17	0.10	(-0.24, -0.11)	(-0.33, -0.01)	0.00
Career development consequences	4,172	6	-0.24	0.14	-0.30	0.17	(-0.42, -0.18)	(-0.58, -0.02)	0.00

Notes: *N*, total sample size accumulated across studies; *k*, number of studies including an analysis of that relationship; *r*, sample size weighted uncorrected correlation; SD, standard deviation of *r*; *r_c*, sample size weighted corrected correlation; SD_{*c*}, standard deviation of *r_c*; 95% CI, 95% confidence interval; 90% CrI, 90% credibility interval; REVC, random effects variance component

Table II.
Meta-analytic results
of the antecedents-
WFC and WFC-
consequences
relationships

(*r_c* = 0.30) and family demand (*r_c* = 0.22) and negatively related to work control (*r_c* = -0.12) and family control (*r_c* = -0.24).

H3a-3b and *H4*, which argue that work hours and family hours are positively related to WFC and that job autonomy is negatively related to WFC, respectively, are partially supported. WFC is found to be positively related to work hours (*r_c* = 0.18) and negatively related to job autonomy (*r_c* = -0.14). The effect size between WFC and family hours is not prominent (*r_c* = 0.02).

H5a-5b and *H6*, which argue that work role overload and family role overload are positively related to WFC and that flexibility at work is negatively related to WFC, respectively, are fully supported. WFC is found to be positively related to work role overload (*r_c* = 0.52) and family role overload (*r_c* = 0.31) and negatively related to flexibility at work (*r_c* = -0.14).

H7a-7b, *H8a-8b* and *H9a-9b*, which argue that WFC is negatively related to three types of consequences, are fully supported. WFC is found to be negatively related to commitment to work (*r_c* = -0.15), commitment to family (*r_c* = -0.11), work performance (*r_c* = -0.13), family performance (*r_c* = -0.23), career satisfaction (*r_c* = -0.17) and career rewards and development (*r_c* = -0.30).

Moderation results

Table III shows the moderation results, with one moderator (WIF vs FIW) analysed. Moderation analyses were conducted with those WFC-correlate relationships gathered sufficient number of empirical studies (i.e. at least two studies for each subgroup).

In terms of the moderating effects, *Q* statistic of family demand, family control, work hours, flexibility, and work performance show significant differences between WIF-correlate and FIW-correlate relationships. These results suggest that WIF has stronger relationships with family control (*r_c* = -0.37) and work hours (*r_c* = 0.26); while FIW has stronger relationships with family demand (*r_c* = 0.26), flexibility at work (*r_c* = 0.10) and work performance (*r_c* = -0.25).

WFC correlate	Subgroup	<i>n</i>	<i>k</i>	<i>r</i>	SD	<i>r_c</i>	SD _{<i>c</i>}	95% CI	90% CrI	<i>Q</i>
Work demand	WIF	13,802	32	0.23	0.32	0.29	0.39	(0.15, 0.42)	(-0.41, 0.87)	2.74
	FIW	9,027	21	0.12	0.17	0.15	0.20	(0.05, 0.25)	(-0.18, 0.48)	
Family demand	WIF	12,975	22	0.11	0.14	0.14	0.18	(0.07, 0.21)	(-0.16, 0.44)	5.21*
	FIW	13,257	20	0.21	0.13	0.26	0.16	(0.19, 0.33)	(0.00, 0.52)	
Work control	WIF	9,008	25	-0.12	0.23	-0.16	0.29	(-0.25, -0.06)	(-0.64, 0.32)	0.68
	FIW	4,737	14	-0.07	0.12	-0.10	0.16	(-0.20, -0.00)	(-0.36, 0.16)	
Family control	WIF	6,560	8	-0.32	0.15	-0.37	0.17	(-0.45, -0.27)	(-0.65, -0.09)	4.33*
	FIW	6,560	8	-0.16	0.17	-0.20	0.21	(-0.33, -0.06)	(-0.55, 0.15)	
Job autonomy	WIF	15,525	20	-0.11	0.12	-0.15	0.14	(-0.20, -0.10)	(-0.38, 0.08)	1.56
	FIW	7,290	9	-0.05	0.15	-0.07	0.19	(-0.18, 0.03)	(-0.38, 0.24)	
Hours at work	WIF	38,469	80	0.24	0.13	0.26	0.15	(0.24, 0.29)	(0.01, 0.51)	166.68**
	FIW	25,867	52	0.01	0.11	0.03	0.12	(0.02, 0.05)	(-0.17, 0.23)	
Hours at home	WIF	3,673	6	-0.08	0.11	-0.08	0.12	(-0.11, -0.05)	(-0.23, 0.17)	0.89
	FIW	4,175	6	0.01	0.06	0.01	0.07	(-0.04, 0.07)	(-0.11, 0.13)	
Role overload at work	WIF	14,617	31	0.42	0.14	0.53	0.18	(0.45, 0.60)	(0.23, 0.83)	3.31
	FIW	10,723	18	0.33	0.15	0.43	0.20	(0.35, 0.50)	(0.10, 0.76)	
Role overload at home	WIF	1,543	6	0.20	0.16	0.23	0.18	(0.05, 0.40)	(-0.07, 0.53)	1.03
	FIW	1,543	6	0.28	0.10	0.34	0.13	(0.21, 0.46)	(0.13, 0.55)	
Flexibility (work time/schedule)	WIF	16,057	26	-0.06	0.18	-0.07	0.22	(-0.14, -0.01)	(-0.43, 0.29)	10.10**
	FIW	7,664	15	0.07	0.13	0.10	0.19	(0.02, 0.18)	(-0.21, 0.41)	
Career development consequences	WIF	4,188	6	-0.27	0.19	-0.33	0.23	(-0.49, -0.16)	(-0.71, 0.05)	1.09
	FIW	3,930	5	-0.19	0.06	-0.23	0.08	(-0.30, -0.16)	(-0.36, -0.10)	
Work performance	WIF	3,660	14	-0.06	0.12	-0.07	0.15	(-0.16, 0.02)	(-0.32, 0.18)	7.12**
	FIW	3,641	16	-0.19	0.13	-0.25	0.17	(-0.33, -0.16)	(-0.53, 0.03)	
Family commitment	WIF	1,037	4	-0.13	0.11	-0.15	0.12	(-0.26, -0.04)	(-0.35, 0.05)	1.94
	FIW	683	3	-0.03	0.09	-0.02	0.12	(-0.16, 0.12)	(-0.22, 0.18)	
Work commitment	WIF	4,398	13	-0.17	0.15	-0.20	0.18	(-0.29, -0.11)	(-0.50, 0.10)	0.00
	FIW	3,576	8	-0.16	0.15	-0.21	0.19	(-0.34, -0.06)	(-0.52, 0.10)	

Notes: *N*, total sample size accumulated across studies; *k*, number of studies including an analysis of that relationship; *r*, sample size weighted uncorrected correlation; SD, standard deviation of *r*; *r_c*, sample size weighted corrected correlation; SD_{*c*}, standard deviation of *r_c*; 95% CI, 95% confidence interval; 90% CrI, 90% credibility interval; *Q*, value of *Q*-statistic. **p* < 0.05; ***p* < 0.01

Table III.
Moderation analyses

Discussion

To date, more than a dozen meta-analytic studies of WFC have been conducted. Most of them have examined either the antecedents (e.g. Allen *et al.*, 2012; Byron, 2005; Mesmer-Magnus and Viswesvaran, 2006; Michel, Clark and Jaramillo, 2011; Michel, Kotrba, Mitchelson, Clark and Baltes, 2011; Michel *et al.*, 2010) or the consequences (e.g. Allen *et al.*, 2000; Amstad *et al.*, 2011; Kossek and Ozeki, 1998; Mesmer-Magnus and Viswesvaran, 2005; Nohe *et al.*, 2015) of WFC. Although the rest have comprised both WFC antecedents and consequences, they have mainly examined the cross-domain (i.e. work antecedents affecting family consequences and vice versa) or match-domain (i.e. work antecedents affecting work consequences and vice versa) relations of WFC (e.g. Ford *et al.*, 2007; Michel and Hargis, 2008; Michel *et al.*, 2009). Despite these studies advancing our knowledge of WFC, theory-driven meta-analytic models of WFC comprising both antecedents and consequences have been limited.

To fill the knowledge gap, from a COR perspective, we extend the literature by developing a theory-driven meta-analytic model of WFC comprising both antecedents and consequences. More specifically, we identify three sets of WFC antecedents: demand of and control over work and family, hours spent at work and home and job autonomy and role overload at work and home and work flexibility. Likewise, we identify three sets of WFC

consequences: employees' commitment to work and family (work attitude), employees' performance at work and home and employees' career satisfaction and rewards such as favourable career appraisals.

Antecedents of WFC

There are three sets of WFC antecedents. First, we argue that work demand and family demand are two significantly positive predictors of WFC, whereas work control and family control are two significantly negative predictors of WFC. Our findings support that either work or family demand worsens WFC, as work and family obligations use up individuals' resources, leading to the deterioration of WFC. When individuals perceive that they have control over their work or family obligations, they are in a better position to retain or protect their limited resources for their dual roles in the work and family domains, leading to the mitigation of WFC.

Second, in addition to the perceptions of work and family obligations, the actual hours spent in the work and family domains explicitly deplete personal resources. Our findings uphold that when individuals are substantially occupied by work, they tend to find it challenging to effectively cope with both work and family responsibilities, leading to the occurrence of WFC. On the other hand, hours spent in the family domain are not a significant predictor of WFC, probably because individuals' psychological ownership in family issues is generally stronger than that in work issues and thus resource loss may be less noticeable. In contrast, individuals' job autonomy affects their perceptions of their degree of control over when and how they complete their work tasks, which may help save their personal resources on both work and family responsibilities. The occurrence of WFC may thus decrease.

Third, our findings indicate that role overload from the work and family domains are two significantly positive predictors of WFC, whereas employees' flexibility at work such as flexible work hours, flexible workplaces and flexible work schedules is a significantly negative predictor of WFC. Role overload is essentially a resource loss event that leads to a certain degree of depression (Hobfoll, 1989). Such resource loss weakens individuals' capacity to deal with their work or family obligations, giving rise to WFC. In contrast, employees' flexibility at work allows them to make better use of their personal resources and thus helps alleviate the impact of WFC.

Finally, the findings from the moderation test show that despite no significant differences between the effect sizes that WIF and FIW have with most of the correlates (9 out of 14), five correlates do suggest some distinct relationships. Employee work hours are indicated as more related to WIF than to FIW. This is consistent with the argument that when employees spend more time on work tasks, they are more likely to reserve less time and effort for family commitments. Thus, the perception of WIF would be stronger. Family demands are more associated with FIW, supporting the notion that with high family demands, employees would perceive family tasks interfering with their work. In addition, the subgroup analysis results show that having higher level of control over family issues and having more flexibility at work is more associated with FIW than WIF. Further empirical studies investigating the underlying mechanisms of these associations would help clarify the comparison.

Consequences of WFC

COR theory posits that WFC can result in resource loss because individuals need to use personal resources to deal with it (Kwan *et al.*, 2012). As such, we expect WFC to lead to negative consequences. We also hypothesise three sets of WFC consequences. First, we argue that WFC has negative effects on work attitudes, such as employees' commitment to both work and family domains. Our findings endorse these relationships. As individuals

have to utilise their resources to cope with the conflict, they may suffer from resource drain and thus reduce their commitment to fulfilling their work and family roles.

Second, we believe that WFC also has negative effects on employees' performance both at work and home. Employees who experience WFC may deplete their resources, leading to insufficient resources to be devoted to their work and family obligations, which in turn decrease their performance in the work and family domains.

Third, we expect WFC to hamper employees' favourable career appraisals, including career satisfaction and career rewards and development. Similar to the effects of other negative consequences of WFC, when individuals experience WFC, their personal resources are drained, and the negative appraisals of such adverse situations may generate further negative outcomes and affect other domains, such as career appraisals. Our findings are consistent with our expectations, with those who experience WFC being likely to appraise their career satisfaction and career rewards and development more unfavourably.

Implications and limitations

There are several implications from this study. First, we adopt a COR perspective to understand how acquiring critical resources (i.e. perceptions of control, autonomy and flexibility) decreases the unfavourable experiences of WFC and how WFC as a signal of potential and actual resource loss influences employees' positive attitudes and performance both at work and home. These findings are of valuable reference to management practitioners. Insofar as employees feel empowered by higher levels of control, autonomy and flexibility in their jobs, they are more likely to perceive a lower level of WFC. More importantly, in turn, these employees may have a better chance to experience positive outcomes at work, such as higher work commitment, better job performance and increased career satisfaction. These findings provide practical implication to support the importance of managerial support, such as coaching (Hui and Sue-Chan, 2018; Hui *et al.*, 2013) and mentoring (Nielson *et al.*, 2001), in enhancing employees' attitude and performance through reducing their stress caused by conflicts between work and family. Second, we provide preliminary findings on the comparison of the strengths between the favourable and unfavourable antecedents of WFC. Our results are consistent with the arguments of COR theory such that compared to favourable antecedents, unfavourable/negative predictors demonstrate stronger relationships with individuals' WFC. Empirical findings from other research have also supported this argument. Baumeister *et al.* (2001) asserted that compared to positive or neutral stimuli, negative events have a great power to generate stronger psychological, affective and behavioural reactions. Such negative asymmetry effects have gained support from various scholarly perspectives, such as discrepancy theories (Fiske, 1980). If unfavourable conditions have stronger impacts on employees' WFC than favourable conditions, management practitioners should be more aware of getting rid of extremely high work demands or other constraining requirements, instead of focussing merely on building supportive work environments. Third, we incorporate the less discussed and newly developed correlates of WFC, such as the negative consequences of WFC on individuals' favourable career appraisals. In addition, our subgroup tests show that most of the WFC correlates included (i.e. 11 out of 14) show similar effect sizes to WIF and FIW. The findings support our conceptualisation that from our research model, employees often react to their feelings of conflict in a general way, instead of having distinct reactions to WIF or FIW.

We are also aware of some potential limitations to this study. First, the effect sizes from our meta-analytical findings only suggest the binary relationship between WFC and its correlates. More empirical studies with appropriate research designs are needed to investigate the causal relationships. Although the research model developed in this meta-analysis is based on theoretical arguments, the nature of correlation-based meta-analyses does not support the examination of causality relationships. Furthermore,

our meta-analytical results show the preliminary results of effect size comparison. More empirical studies are needed to simultaneously include both antecedents to provide more robust statistical comparison. In addition, although a moderation test was conducted using the types of WFC as moderators, some of the CrI intervals still contain the value of zero. This result indicates other moderators. Future research should examine whether other moderators such as job level and company industry can provide further information on the effect size findings. Second, we aim to develop a relatively parsimonious meta-analytic model of WFC comprising both favourable and unfavourable antecedents and consequences. Furthermore, the WFC studies incorporating both antecedents and consequences and testing the bidirectional conception of conflict between work and family are limited in the literature. The trade-off would be the loss of valuable information given by the two dimensions of WFC (i.e. WIF and FIW). Future research should consider including both the WIF and FIW dimensions provided that a relatively parsimonious model could be attained. In addition, such a methodological arrangement is consistent with our research purpose of investigating the impacts of resource gain/loss experiences on individual perceived levels of WFC. Although we do not focus on discovering whether work issues interfere with family issues more (i.e. WIF) or vice versa, having a general WFC construct is reasonable in our research model. Third, similar to other meta-analytic studies, one limitation is associated with the primary research aggregated in this study. As many primary studies are based on cross-sectional research designs or self-reported data, caution is needed regarding the inferences drawn (Allen *et al.*, 2012). Future research may consider empirically testing both favourable and unfavourable conditions in the same sample, preferably with a longitudinal design. We also encourage researchers to include both work and family conditions in the same study and to compare the influence of each domain over employees' WFC perceptions.

Conclusion

We provide an updated meta-analytic model of WFC comprising both antecedents and consequences. From a COR perspective, we develop and test three sets of WFC antecedents and three sets of WFC consequences. The hypotheses are generally supported. Our findings extend the WFC literature and lay the groundwork for future research in this area of study.

References

The studies included in the meta-analysis are marked by an asterisk.

- *Adams, G.A. and Jex, S.M. (1999), "Relationships between time management, control, work-family conflict, and strain", *Journal of Occupational Health Psychology*, Vol. 4 No. 1, pp. 72-77.
- Ahmad, A. (2008), "Job, family and individual factors as predictors of work-family conflict", *The Journal of Human Resource and Adult Learning*, Vol. 4 No. 1, pp. 57-65.
- *Ahuja, M.K., Chudoba, K.M., Kacmar, C.J., McKnight, D.H. and George, J.F. (2007), "IT road warriors: balancing work-family conflict, job autonomy, and work overload to mitigate turnover intentions", *MIS Quarterly*, Vol. 31 No. 1, pp. 1-17.
- *Allard, K., Haas, L. and Philip Hwang, C. (2007), "Exploring the paradox: experiences of flexible working arrangements and work-family conflict among managerial fathers in Sweden", *Community, Work and Family*, Vol. 10 No. 4, pp. 475-493.
- *Allen, T.D. (2001), "Family-supportive work environments: the role of organizational perceptions", *Journal of Vocational Behavior*, Vol. 58 No. 3, pp. 414-435.
- *Allen, T.D. and Armstrong, J. (2006), "Further examination of the link between work-family conflict and physical health: the role of health-related behaviors", *American Behavioral Scientist*, Vol. 49 No. 9, pp. 1204-1221.

- Allen, T.D., French, K.A., Dumani, S. and Shockley, K.M. (2015), "Meta-analysis of work-family conflict mean differences: does national context matter?", *Journal of Vocational Behavior*, Vol. 90, pp. 90-100.
- Allen, T.D., Herst, D.E., Bruck, C.S. and Sutton, M. (2000), "Consequences associated with work-to-family conflict: a review and agenda for future research", *Journal of Occupational Health Psychology*, Vol. 5 No. 2, pp. 278-308.
- Allen, T.D., Johnson, R.C., Kiburz, K.M. and Shockley, K.M. (2013), "Work-family conflict and flexible work arrangements: deconstructing flexibility", *Personnel Psychology*, Vol. 66 No. 2, pp. 345-376.
- Allen, T.D., Johnson, R.C., Saboe, K.N., Cho, E., Dumani, S. and Evans, S. (2012), "Dispositional variables and work-family conflict: a meta-analysis", *Journal of Vocational Behavior*, Vol. 80 No. 1, pp. 17-26.
- *Allis, P. and O'Driscoll, M. (2008), "Positive effects of non-work-to-work facilitation on well-being in work, family and personal domains", *Journal of Managerial Psychology*, Vol. 23 No. 3, pp. 273-291.
- Amstad, F.T., Meier, L.L., Fasel, U., Elfering, A. and Semmer, N.K. (2011), "A meta-analysis of work-family conflict and various outcomes with a special emphasis on cross-domain versus matching-domain relations", *Journal of Occupational Health Psychology*, Vol. 16 No. 2, pp. 151-169.
- *Anderson, S.E., Coffey, B.S. and Byerly, R.T. (2002), "Formal organizational initiatives and informal workplace practices: links to work-family conflict and job-related outcomes", *Journal of Management*, Vol. 28 No. 6, pp. 787-810.
- *Anderson-Kulman, R.E. and Paludi, M.A. (1986), "Working mothers and the family context: predicting positive coping", *Journal of Vocational Behavior*, Vol. 28 No. 3, pp. 241-253.
- *Andreassi, J.K. and Thompson, C.A. (2007), "Dispositional and situational sources of control: relative impact on work-family conflict and positive spillover", *Journal of Managerial Psychology*, Vol. 22 No. 8, pp. 722-740.
- Anwar, F., Sidin, J.P. and Javed, A. (2016), "Antecedents of work exhaustion, its mediating role and subsequent effects on turnover intentions", *Society for Business and Management Dynamics*, Vol. 5 No. 8, pp. 85-94.
- *Aryee, S. (1992), "Antecedents and outcomes of work-family conflict among married professional women: evidence from Singapore", *Human Relations*, Vol. 45 No. 8, pp. 813-837.
- *Aryee, S. (1993), "Dual-earner couples in Singapore: an examination of work and nonwork sources of their experienced burnout", *Human Relations*, Vol. 46 No. 12, pp. 1441-1468.
- *Aryee, S. and Luk, V. (1996), "Work and nonwork influences on the career satisfaction of dual-earner couples", *Journal of Vocational Behavior*, Vol. 49 No. 1, pp. 38-52.
- *Aryee, S., Luk, V. and Fields, D. (1999), "A cross-cultural test of a model of the work-family interface", *Journal of Management*, Vol. 25 No. 4, pp. 491-511.
- *Aryee, S., Srinivas, E.S. and Tan, H.H. (2005), "Rhythms of life: antecedents and outcomes of work-family balance in employed parents", *Journal of Applied Psychology*, Vol. 90 No. 1, pp. 132-146.
- *Aryee, S., Luk, V., Leung, A. and Lo, S. (1999), "Role stressors, interrole conflict, and well-being: the moderating influence of spousal support and coping behaviors among employed parents in Hong Kong", *Journal of Vocational Behavior*, Vol. 54 No. 2, pp. 259-278.
- *Aycaan, Z. and Eskin, M. (2005), "Relative contributions of childcare, spousal support, and organizational support in reducing work-family conflict for men and women: the case of Turkey", *Sex Roles*, Vol. 53 Nos 7/8, pp. 453-471.
- *Bacharach, S.B., Bamberger, P. and Conley, S. (1991), "Work-home conflict among nurses and engineers: mediating the impact of role stress on burnout and satisfaction at work", *Journal of Organizational Behavior*, Vol. 12 No. 1, pp. 39-53.

- *Bakker, A.B., Demerouti, E. and Dollard, M.F. (2008), "How job demands affect partners' experience of exhaustion: integrating work-family conflict and crossover theory", *Journal of Applied Psychology*, Vol. 93 No. 4, pp. 901-911.
- *Bakker, A.B., Lieke, L., Prins, J.T. and van der Heijden, F.M. (2011), "Applying the job demands-resources model to the work-home interface: a study among medical residents and their partners", *Journal of Vocational Behavior*, Vol. 79 No. 1, pp. 170-180.
- *Balmforth, K. and Gardner, D. (2006), "Conflict and facilitation between work and family: realizing the outcomes for organizations", *New Zealand Journal of Psychology*, Vol. 35 No. 2, pp. 69-76.
- *Batt, R. and Valcour, P.M. (2003), "Human resources practices as predictors of work-family outcomes and employee turnover", *Industrial Relations: A Journal of Economy and Society*, Vol. 42 No. 2, pp. 189-220.
- Baumeister, R.F., Bratslavsky, E., Finkenauer, C. and Vohs, K.D. (2001), "Bad is stronger than good", *Review of General Psychology*, Vol. 5 No. 4, pp. 323-370.
- *Beauregard, A.T. (2006), "Are organizations shooting themselves in the foot? Workplace contributors to family-to-work conflict", *Equal Opportunities International*, Vol. 25 No. 5, pp. 336-353.
- *Bedeian, A.G., Burke, B.G. and Moffett, R.G. (1988), "Outcomes of work-family conflict among married male and female professionals", *Journal of Management*, Vol. 14 No. 3, pp. 475-491.
- *Beham, B., Drobnič, S. and Präg, P. (2011), "Work demands and resources and the work-family interface: testing a salience model on German service sector employees", *Journal of Vocational Behavior*, Vol. 78 No. 1, pp. 110-122.
- Beham, B., Drobnič, S. and Präg, P. (2012), "Who's got the balance? A study of satisfaction with the work-family balance among part-time service sector employees in five Western European countries", *International Journal of Human Resource Management*, Vol. 23 No. 18, pp. 3725-3741.
- Beham, B., Drobnič, S. and Präg, P. (2014), "The work-family interface of service sector workers: a comparison of work resources and professional status across five European countries", *Applied Psychology*, Vol. 63 No. 1, pp. 29-61.
- *Behson, S.J. (2002), "Which dominates? The relative importance of work-family organizational support and general organizational context on employee outcomes", *Journal of Vocational Behavior*, Vol. 61 No. 1, pp. 53-72.
- *Behson, S.J. (2005), "The relative contribution of formal and informal organizational work-family support", *Journal of Vocational Behavior*, Vol. 66 No. 3, pp. 487-500.
- *Beigi, M., Shirmohammadi, M. and Kim, S. (2016), "Living the academic life: a model for work-family conflict", *Work*, Vol. 53 No. 3, pp. 459-468.
- *Bhave, D.P., Kramer, A. and Glomb, T.M. (2010), "Work-family conflict in work groups: social information processing, support, and demographic dissimilarity", *Journal of Applied Psychology*, Vol. 95 No. 1, pp. 145-158.
- *Bolino, M.C. and Turnley, W.H. (2005), "The personal costs of citizenship behavior: the relationship between individual initiative and role overload, job stress, and work-family conflict", *Journal of Applied Psychology*, Vol. 90 No. 4, pp. 740-748.
- *Boyar, S.L. and Mosley, D.C. Jr (2007), "The relationship between core self-evaluations and work and family satisfaction: the mediating role of work-family conflict and facilitation", *Journal of Vocational Behavior*, Vol. 71 No. 2, pp. 265-281.
- *Boyar, S.L., Carr, J.C., Mosley, D.C. Jr and Carson, C.M. (2007), "The development and validation of scores on perceived work and family demand scales", *Educational and Psychological Measurement*, Vol. 67 No. 1, pp. 100-115.
- *Boyar, S.L., Maertz, C.P. Jr, Mosley, D.C. Jr and Carr, J.C. (2008), "The impact of work/family demand on work-family conflict", *Journal of Managerial Psychology*, Vol. 23 No. 3, pp. 215-235.
- *Boyar, S.L., Maertz, C.P. Jr, Pearson, A.W. and Keough, S. (2003), "Work-family conflict: a model of linkages between work and family domain variables and turnover intentions", *Journal of Managerial Issues*, Vol. 15 No. 2, pp. 175-190.

-
- *Bragger, J.D., Rodriguez-Srednicki, O., Kutcher, E.J., Indovino, L. and Rosner, E. (2005), "Work-family conflict, work-family culture, and organizational citizenship behavior among teachers", *Journal of Business and Psychology*, Vol. 20 No. 2, pp. 303-324.
- *Britt, T.W. and Dawson, C.R. (2005), "Predicting work-family conflict from workload, job attitudes, group attributes, and health: a longitudinal study", *Military Psychology*, Vol. 17 No. 3, pp. 203-227.
- *Brough, P. and Kelling, A. (2002), "Women, work & well-being: the influence of work-family and family-work conflict", *New Zealand Journal of Psychology*, Vol. 31 No. 1, pp. 29-38.
- *Brough, P., O'Driscoll, M.P. and Kalliath, T.J. (2005), "The ability of 'family friendly' organizational resources to predict work-family conflict and job and family satisfaction", *Stress and Health*, Vol. 21 No. 4, pp. 223-234.
- *Brown, M. and Pitt-Catsoupes, M. (2016), "A mediational model of workplace flexibility, work-family conflict, and perceived stress among caregivers of older adults", *Community, Work & Family*, Vol. 19 No. 4, pp. 379-395.
- *Bruck, C.S., Allen, T.D. and Spector, P.E. (2002), "The relation between work-family conflict and job satisfaction: a finer-grained analysis", *Journal of Vocational Behavior*, Vol. 60 No. 3, pp. 336-353.
- *Buonocore, F. and Russo, M. (2013), "Reducing the effects of work-family conflict on job satisfaction: the kind of commitment matters", *Human Resource Management Journal*, Vol. 23 No. 1, pp. 91-108.
- *Butler, A.B., Grzywacz, J.G., Bass, B.L. and Linney, K.D. (2005), "Extending the demands-control model: a daily diary study of job characteristics, work-family conflict and work-family facilitation", *Journal of Occupational and Organizational Psychology*, Vol. 78 No. 2, pp. 155-169.
- *Butts, M.M., Becker, W.J. and Boswell, W.R. (2015), "Hot buttons and time sinks: the effects of electronic communication during nonwork time on emotions and work-nonwork conflict", *Academy of Management Journal*, Vol. 58 No. 3, pp. 763-788.
- Butts, M.M., Casper, W.J. and Yang, T.S. (2013), "How important are work-family support policies? A meta-analytic investigation of their effects on employee outcomes", *Journal of Applied Psychology*, Vol. 98 No. 1, pp. 1-25.
- *Byron, K. (2005), "A meta-analytic review of work-family conflict and its antecedents", *Journal of Vocational Behavior*, Vol. 67 No. 2, pp. 169-198.
- Caplan, R., Cobb, S., French, J., Harrison, R. and Pinneau, R. (1975), *Job Demands and Worker Health*, US Department of Health, Education, and Welfare (NIOSH) Publication No. 75-160.
- *Carlson, D.S. and Kacmar, K.M. (2000), "Work-family conflict in the organization: do life role values make a difference?", *Journal of Management*, Vol. 26 No. 5, pp. 1031-1054.
- *Carlson, D.S., Grzywacz, J.G., Ferguson, M., Hunter, E.M., Clinch, C.R. and Arcury, T.A. (2011), "Health and turnover of working mothers after childbirth via the work-family interface: an analysis across time", *Journal of Applied Psychology*, Vol. 96 No. 5, pp. 1045-1054.
- *Carr, J.C., Boyar, S.L. and Gregory, B.T. (2008), "The moderating effect of work-family centrality on work-family conflict, organizational attitudes, and turnover behaviour", *Journal of Management*, Vol. 34 No. 2, pp. 244-262.
- *Casper, W.J. and Buffardi, L.C. (2004), "Work-life benefits and job pursuit intentions: the role of anticipated organizational support", *Journal of Vocational Behavior*, Vol. 65 No. 3, pp. 391-410.
- *Casper, W.J., Harris, C., Taylor-Bianco, A. and Wayne, J.H. (2011), "Work-family conflict, perceived supervisor support and organizational commitment among Brazilian professionals", *Journal of Vocational Behavior*, Vol. 79 No. 3, pp. 640-652.
- *Cho, E. and Allen, T.D. (2012), "Relationship between work interference with family and parent-child interactive behavior: can guilt help?", *Journal of Vocational Behavior*, Vol. 80 No. 2, pp. 276-287.
- *Choi, J. (2008), "Work and family demands and life stress among Chinese employees: the mediating effect of work-family conflict", *The International Journal of Human Resource Management*, Vol. 19 No. 5, pp. 878-895.

- *Cinamon, R.G. and Rich, Y. (2002), "Profiles of attribution of importance to life roles and their implications for the work-family conflict", *Journal of Counseling Psychology*, Vol. 49 No. 2, pp. 212-220.
- *Cinamon, R.G., Rich, Y. and Westman, M. (2007), "Teachers' occupation-specific work-family conflict", *The Career Development Quarterly*, Vol. 55 No. 3, pp. 249-261.
- *Clark, S.C. (2001), "Work cultures and work/family balance", *Journal of Vocational Behavior*, Vol. 58 No. 3, pp. 348-365.
- *Clark, S.C. (2002), "Employees' sense of community, sense of control, and work/family conflict in Native American organizations", *Journal of Vocational Behavior*, Vol. 61 No. 1, pp. 92-108.
- Cleveland, J., Cordeiro, B., Fisk, G. and Mulvaney, R. (2006), "The role of person, spouse and organisational climate on work-family perceptions", *Irish Journal of Management*, Vol. 27 No. 1, pp. 229-253.
- *Cohen, A. and Kirchmeyer, C. (1995), "A multidimensional approach to the relation between organizational commitment and nonwork participation", *Journal of Vocational Behavior*, Vol. 46 No. 2, pp. 189-202.
- *Cohen, A., Granot-Shilovsky, L. and Yishai, Y. (2007), "The relationship between personal, role, and organizational variables and promotion to managerial positions in the Israeli educational system", *Personnel Review*, Vol. 36 No. 1, pp. 6-22.
- Cohen, J. (1988), *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed., Lawrence Erlbaum Associates, Mahwah, NJ.
- *Cullen, J.C. and Hammer, L.B. (2007), "Developing and testing a theoretical model linking work-family conflict to employee safety", *Journal of Occupational Health Psychology*, Vol. 12 No. 3, pp. 266-278.
- *Daalen, V.G., Willemsen, T.M. and Sanders, K. (2006), "Reducing work-family conflict through different sources of social support", *Journal of Vocational Behavior*, Vol. 69 No. 3, pp. 462-476.
- *Day, A.L. and Chamberlain, T.C. (2006), "Committing to your work, spouse, and children: implications for work-family conflict", *Journal of Vocational Behavior*, Vol. 68 No. 1, pp. 116-130.
- *de Janasz, S.C. and Behson, S.J. (2007), "Cognitive capacity for processing work-family conflict: an initial examination", *Career Development International*, Vol. 12 No. 4, pp. 397-411.
- *Demerouti, E., Bakker, A.B. and Schaufeli, W.B. (2005), "Spillover and crossover of exhaustion and life satisfaction among dual-earner parents", *Journal of Vocational Behavior*, Vol. 67 No. 2, pp. 266-289.
- *Demerouti, E., Taris, T.W. and Bakker, A.B. (2007), "Need for recovery, home-work interference and performance: is lack of concentration the link?", *Journal of Vocational Behavior*, Vol. 71 No. 2, pp. 204-220.
- *Desrochers, S., Hilton, J.M. and Larwood, L. (2005), "Preliminary validation of the work-family integration-blurring scale", *Journal of Family Issues*, Vol. 26 No. 4, pp. 442-466.
- *Dierdorff, E.C. and Ellington, J.K. (2008), "It's the nature of the work: examining behavior-based sources of work-family conflict across occupations", *Journal of Applied Psychology*, Vol. 93 No. 4, pp. 883-892.
- *DiRenzo, M.S., Greenhaus, J.H. and Weer, C.H. (2011), "Job level, demands, and resources as antecedents of work-family conflict", *Journal of Vocational Behavior*, Vol. 78 No. 2, pp. 305-314.
- *Duxbury, L., Higgins, C. and Lee, C. (1994), "Work-family conflict: a comparison by gender, family type, and perceived control", *Journal of Family Issues*, Vol. 15 No. 3, pp. 449-466.
- *Duxbury, L.E., Higgins, C.A. and Thomas, D.R. (1996), "Work and family environments and the adoption of computer-supported supplemental work-at-home", *Journal of Vocational Behavior*, Vol. 49 No. 1, pp. 1-23.
- *Eagle, B.W., Miles, E.W. and Icenogle, M.L. (1997), "Interrole conflicts and the permeability of work and family domains: are there gender differences?", *Journal of Vocational Behavior*, Vol. 50 No. 2, pp. 168-184.

- *Eagle, B.W., Icenogle, M.L., Maes, J.D. and Miles, E.W. (1998), "The importance of employee demographic profiles for understanding experiences of work-family interrole conflicts", *The Journal of Social Psychology*, Vol. 138 No. 6, pp. 690-709.
- Eckenrode, J. and Gore, S. (1990), "Stress between work and family", in Eckenrode, J. and Gore, S. (Eds), *Stress Between Work and Family*, Springer, Boston, MA, pp. 205-218.
- *Fein, E.C. and Skinner, N. (2015), "Clarifying the effect of work hours on health through work-life conflict", *Asia Pacific Journal of Human Resources*, Vol. 53 No. 4, pp. 448-470.
- *Ferguson, M., Carlson, D. and Kacmar, K.M. (2015), "Flexing work boundaries: the spillover and crossover of workplace support", *Personnel Psychology*, Vol. 68 No. 3, pp. 581-614.
- *Fiske, S.T. (1980), "Attention and weight in person perception: the impact of negative and extreme behaviour", *Journal of Personality and Social Psychology*, Vol. 38 No. 6, pp. 889-906.
- *Foley, S., Hang-Yue, N. and Lui, S. (2005), "The effects of work stressors, perceived organizational support, and gender on work-family conflict in Hong Kong", *Asia Pacific Journal of Management*, Vol. 22 No. 3, pp. 237-256.
- Ford, M.T., Heinen, B.A. and Langkamer, K.L. (2007), "Work and family satisfaction and conflict: a meta-analysis of cross-domain relations", *Journal of Applied Psychology*, Vol. 92 No. 1, pp. 57-80.
- *Forret, M. and de Janasz, S. (2005), "Perceptions of an organization's culture for work and family: do mentors make a difference?", *Career Development International*, Vol. 10 Nos 6/7, pp. 478-492.
- *Fox, M.L. and Dwyer, D.J. (1999), "An investigation of the effects of time and involvement in the relationship between stressors and work-family conflict", *Journal of Occupational Health Psychology*, Vol. 4 No. 2, pp. 164-174.
- French, K.A., Dumani, S., Allen, T.D. and Shockley, K.M. (2018), "A meta-analysis of work-family conflict and social support", *Psychological Bulletin*, Vol. 144 No. 3, p. 284.
- *Frone, M.R. (2000), "Work-family conflict and employee psychiatric disorders: the national comorbidity survey", *Journal of Applied Psychology*, Vol. 85 No. 6, pp. 888-895.
- *Frone, M.R. and Yardley, J.K. (1996), "Workplace family-supportive programmes: predictors of employed parents' importance ratings", *Journal of Occupational and Organizational Psychology*, Vol. 56 No. 4, pp. 351-366.
- *Frone, M.R., Barnes, G.M. and Farrell, M.P. (1994), "Relationship of work-family conflict to substance use among employed mothers: the role of negative affect", *Journal of Marriage and the Family*, pp. 1019-1030.
- Frone, M.R., Russell, M. and Cooper, M.L. (1992), "Antecedents and outcomes of work-family conflict: testing a model of the work-family interface", *Journal of Applied Psychology*, Vol. 77 No. 1, pp. 65-78.
- *Frone, M.R., Russell, M. and Cooper, M.L. (1993), "Relationship of work-family conflict, gender, and alcohol expectancies to alcohol use/abuse", *Journal of Organizational Behavior*, Vol. 14 No. 6, pp. 545-558.
- *Frone, M.R., Yardley, J.K. and Markel, K.S. (1997), "Developing and testing an integrative model of the work-family interface", *Journal of Vocational Behavior*, Vol. 50 No. 2, pp. 145-167.
- *Frye, N.K. and Breugh, J.A. (2004), "Family-friendly policies, supervisor support, work-family conflict, family-work conflict, and satisfaction: a test of a conceptual model", *Journal of Business and Psychology*, Vol. 19 No. 2, pp. 197-220.
- *Fu, C.K. and Shaffer, M.A. (2001), "The tug of work and family: direct and indirect domain-specific determinants of work-family conflict", *Personnel Review*, Vol. 30 No. 5, pp. 502-522.
- *Golden, T.D., Veiga, J.F. and Simsek, Z. (2006), "Telecommuting's differential impact on work-family conflict: is there no place like home?", *Journal of Applied Psychology*, Vol. 91 No. 6, p. 1340.
- *Gordon, J.R., Whelan-Berry, K.S. and Hamilton, E.A. (2007), "The relationship among work-family conflict and enhancement, organizational work-family culture, and work outcomes for older working women", *Journal of Occupational Health Psychology*, Vol. 12 No. 4, pp. 350-364.

- Grandey, A.A. and Cropanzano, R. (1999), "The conservation of resources model applied to work-family conflict and strain", *Journal of Vocational Behavior*, Vol. 54 No. 2, pp. 350-370.
- *Grandey, A.A., Cordeiro, B.L. and Crouter, A.C. (2005), "A longitudinal and multi-source test of the work-family conflict and job satisfaction relationship", *Journal of Occupational and Organizational Psychology*, Vol. 78 No. 3, pp. 305-323.
- *Grandey, A.A., Cordeiro, B.L. and Michael, J.H. (2007), "Work-family supportiveness organizational perceptions: important for the well-being of male blue-collar hourly workers?", *Journal of Vocational Behavior*, Vol. 71 No. 3, pp. 460-478.
- Greenhaus, J.H. and Beutell, N.J. (1985), "Sources of conflict between work and family roles", *Academy of Management Review*, Vol. 10 No. 1, pp. 76-88.
- Greenhaus, J.H. and Parasuraman, S. (1986), "Vocational and organizational behavior, 1985: a review", *Journal of Vocational Behavior*, Vol. 29 No. 2, pp. 115-176.
- Grzywacz, J.G. and Marks, N.F. (2000), "Reconceptualizing the work-family interface: an ecological perspective on the correlates of positive and negative spillover between work and family", *Journal of Occupational Health Psychology*, Vol. 5 No. 1, pp. 111-126.
- *Haar, J. (2017), "Work-family conflict and employee loyalty: exploring the moderating effects of positive thinking coping", *New Zealand Journal of Employment Relations*, Vol. 42 No. 1, pp. 35.
- Hanson, G.C., Hammer, L.B. and Colton, C.L. (2006), "Development and validation of a multidimensional scale of perceived work-family positive spillover", *Journal of Occupational Health Psychology*, Vol. 11 No. 3, pp. 249-265.
- *Hart, M.S. and Kelley, M.L. (2006), "Fathers' and mothers' work and family issues as related to internalizing and externalizing behavior of children attending day care", *Journal of Family Issues*, Vol. 27 No. 2, pp. 252-270.
- *Hecht, L.M. (2001), "Role conflict and role overload: different concepts, different consequences", *Sociological Inquiry*, Vol. 71 No. 1, pp. 111-121.
- *Heponiemi, T., Elovainio, M., Pekkarinen, L., Sinervo, T. and Kouvonen, A. (2008), "The effects of job demands and low job control on work-family conflict: the role of fairness in decision making and management", *Journal of Community Psychology*, Vol. 36 No. 3, pp. 387-398.
- *Higgins, C., Duxbury, L. and Lee, C. (1994), "Impact of life-cycle stage and gender on the ability to balance work and family responsibilities", *Family Relations*, Vol. 43 No. 2, pp. 144-150.
- *Hill, E.J. (2005), "Work-family facilitation and conflict, working fathers and mothers, work-family stressors and support", *Journal of Family Issues*, Vol. 26 No. 6, pp. 793-819.
- *Hill, J.E., Mårtinson, V. and Ferris, M. (2004), "New-concept part-time employment as a work-family adaptive strategy for women professionals with small children", *Family Relations*, Vol. 53 No. 3, pp. 282-292.
- Hobfoll, S.E. (1989), "Conservation of resources: a new attempt at conceptualizing stress", *American Psychologist*, Vol. 44 No. 3, pp. 513-524.
- Hobfoll, S.E. (2001), "The influence of culture, community, and the nested-self in the stress process: advancing conservation of resources theory", *Applied Psychology*, Vol. 50 No. 3, pp. 337-421.
- Hobfoll, S.E. (2011), "Conservation of resource caravans and engaged settings", *Journal of Occupational and Organizational Psychology*, Vol. 84 No. 1, pp. 116-122.
- *Hogan, N.L., Lambert, E.G., Jenkins, M. and Wambold, S. (2006), "The impact of occupational stressors on correctional staff organizational commitment: a preliminary study", *Journal of Contemporary Criminal Justice*, Vol. 22 No. 1, pp. 44-62.
- *Hoobler, J.M., Wayne, S.J. and Lemmon, G. (2009), "Bosses' perceptions of family-work conflict and women's promotability: glass ceiling effects", *Academy of Management Journal*, Vol. 52 No. 5, pp. 939-957.
- Hosking, A. and Western, M. (2008), "The effects of non-standard employment on work-family conflict", *Journal of Sociology*, Vol. 44 No. 1, pp. 5-27.

- *Houkes, I., Winants, Y.H. and Twellaar, M. (2008), "Specific determinants of burnout among male and female general practitioners: a cross-lagged panel analysis", *Journal of Occupational and Organizational Psychology*, Vol. 81 No. 2, pp. 249-276.
- *Hughes, D., Galinsky, E. and Morris, A. (1992), "The effects of job characteristics on marital quality: specifying linking mechanisms", *Journal of Marriage and the Family*, Vol. 54 No. 1, pp. 31-42.
- *Hughes, E.L. and Parkes, K.R. (2007), "Work hours and well-being: the roles of work-time control and work-family interference", *Work & Stress*, Vol. 21 No. 3, pp. 264-278.
- *Hui, R.T.Y. and Sue-Chan, C. (2018), "Variations in coaching style and their impact on subordinates' work outcomes", *Journal of Organizational Behavior*, Vol. 39 No. 5, pp. 663-679.
- Hui, R.T.Y., Sue-Chan, C. and Wood, R.E. (2013), "The contrasting effects of coaching style on task performance: the mediating roles of subjective task complexity and self-set goal", *Human Resource Development Quarterly*, Vol. 24 No. 4, pp. 429-458.
- Hunter, J.E. and Schmidt, F.L. (2004), *Methods of Meta-Analysis: Correcting Error and Bias in Research Findings*, Sage, CA.
- Ilies, R., Huth, M., Ryan, A.M. and Dimotakis, N. (2015), "Explaining the links between workload, distress, and work-family conflict among school employees: physical, cognitive, and emotional fatigue", *Journal of Educational Psychology*, Vol. 107 No. 4, pp. 1136-1149.
- *Ilies, R., Schwind, K.M., Wagner, D.T., Johnson, M.D., DeRue, D.S. and Ilgen, D.R. (2007), "When can employees have a family life? The effects of daily workload and affect on work-family conflict and social behaviors at home", *Journal of Applied Psychology*, Vol. 92 No. 5, pp. 1368-1379.
- *Janssen, P.P., Peeters, M.C., de Jonge, J., Houkes, I. and Tummers, G.E. (2004), "Specific relationships between job demands, job resources and psychological outcomes and the mediating role of negative work-home interference", *Journal of Vocational Behavior*, Vol. 65 No. 3, pp. 411-429.
- *Jex, S.M. and Elacqua, T.C. (1999), "Time management as a moderator of relations between stressors and employee strain", *Work & Stress*, Vol. 13 No. 2, pp. 182-191.
- *Jones, A.P. and Butler, M.C. (1980), "A role transition approach to the stresses of organizationally induced family role disruption", *Journal of Marriage and the Family*, Vol. 42 No. 2, pp. 367-376.
- Judge, T.A. and Ilies, R. (2002), "Relationship of personality to performance motivation: a meta-analytic review", *Journal of Applied Psychology*, Vol. 87 No. 4, pp. 797-807.
- *Judge, T.A., Boudreau, J.W. and Bretz, R.D. (1994), "Job and life attitudes of male executives", *Journal of Applied Psychology*, Vol. 79 No. 5, pp. 767-782.
- Kahn, R.L., Wolfe, D.M., Quinn, R.P., Snoek, J.D. and Rosenthal, R.A. (1964), *Organizational Stress: Studies in Role Conflict and Ambiguity*, John Wiley, Oxford.
- *Karatepe, O.M. and Bekteshi, L. (2008), "Antecedents and outcomes of work-family facilitation and family-work facilitation among frontline hotel employees", *International Journal of Hospitality Management*, Vol. 27 No. 4, pp. 517-528.
- *Karatepe, O.M. and Tekinkus, M. (2006), "The effects of work-family conflict, emotional exhaustion, and intrinsic motivation on job outcomes of front-line employees", *International Journal of Bank Marketing*, Vol. 24 No. 3, pp. 173-193.
- Katz, D. and Kahn, R.L. (1978), *The Social Psychology of Organizations*, Wiley, New York, NY.
- *Katz, M.H. and Piotrkowski, C.S. (1983), "Correlates of family role strain among employed black women", *Family Relations*, Vol. 32 No. 3, pp. 331-339.
- *Kelly, M.R. and Dabul Marin, A.J. (1998), "Position power and women's career advancement", *Women in Management Review*, Vol. 13 No. 2, pp. 53-66.
- *Kinnunen, U., Feldt, T., Geurts, S. and Pulkkinen, L. (2006), "Types of work-family interface: well-being correlates of negative and positive spillover between work and family", *Scandinavian Journal of Psychology*, Vol. 47 No. 2, pp. 149-162.

- Kossek, E.E. and Ozeki, C. (1998), "Work-family conflict, policies, and the job-life satisfaction relationship: a conflict review and directions for organizational behavior-human resources research", *Journal of Applied Psychology*, Vol. 83 No. 2, pp. 139-149.
- *Kossek, E.E., Colquitt, J.A. and Noe, R.A. (2001), "Caregiving decisions, well-being, and performance: the effects of place and provider as a function of dependent type and work-family climates", *Academy of Management Journal*, Vol. 44 No. 1, pp. 29-44.
- *Kossek, E.E., Lautsch, B.A. and Eaton, S.C. (2006), "Telecommuting, control, and boundary management: correlates of policy use and practice, job control, and work-family effectiveness", *Journal of Vocational Behavior*, Vol. 68 No. 2, pp. 347-367.
- Kossek, E.E., Pichler, S., Bodner, T. and Hammer, L.B. (2011), "Workplace social support and work-family conflict: a meta-analysis clarifying the influence of general and work-family-specific supervisor and organizational support", *Personnel Psychology*, Vol. 64 No. 2, pp. 289-313.
- *Kossek, E.E., Ruderman, M.N., Braddy, P.W. and Hannum, K.M. (2012), "Work-nonwork boundary management profiles: a person-centered approach", *Journal of Vocational Behavior*, Vol. 81 No. 1, pp. 112-128.
- Kwan, H.K., Lau, V.P. and Au, K. (2012), "Effects of family-to-work conflict on business owners: the role of family business", *Family Business Review*, Vol. 25 No. 2, pp. 178-190.
- *Lambert, C.H., Kass, S.J., Piotrowski, C. and Vodanovich, S.J. (2006), "Impact factors on work-family balance: initial support for border theory", *Organization Development Journal*, Vol. 24 No. 3, pp. 64-75.
- Lambert, S.J. and Haley-Lock, A. (2004), "The organizational stratification of opportunities for work-life balance", *Community, Work & Family*, Vol. 7 No. 2, pp. 179-195.
- *Lapierre, L.M. and Allen, T.D. (2012), "Control at work, control at home, and planning behavior: implications for work-family conflict", *Journal of Management*, Vol. 38 No. 5, pp. 1500-1516.
- *Laurence, G.A., Fried, Y. and Raub, S. (2016), "Evidence for the need to distinguish between self-initiated and organizationally imposed overload in studies of work stress", *Work & stress*, Vol. 30 No. 4, pp. 337-355.
- *Lee, C. and Hui, C. (1999), "Antecedents and outcomes of work-family interface", *Research and Practice in Human Resource Management*, Vol. 7 No. 1, pp. 35-51.
- *Lee, D.J., Grace, B.Y., Sirgy, M.J., Singhapakdi, A. and Lucianetti, L. (2018), "The effects of explicit and implicit ethics institutionalization on employee life satisfaction and happiness: the mediating effects of employee experiences in work life and moderating effects of work-family life conflict", *Journal of Business Ethics*, Vol. 147 No. 4, pp. 855-874.
- *Leiter, M.P. and Durup, M.J. (1996), "Work, home, and in-between: a longitudinal study of spillover", *The Journal of Applied Behavioral Science*, Vol. 32 No. 1, pp. 29-47.
- *Lenaghan, J.A., Buda, R. and Eisner, A.B. (2007), "An examination of the role of emotional intelligence in work and family conflict", *Journal of Managerial Issues*, Vol. 19 No. 1, pp. 76-94.
- *Leslie, L.M., Manchester, C.F. and Dahm, P.C. (2017), "Why and when does the gender gap reverse? Diversity goals and the pay premium for high potential women", *Academy of Management Journal*, Vol. 60 No. 2, pp. 402-432.
- *Li, A., Bagger, J. and Cropanzano, R. (2017), "The impact of stereotypes and supervisor perceptions of employee work-family conflict on job performance ratings", *Human Relations*, Vol. 70 No. 1, pp. 119-145.
- *Lingard, H. and Francis, V. (2005), "Does work-family conflict mediate the relationship between job schedule demands and burnout in male construction professionals and managers?", *Construction Management and Economics*, Vol. 23 No. 7, pp. 733-745.
- *Lingard, H. and Lin, J. (2004), "Career, family and work environment determinants of organizational commitment among women in the Australian construction industry", *Construction Management and Economics*, Vol. 22 No. 4, pp. 409-420.
- Lipsey, M.W. and Wilson, D.B. (2001), *Practical Meta-Analysis*, Sage Publications.

- *Lu, L., Gilmour, R., Kao, S.F. and Huang, M.T. (2006), "A cross-cultural study of work/family demands, work/family conflict and wellbeing: the Taiwanese vs British", *Career Development International*, Vol. 11 No. 1, pp. 9-27.
- *Lu, L., Kao, S.F., Chang, T.T., Wu, H.P. and Cooper, C.L. (2008), "Work/family demands, work flexibility, work/family conflict, and their consequences at work: a national probability sample in Taiwan", *International Journal of Stress Management*, Vol. 15 No. 1, pp. 1-21.
- *Luk, D.M. and Shaffer, M.A. (2005), "Work and family domain stressors and support: within- and cross-domain influences on work-family conflict", *Journal of Occupational and Organizational Psychology*, Vol. 78 No. 4, pp. 489-508.
- *Lukasz, B. and Derbis, R. (2012), "Job stressors, job burnout and work engagement: do work-family conflict and type-A behaviour play roles in regulating them?", *Polish Journal of Applied Psychology*, Vol. 10 No. 2, pp. 129-155.
- *Lyness, K.S. and Thompson, D.E. (1997), "Above the glass ceiling? A comparison of matched samples of female and male executives", *Journal of Applied Psychology*, Vol. 82 No. 3, pp. 359-375.
- *McElwain, A.K., Korabik, K. and Rosin, H.M. (2005), "An examination of gender differences in work-family conflict", *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement*, Vol. 37 No. 4, pp. 283-298.
- *McManus, K., Korabik, K., Rosin, H.M. and Kelloway, E.K. (2002), "Employed mothers and the work-family interface: does family structure matter?", *Human Relations*, Vol. 55 No. 11, pp. 1295-1324.
- *Mache, S., Bernburg, M., Groneberg, D.A., Klapp, B.F. and Danzer, G. (2016), "Work family conflict in its relations to perceived working situation and work engagement", *Work*, Vol. 53 No. 4, pp. 859-869.
- *Madsen, S.R. (2006), "Work and family conflict: can home-based teleworking make a difference?", *International Journal of Organization Theory & Behavior*, Vol. 9 No. 3, pp. 307-350.
- *Major, V.S., Klein, K.J. and Ehrhart, M.G. (2002), "Work time, work interference with family, and psychological distress", *Journal of Applied Psychology*, Vol. 87 No. 3, pp. 427-436.
- *Mallard, A.G. and Lance, C.E. (1998), "Development and evaluation of a parent-employee interrole conflict scale", *Social Indicators Research*, Vol. 45 Nos 1/3, pp. 343-370.
- *Martins, L.L., Eddleston, K.A. and Veiga, J.F. (2002), "Moderators of the relationship between work-family conflict and career satisfaction", *Academy of Management Journal*, Vol. 45 No. 2, pp. 399-409.
- *Masuda, A.D., McNall, L.A., Allen, T.D. and Nicklin, J.M. (2012), "Examining the constructs of work-to-family enrichment and positive spillover", *Journal of Vocational Behavior*, Vol. 80 No. 1, pp. 197-210.
- *Matsui, T., Ohsawa, T. and Onglatco, M.L. (1995), "Work-family conflict and stress-buffering effects of husbands support and coping behavior among Japanese married working women", *Journal of Vocational Behavior*, Vol. 47 No. 2, pp. 178-192.
- *Matthews, R.A., Wayne, J.H. and Ford, M.T. (2014), "A work-family conflict/subjective well-being process model: a test of competing theories of longitudinal effects", *Journal of Applied Psychology*, Vol. 99 No. 6, pp. 1173-1187.
- Matthews, R.A., Winkel, D.E. and Wayne, J.H. (2014), "A longitudinal examination of role overload and work-family conflict: the mediating role of interdomain transitions", *Journal of Organizational Behavior*, Vol. 35 No. 1, pp. 72-91.
- *Mellor, D., Moore, K.A. and Siong, Z.M.B. (2015), "The role of general and specific stressors in the health and well-being of call centre operators", *Work*, Vol. 52 No. 1, pp. 31-43.
- Mesmer-Magnus, J.R. and Viswesvaran, C. (2005), "Convergence between measures of work-to-family and family-to-work conflict: a meta-analytic examination", *Journal of Vocational Behavior*, Vol. 67 No. 2, pp. 215-232.

- Mesmer-Magnus, J.R. and Viswesvaran, C. (2006), "How family-friendly work environments affect work/family conflict: a meta-analytic examination", *Journal of Labor Research*, Vol. 27 No. 4, pp. 555-574.
- Michel, J.S. and Hargis, M.B. (2008), "Linking mechanisms of work-family conflict and segmentation", *Journal of Vocational Behavior*, Vol. 73 No. 3, pp. 509-522.
- Michel, J.S., Clark, M.A. and Jaramillo, D. (2011), "The role of the five-factor model of personality in the perceptions of negative and positive forms of work-nonwork spillover: a meta-analytic review", *Journal of Vocational Behavior*, Vol. 79 No. 1, pp. 191-203.
- Michel, J.S., Mitchelson, J.K., Pichler, S. and Cullen, K.L. (2010), "Clarifying relationships among work and family social support, stressors, and work-family conflict", *Journal of Vocational Behavior*, Vol. 76 No. 1, pp. 91-104.
- Michel, J.S., Kotrba, L.M., Mitchelson, J.K., Clark, M.A. and Baltes, B.B. (2011), "Antecedents of work-family conflict: a meta-analytic review", *Journal of Organizational Behavior*, Vol. 32 No. 5, pp. 689-725.
- Michel, J.S., Mitchelson, J.K., Kotrba, L.M., LeBreton, J.M. and Baltes, B.B. (2009), "A comparative test of work-family conflict models and critical examination of work-family linkages", *Journal of Vocational Behavior*, Vol. 74 No. 2, pp. 199-218.
- *Montgomery, A.J., Panagopolou, E. and Benos, A. (2006), "Work-family interference as a mediator between job demands and job burnout among doctors", *Stress and Health*, Vol. 22 No. 3, pp. 203-212.
- Mowday, R.T., Porter, L.W. and Steers, R.M. (1982), *Employee-Organization Linkages: The Psychology of Commitment, Absenteeism and Turnover*, Academic Press, New York, NY.
- *Muse, L.A. and Pichler, S. (2011), "A comparison of types of support for lower-skill workers: evidence for the importance of family supportive supervisors", *Journal of Vocational Behavior*, Vol. 79 No. 3, pp. 653-666.
- *Netemeyer, R.G., Boles, J.S. and McMurrian, R. (1996), "Development and validation of work-family conflict and family-work conflict scales", *Journal of Applied Psychology*, Vol. 81 No. 4, pp. 400-410.
- *Netemeyer, R.G., Brashear-Alejandro, T. and Boles, J.S. (2004), "A cross-national model of job-related outcomes of work role and family role variables: a retail sales context", *Journal of the Academy of Marketing Science*, Vol. 32 No. 1, pp. 49-60.
- *Ngo, H.Y. and Lau, C.M. (1998), "Interferences between work and family among male and female executives in Hong Kong", *Research and Practice in Human Resource Management*, Vol. 6 No. 1, pp. 17-34.
- *Nielsen, T.R., Carlson, D.S. and Lankau, M.J. (2001), "The supportive mentor as a means of reducing work-family conflict", *Journal of Vocational Behavior*, Vol. 59 No. 3, pp. 364-381.
- *Nohe, C. and Sonntag, K. (2014), "Work-family conflict, social support, and turnover intentions: a longitudinal study", *Journal of Vocational Behavior*, Vol. 85 No. 1, pp. 1-12.
- Nohe, C., Meier, L.L., Sonntag, K. and Michel, A. (2015), "The chicken or the egg? A meta-analysis of panel studies of the relationship between work-family conflict and strain", *Journal of Applied Psychology*, Vol. 100 No. 2, pp. 522-536.
- *Noor, N.M. (2003), "Work-and family-related variables, work-family conflict and women's well-being: some observations", *Community, Work & Family*, Vol. 6 No. 3, pp. 297-319.
- *Noor, N.M. (2004), "Work-family conflict, work-and family-role salience, and women's well-being", *The Journal of Social Psychology*, Vol. 144 No. 4, pp. 389-406.
- *Pal, S. and Saksvik, P.Ø. (2008), "Work-family conflict and psychosocial work environment stressors as predictors of job stress in a cross-cultural study", *International Journal of Stress Management*, Vol. 15 No. 1, pp. 22-42.
- *Parasuraman, S. and Simmers, C.A. (2001), "Type of employment, work-family conflict and well-being: a comparative study", *Journal of Organizational Behavior*, Vol. 22 No. 5, pp. 551-568.

-
- *Parasuraman, S., Purohit, Y.S., Godshalk, V.M. and Beutell, N.J. (1996), "Work and family variables, entrepreneurial career success, and psychological well-being", *Journal of Vocational Behavior*, Vol. 48 No. 3, pp. 275-300.
- *Pleck, J.H., Staines, G.L. and Lang, L. (1980), "Conflicts between work and family life", *Monthly Labor Review*, Vol. 103 No. 3, pp. 29-32.
- Pluut, H., Ilies, R., Curşeu, P.L. and Liu, Y. (2018), "Social support at work and at home: dual-buffering effects in the work-family conflict process", *Organizational Behavior and Human Decision Processes*, Vol. 146, pp. 1-13.
- *Poposki, E.M. (2011), "The blame game: exploring the nature and correlates of attributions following work-family conflict", *Group & Organization Management*, Vol. 36 No. 4, pp. 499-525.
- *Premeaux, S.F., Adkins, C.L. and Mossholder, K.W. (2007), "Balancing work and family: a field study of multi-dimensional, multi-role work-family conflict", *Journal of Organizational Behavior*, Vol. 28 No. 6, pp. 705-727.
- *Promislo, M.D., Deckop, J.R., Giacalone, R.A. and Jurkiewicz, C.L. (2010), "Valuing money more than people: the effects of materialism on work-family conflict", *Journal of Occupational and Organizational Psychology*, Vol. 83 No. 4, pp. 935-953.
- *Prottas, D.J. and Thompson, C.A. (2006), "Stress, satisfaction, and the work-family interface: a comparison of self-employed business owners, independents, and organizational employees", *Journal of Occupational Health Psychology*, Vol. 11 No. 4, pp. 366-378.
- *Rantanen, J., Pulkkinen, L. and Kinnunen, U. (2005), "The Big Five personality dimensions, work-family conflict, and psychological distress: a longitudinal view", *Journal of Individual Differences*, Vol. 26 No. 3, pp. 155-166.
- *Reinardy, S. (2007), "Satisfaction vs sacrifice: sports editors assess the influences of life issues on job satisfaction", *Journalism & Mass Communication Quarterly*, Vol. 84 No. 1, pp. 105-121.
- Reinardy, S. (2011), "Newspaper journalism in crisis: burnout on the rise, eroding young journalists' career commitment", *Journalism*, Vol. 12 No. 1, pp. 33-50.
- *Richardsen, A.M., Mikkelsen, A. and Burke, R.J. (1997), "Work experiences and career and job satisfaction among professional and managerial women in Norway", *Scandinavian Journal of Management*, Vol. 13 No. 2, pp. 209-218.
- Rimi, N.N. (2014), "Achieving balance in work-family conflict through the influences of family supportive HRM: a conceptual framework for the organizations of Bangladesh", *International Journal of Business and Innovation*, Vol. 1 No. 3, pp. 80-99.
- *Rowley, C., Kang, H.R. and Lim, H.J. (2016), "Female manager career success: the importance of individual and organizational factors in South Korea", *Asia Pacific Journal of Human Resources*, Vol. 54 No. 1, pp. 98-122.
- *Russo, J.A. and Waters, L.E. (2006), "Workaholic worker type differences in work-family conflict: the moderating role of supervisor support and flexible work scheduling", *Career Development International*, Vol. 11 No. 5, pp. 418-439.
- *Secret, M. and Sprang, G. (2001), "The effects of family-friendly workplace environments on work-family stress of employed parents", *Journal of Social Service Research*, Vol. 28 No. 2, pp. 21-45.
- *Senécal, C., Vallerand, R.J. and Guay, F. (2001), "Antecedents and outcomes of work-family conflict: toward a motivational model", *Personality and Social Psychology Bulletin*, Vol. 27 No. 2, pp. 176-186.
- *Shaffer, M.A., Harrison, D.A., Gilley, K.M. and Luk, D.M. (2001), "Struggling for balance amid turbulence on international assignments: work-family conflict, support and commitment", *Journal of Management*, Vol. 27 No. 1, pp. 99-121.
- *Shannon, H.S., Woodward, C.A., Cunningham, C.E., McIntosh, J., Lendrum, B., Brown, J. and Rosenbloom, D. (2001), "Changes in general health and musculoskeletal outcomes in the workforce of a hospital undergoing rapid change: a longitudinal study", *Journal of Occupational Health Psychology*, Vol. 6 No. 1, pp. 3-14.

- *Shockley, K.M. and Allen, T.D. (2007), "When flexibility helps: another look at the availability of flexible work arrangements and work-family conflict", *Journal of Vocational Behavior*, Vol. 71 No. 3, pp. 479-493.
- Shockley, K.M. and Singla, N. (2011), "Reconsidering work-family interactions and satisfaction: a meta-analysis", *Journal of Management*, Vol. 37 No. 3, pp. 861-886.
- Shockley, K.M., Shen, W., DeNunzio, M.M., Arvan, M.L. and Knudsen, E.A. (2017), "Disentangling the relationship between gender and work-family conflict: an integration of theoretical perspectives using meta-analytic methods", *Journal of Applied Psychology*, Vol. 102 No. 12, pp. 1601-1635.
- *Simon, M., Kümmerling, A. and Hasselhorn, H.M. (2004), "Work-home conflict in the European nursing profession", *International Journal of Occupational and Environmental Health*, Vol. 10 No. 4, pp. 384-391.
- *Smith, J. and Gardner, D. (2007), "Factors affecting employee use of work-life balance initiatives", *New Zealand Journal of Psychology*, Vol. 36 No. 1, pp. 3-12.
- *Staines, G.L. and Pleck, J.H. (1986), "Work schedule flexibility and family life", *Journal of Organizational Behavior*, Vol. 7 No. 2, pp. 147-153.
- *Steinmetz, H., Frese, M. and Schmidt, P. (2008), "A longitudinal panel study on antecedents and outcomes of work-home interference", *Journal of Vocational Behavior*, Vol. 73 No. 2, pp. 231-241.
- *Stevens, D.P., Kiger, G. and Riley, P.J. (2002), "Coming unglued? Workplace characteristics, work satisfaction, and family cohesion", *Social Behavior and Personality: An International Journal*, Vol. 30 No. 3, pp. 289-302.
- *Stevens, D.P., Kiger, G. and Riley, P.J. (2006), "His, hers, or ours? Work-to-family spillover, crossover, and family cohesion", *The Social Science Journal*, Vol. 43 No. 3, pp. 425-436.
- *Taylor, B.L., DelCampo, R.G. and Blanco, D.M. (2009), "Work-family conflict/facilitation and the role of workplace supports for US Hispanic professionals", *Journal of Organizational Behavior*, Vol. 30 No. 5, pp. 643-664.
- *Tepper, B.J. (2000), "Consequences of abusive supervision", *Academy of Management Journal*, Vol. 43 No. 2, pp. 178-190.
- *Thomas, L.T. and Ganster, D.C. (1995), "Impact of family-supportive work variables on work-family conflict and strain: a control perspective", *Journal of Applied Psychology*, Vol. 80 No. 1, pp. 6-15.
- *Thompson, B.M. and Cavallaro, L. (2007), "Gender, work-based support and family outcomes", *Stress and Health: Journal of the International Society for the Investigation of Stress*, Vol. 23 No. 2, pp. 73-85.
- *Thompson, C.A. and Prottas, D.J. (2005), "Relationships among organizational family support, job autonomy, perceived control, and employee well-being", *Journal of Occupational Health Psychology*, Vol. 11 No. 1, pp. 100-118.
- *Thompson, C.A., Beauvais, L.L. and Lyness, K.S. (1999), "When work-family benefits are not enough: the influence of work-family culture on benefit utilization, organizational attachment, and work-family conflict", *Journal of Vocational Behavior*, Vol. 54 No. 3, pp. 392-415.
- *Tucker, J.S., Sinclair, R.R. and Thomas, J.L. (2005), "The multilevel effects of occupational stressors on soldiers' well-being, organizational attachment, and readiness", *Journal of Occupational Health Psychology*, Vol. 10 No. 3, pp. 276-299.
- *Tuten, T.L. and August, R.A. (2006), "Work-family conflict: a study of lesbian mothers", *Women in Management Review*, Vol. 21 No. 7, pp. 578-597.
- *Van Daalen, G., Willemsen, T.M. and Sanders, K. (2006), "Reducing work-family conflict through different sources of social support", *Journal of Vocational Behavior*, Vol. 69 No. 3, pp. 462-476.
- *Van Rijswijk, K., Bekker, M.H., Rutte, C.G. and Croon, M.A. (2004), "The relationships among part-time work, work-family interference, and well-being", *Journal of Occupational Health Psychology*, Vol. 9 No. 4, pp. 286-295.

-
- *Van Steenbergen, E.F. and Ellemers, N. (2009), "Is managing the work-family interface worthwhile? Benefits for employee health and performance", *Journal of Organizational Behavior*, Vol. 30 No. 5, pp. 617-642.
- *Van Steenbergen, E.F., Ellemers, N. and Mooijaart, A. (2007), "How work and family can facilitate each other: distinct types of work-family facilitation and outcomes for women and men", *Journal of Occupational Health Psychology*, Vol. 12 No. 3, pp. 279-300.
- *Voydanoff, P. (1988), "Work role characteristics, family structure demands, and work/family conflict", *Journal of Marriage and the Family*, Vol. 50 No. 3, pp. 749-761.
- *Voydanoff, P. (2004), "The effects of work demands and resources on work-to-family conflict and facilitation", *Journal of Marriage and Family*, Vol. 66 No. 2, pp. 398-412.
- *Voydanoff, P. (2005a), "Consequences of boundary-spanning demands and resources for work-to-family conflict and perceived stress", *Journal of Occupational Health Psychology*, Vol. 10 No. 4, pp. 491-503.
- *Voydanoff, P. (2005b), "The differential salience of family and community demands and resources for family-to-work conflict and facilitation", *Journal of Family and Economic Issues*, Vol. 26 No. 3, pp. 395-417.
- *Wayne, J.H., Musisca, N. and Fleeson, W. (2004), "Considering the role of personality in the work-family experience: relationships of the Big Five to work-family conflict and facilitation", *Journal of Vocational Behavior*, Vol. 64 No. 1, pp. 108-130.
- *Wayne, J.H., Casper, W.J., Matthews, R.A. and Allen, T.D. (2013), "Family-supportive organization perceptions and organizational commitment: the mediating role of work-family conflict and enrichment and partner attitudes", *Journal of Applied Psychology*, Vol. 98 No. 4, pp. 606-622.
- Wayne, S.J., Lemmon, G., Hoobler, J.M., Cheung, G.W. and Wilson, M.S. (2017), "The ripple effect: a spillover model of the detrimental impact of work-family conflict on job success", *Journal of Organizational Behavior*, Vol. 38 No. 6, pp. 876-894.
- *Weigel, D.J., Weigel, R.R., Berger, P.S., Cook, A.S. and DelCampo, R. (1995), "Work-family conflict and the quality of family life: specifying linking mechanisms", *Family and Consumer Sciences Research Journal*, Vol. 24 No. 1, pp. 5-28.
- *Westman, M., Etzion, D. and Gattenio, E. (2008), "International business travels and the work-family interface: a longitudinal study", *Journal of Occupational and Organizational Psychology*, Vol. 81 No. 3, pp. 459-480.
- *Westman, M., Etzion, D. and Gortler, E. (2004), "The work-family interface and burnout", *International Journal of Stress Management*, Vol. 11 No. 4, pp. 413-428.
- *Westring, A.F. and Ryan, A.M. (2011), "Anticipated work-family conflict: a construct investigation", *Journal of Vocational Behavior*, Vol. 79 No. 2, pp. 596-610.
- *Wiese, B.S. and Salmela-Aro, K. (2008), "Goal conflict and facilitation as predictors of work-family satisfaction and engagement", *Journal of Vocational Behavior*, Vol. 73 No. 3, pp. 490-497.
- *Wiley, D.L. (1987), "The relationship between work/nonwork role conflict and job-related outcomes: some unanticipated findings", *Journal of Management*, Vol. 13 No. 3, pp. 467-472.
- *Williams, A., Franche, R.L., Ibrahim, S., Mustard, C.A. and Layton, F.R. (2006), "Examining the relationship between work-family spillover and sleep quality", *Journal of Occupational Health Psychology*, Vol. 11 No. 1, pp. 27-37.
- *Williams, K.J. and Alliger, G.M. (1994), "Role stressors, mood spillover, and perceptions of work-family conflict in employed parents", *Academy of Management Journal*, Vol. 37 No. 4, pp. 837-868.
- *Witt, L.A. and Carlson, D.S. (2006), "The work-family interface and job performance: moderating effects of conscientiousness and perceived organizational support", *Journal of Occupational Health Psychology*, Vol. 11 No. 4, pp. 343-357.

- *Yang, N., Chen, C.C., Choi, J. and Zou, Y. (2000), "Sources of work-family conflict: a Sino-US comparison of the effects of work and family demands", *Academy of Management Journal*, Vol. 43 No. 1, pp. 113-123.
- *Yavas, U., Babakus, E. and Karatepe, O.M. (2008), "Attitudinal and behavioral consequences of work-family conflict and family-work conflict: does gender matter?", *International Journal of Service Industry Management*, Vol. 19 No. 1, pp. 7-31.

Further reading

- Clive, F. and Bailey, C. (2002), "The impact of multiple source feedback on management development: findings from a longitudinal study", *Journal of Organizational Behavior*, Vol. 23 No. 7, pp. 853-867.
- Kossek, E.E. and Lautsch, B.A. (2012), "Work-family boundary management styles in organisations: a cross-level model", *Organisational Psychology Review*, Vol. 2 No. 2, pp. 152-171.
- Pam, A. and O'Driscoll, M. (2008), "Positive effects of nonwork-to-work facilitation on well-being in work, family and personal domains", *Journal of Managerial Psychology*, Vol. 23 No. 3, pp. 273-291.

Appendix

Correlate	Definition
Work demand	General work roles, tasks and responsibilities, including time, effort and energy
Family demand	Household maintenance tasks and childcare responsibilities (McManus <i>et al.</i> , 2002, p. 1298)
Family control	The amount of control experienced at family (Lapierre and Allen, 2012, p. 1501)
Work control	The amount of control experienced at work (Lapierre and Allen, 2012, p. 1501)
Job autonomy	The degree of control people has over when and how their work gets done (Behson, 2005)
Hours at work	The average number of hours spent at work
Hours at home	The average number of hours spent at home
Role overload at work	When an individual's capacity is not enough to handle and complete the amount of workload at work
Role overload at home	When an individual's capacity is not enough to handle and complete the amount of workload at home
Flexibility (work time/schedule)	The ability to have discretion in one's work schedule (Clark, 2001, p. 349)
Career satisfaction	Level of satisfaction with career progress and success (Parasuraman and Simmers, 2001, p. 558)
Career development consequences	The degree of internal promotion opportunity in an organisation (Lee and Hui, 1999)
Work performance	The "fulfilment of the general responsibilities associated with a particular job or role (Frone <i>et al.</i> , p. 153)
Family performance	The fulfilment of family responsibilities
Family commitment	The "degree of time and effort employees spend on activities with their family/spouse" (Shaffer <i>et al.</i> , 2001, p. 109)
Work commitment	The degree of time and effort employees spent on work activities

Table A1.
Definition or operationalisation of WFC correlates

Study	<i>n</i>	Correlate (<i>r</i> / α)	α WFC
Adams and Jex (1999)	522	WC (-0.25/0.57)	0.44
Ahuja <i>et al.</i> (2007)	171	JA (-0.20/0.63); GOC (-0.32, 0.76); WR (0.48/0.79)	0.79
Allard <i>et al.</i> (2007)	77	WH (0.20/1)	0.75
Allen (2001)	522	FL (-0.1/0.73)	0.89
Allen and Armstrong (2006)	246	WH (0.16/1)	0.88
Allis and O'Driscoll (2008)	938	FH (0.04/1); WH (0.16/1)	0.88
Anderson <i>et al.</i> (2002)	2,248	CDS (-0.23/0.75); FL (-0.03/0.73)	0.85
Anderson-Kulman and Paludi (1986)	204	FC (0.29/0.83); FL (-0.02/0.73)	0.83
Andreassi and Thompson (2007)	3,504	FD (0.11/0.79); WH (0.17/1)	0.83
Anwar <i>et al.</i> (2016)	281	JA (0.01/0.63); WR (0.46/0.78)	0.86
Aryee (1993)	95	FL (-0.07/0.83); WR (0.65/0.73)	0.75
Aryee (1993)	95	FL (-0.09/0.83); WR (0.12/0.73)	0.75
Aryee and Luk (1996) – wife sample	207	JA (-0.14/0.78); CS (-0.14/0.82)	0.84
Aryee and Luk (1996) – husband sample	207	JA (0.13/0.78); CS (0.01/0.82)	0.84
Aryee, Luk, Leung and Lo (1999)	320	WC (-0.20/1)	0.75
Aryee, Luk, Leung and Lo (1999)	320	WC (-0.20/1); CS (-0.10/0.83)	0.75
Aryee, Luk, Leung and Lo (1999)	243	WR (0.51/0.84); FR (0.13/0.89)	0.86
Aryee, Luk, Leung and Lo (1999)	243	WR (0.51/0.84); FR (0.11/0.85)	0.86
Aryee, Luk, Leung and Lo (2005)	267	WR (0.31/0.79); FR (0.20/0.89)	0.76
Aryee (1992)	354	JA (-0.28/0.78); FC (-0.07/0.89); FD (0.07/0.79); FL (-0.03/0.73); WR (0.10/0.79); WH (0.13/1)	0.76
Aycan and Eskin (2005)	197	WD (0.40/0.84)	0.90
Aycan and Eskin (2005)	237	WD (0.31/0.84)	0.90
Bacharach <i>et al.</i> (1991)	215	WR (0.24/0.60)	0.77
Bacharach <i>et al.</i> (1991)	430	WR (0.26/0.68)	0.87
Bakker <i>et al.</i> (2008)	168	FD (0.23/0.77); WD (0.46/0.81); WR (0.39/0.82); FR (0.17/0.83)	0.80
Bakker <i>et al.</i> (2011)	230	WD (0.22/0.78); JA (-0.16/0.71)	0.78
Balmforth and Gardner (2006)	75	WH (-0.11/1)	0.67
Batt and Valcour (2003)	557	JA (-0.01/0.68); FL (0.06/1); WC (0.06/1); WH (0.20/1)	0.54
Beauregard (2006)	208	FC (-0.30/0.90); WC (-0.32/0.67); WH (0.13/1)	0.84
Bedeian <i>et al.</i> (1988) – male sample	411	CS (0.29/0.92)	0.92
Bedeian <i>et al.</i> (1988) – female sample	321	CS (0.27/0.92)	0.92
Beham <i>et al.</i> (2011)	999	FL (-0.10/1); WD (0.52/0.75); WC (-0.08/0.75); WH (0.20/1)	0.76
Behson (2002)	141	WC (0.01/0.87)	0.81
Behson (2005)	2,248	JA (-0.16/0.68); FL (-0.08/1)	0.85
Beigi <i>et al.</i> (2016)	398	FH (0.01/1); WH (0.09/1)	0.81
Bhave <i>et al.</i> (2010)	1,547	WD (0.14/0.95); WH (0.40/1)	0.95
Bolino and Turnley (2005)	196	WR (0.59/0.84)	0.94
Boyar and Mosley (2007)	112	FD (0.23/0.74); WD (0.16/0.83); WR (0.43/0.77)	0.90
Boyar and Mosley (2007)	699	FD (0.31/0.79); WD (0.27/0.78); WR (0.39/0.79)	0.90
Boyar <i>et al.</i> (2008)	698	JA (-0.11/0.84); FD (0.31/0.77); WH (0.21/1)	0.90
Boyar <i>et al.</i> (2003)	432	WR (0.31/0.83)	0.90
Bragger <i>et al.</i> (2005)	203	OC (0.15/0.83)	0.80
Britt and Dawson (2005)	253	WC (-0.24/0.76); WH (0.15/1)	0.94
Britt and Dawson (2005)	493	WR (0.48/0.79)	0.83
Brough and Kelling (2002)	691	FC (-0.10/0.83); WC (-0.07/0.77)	0.88
Brough <i>et al.</i> (2005)	398	WH (0.21/1)	0.90
Brown and Pitt-Catsoupes (2016)	211	FH (0.01/1); FL (-0.45/0.64)	0.86
Bruck <i>et al.</i> (2002)	160	WH (-0.02/1)	0.84
Buonocore and Russo (2013)	171	OC (-0.14/0.78); WH (0.07/1)	0.89
Butler <i>et al.</i> (2005)	46	WD (0.48/not reported); WC (0.76/0.91)	0.76

Table AII.
(continued)
Coding summary

Study	<i>n</i>	Correlate (<i>r</i> / α)	α WFC
Butts <i>et al.</i> (2013)	341	WH (0.11/1)	0.93
Carlson <i>et al.</i> (2011)	179	WC (-0.14/0.80)	0.88
Carlson and Kacmar (2000)	314	WD (0.29/0.60); FD (0.33/0.73)	0.85
Carr <i>et al.</i> (2008)	129	OC (-0.34/0.93)	0.96
Casper and Buffardi (2004)	371	FL (0.06/1); WH (0.12/1)	0.78
Casper <i>et al.</i> (2011)	168	FH (-0.10/1); WH (0.15/1)	0.80
Cho and Allen (2012)	201	WH (0.27/1)	0.90
Cho and Allen (2012)	230	WH (0.19/1)	0.85
Choi (2008)	239	FD (0.40/0.86); FH (0.13/1); WD (0.29/0.80); WH (0.08/1)	0.81
Cinamon and Rich (2002)	213	FL (-0.01/0.52); WH (-0.02/1)	0.80
Cinamon <i>et al.</i> (2007)	230	FL (0.16/0.52); WH (0/1)	0.80
Clark (2001)	179	FL (-0.18/84); WH (0.24/1)	0.86
Clark (2002)	151	FL (-0.18/0.73); WC (-0.25/0.76)	0.86
Cleveland <i>et al.</i> (2006)	81	WD (0.25/0.85)	0.89
Cohen <i>et al.</i> (2007)	195	OC (-0.11/0.89)	0.8
Cohen and Kirchmeyer (1995)	227	OC (0.11/0.71)	0.82
Cullen and Hammer (2007)	218	WR (0.31/0.80); WH (0.06/1)	0.90
Daalen <i>et al.</i> (2006)	444	WH (0.23/1)	0.82
Day and Chamberlain (2006)	436	FH (0.09/1); WC (-0.27/0.89); WH (0.10/1)	0.94
Demerouti <i>et al.</i> (2005)	382	WD (0.43/0.82)	0.76
Demerouti <i>et al.</i> (2007)	123	WP (-0.08/0.83)	0.77
Desrochers <i>et al.</i> (2005)	100	WH (0.27/1)	0.83
Dierdorff and Ellington (2008)	1,367	FL (-0.34/0.73); WR (0.27/0.79)	0.83
DiRenzo <i>et al.</i> (2011)	1,090	JA (-0.07/0.78); FD (-0.02/0.79); FH (-0.04/1); WD (0.40/0.78); WH (0.18/1)	0.84
Duxbury <i>et al.</i> (1994)	1,989	FC (-0.29/0.80); WR (0.48/0.79)	0.83
Duxbury <i>et al.</i> (1996)	307	JA (-0.02/0.58); WR (0.50/0.88)	0.71
Eagle <i>et al.</i> (1998)	318	FL (-0.23/0.73); OC (0/0.84); WH (0.22/1)	0.83
Eagle <i>et al.</i> (1997)	168	WH (0.04/1)	0.82
Eagle <i>et al.</i> (1997)	225	WH (0.14/1)	0.82
Fein and Skinner (2015)	328	WH (0.27/1)	0.82
Fein and Skinner (2015)	714	WH (0.20/1)	0.82
Ferguson <i>et al.</i> (2015)	503	FL (-0.42/0.87); OC (-0.35/0.86)	0.83
Foley <i>et al.</i> (2005)	877	WR (0.28/0.67)	0.89
Forret and de Janasz (2005)	418	CDS (-0.36/0.81); FL (0.12/0.73); WD (-0.43/0.84); WH (0.10/1)	0.87
Fox and Dwyer (1999)	113	WH (-0.04/1)	0.83
Frone (2000)	2,700	WH (0.12/1)	0.66
Frone <i>et al.</i> (1994)	366	WH (0.17/1)	0.69
Frone <i>et al.</i> (1993)	473	WH (0.17/1)	0.65
Frone and Yardley (1996)	496	WH (0.26/1)	0.67
Frone and Yardley (1996)	252	FL (0.13/0.73)	0.67
Frone <i>et al.</i> (1997)	372	FP (-0.38/0.84); WR (0.40/0.79); FR (0.32/0.72); WP (-0.27/0.77)	0.84
Frye and Breaugh (2004)	54	WH (0.15/1)	0.87
Fu and Shaffer (2001)	267	JA (-0.18/0.78); FD (0.12/0.79); FH (0.04/1); WR (0.35/0.77); WH (0.15/1)	0.87
Golden <i>et al.</i> (2006)	454	JA (0.11/0.78); FL (0.15/0.91)	0.87
Gordon <i>et al.</i> (2007)	489	CS (-0.14/0.76)	0.80
Grandey <i>et al.</i> (2005)	174	JA (0.05/0.82)	0.77
Grandey <i>et al.</i> (2007)	228	WH (0.37/1); WP (-0.14/0.83)	0.92
Grandey <i>et al.</i> (2007)	228	WH (0.37/1)	0.92
Haar (2017)	203	WH (0.06/1)	0.80

Table AII.

(continued)

Study	<i>n</i>	Correlate (<i>r</i> / α)	α WFC
Hart and Kelley (2006)	132	WH (0.27/1)	0.82
Hecht (2001)	279	FH (-0.06/1); FL (-0.15/0.73); WH (0.14/1)	0.83
Heponiemi <i>et al.</i> (2008)	713	WD (0.39/0.82); WC (-0.11/0.81)	0.76
Higgins <i>et al.</i> (1994)	3,616	WR (0.48/0.79)	0.63
Hill (2005)	1,314	FH (-0.01/1); FL (-0.07/0.73); OC (-0.10/0.84); WH (0.08/1)	0.88
Hill <i>et al.</i> (2004)	529	FL (-0.20/0.73); WP (0.05/0.83)	0.83
Hogan <i>et al.</i> (2006)	272	FL (-0.44/0.88)	0.79
Hoobler <i>et al.</i> (2009)	126	WP (-0.11/0.84)	0.83
Hosking and Western (2008)	1,142	JA (-0.03/0.78)	0.82
Hosking and Western (2008)	1,179	JA (-0.16/0.78)	0.85
Houkes <i>et al.</i> (2008)	261	WC (-0.34/0.64)	0.86
Hughes <i>et al.</i> (1992)	523	WC (0.04/0.75)	0.83
Hughes and Parkes (2007)	292	WD (0.43/0.75); WC (-0.12/0.83); WH (0.34/0.80)	0.89
Ilies <i>et al.</i> (2007)	106	WH (0.17/1)	0.73
de Janasz and Behson (2007)	157	OC (-0.21/0.88)	0.89
Janssen <i>et al.</i> (2004)	107	WD (0.36/0.74); WC (0.12/0.80)	0.90
Janssen <i>et al.</i> (2004)	249	WC (-0.06/0.79); WD (0.36/0.78)	0.87
Jex and Elacqua (1999)	525	WR (0.31/0.70); WC (0.25/0.55)	0.44
Jones and Butler (1980)	181	JA (-0.49/0.78)	0.80
Judge <i>et al.</i> (1994)	1,388	WH (0.16/10.00)	0.82
Karatepe and Bekteshi (2008)	107	WP (-0.06/0.87)	0.75
Karatepe and Tekinkus (2006)	363	WP (-0.01/0.73)	0.87
Katz and Piotrkowski (1983)	51	JA (-0.50/0.80); WD (0.45/0.78); WH (0.20/1.00)	0.92
Kelly and Dabul Marin (1998)	103	FL (-0.03/0.73)	0.83
Kinnunen <i>et al.</i> (2006)	202	WH (0.04/1.00)	0.83
Kossek <i>et al.</i> (2001)	490	FP (-0.11/0.90); WP (0.01/0.94)	0.70
Kossek <i>et al.</i> (2006)	90	WC (-0.14/0.74); WH (0.10/1.00); WP (-0.03/0.91)	0.73
Kossek <i>et al.</i> (2012)	278	FC (-0.37/0.85); WC (-0.25/0.80);	0.92
Kossek <i>et al.</i> (2012)	313	FC (-0.11/0.84)	0.91
Lambert <i>et al.</i> (2006)	95	GOC (-0.01/0.84)	0.83
Lapierre and Allen (2012)	205	FC (-0.27/0.85); WC (-0.11/0.86)	0.81
Laurence <i>et al.</i> (2016)	1,616	WR (0.39/0.89)	0.84
Laurence <i>et al.</i> (2016)	190	WR (0.20/0.89); WP (0.04/0.88)	0.93
Lee <i>et al.</i> (2018)	242	GOC (-0.15/0.80)	0.83
Lee and Hui (1999)	198	CDS (-0.10/0.86)	0.75
Leiter and Durup (1996)	151	WR (0.26/0.75)	0.75
Lenaghan <i>et al.</i> (2007)	205	WH (0.16/1.00)	0.89
Leslie <i>et al.</i> (2017)	1,311	FH (0.19/1.00); GOC (-0.08/0.86); WH (-0.12/1.00); WP (0.01/0.65)	0.80
Li <i>et al.</i> (2017)	113	WH (0.26/1.00); WP (-0.20/0.76)	0.84
Lingard and Francis (2005)	232	WH (0.44/1.00)	0.83
Lingard and Lin (2004)	109	CS (-0.09/0.80); GOC (-0.23/0.90) WH (-0.07/1.00)	0.75
Lu <i>et al.</i> (2006)	103	WH (0.16/1.00)	0.90
Lu <i>et al.</i> (2006)	220	WH (0.20/1.00)	0.84
Lu <i>et al.</i> (2008)	1,122	JA (0.07/0.78); GOC (-0.06/0.84); WH (0.14/1.00)	0.83
Luk and Shaffer (2005)	248	FMC (-0.04/0.89); FD (0.15/0.79)	0.70
Łukasz and Derbis (2012)	282	WH (0.29/1.00)	0.89
Lyness and Thompson (1997)	107	CS (-0.16/0.79); GOC (0.01/0.77); WR (0.65/0.81)	0.86
Mache <i>et al.</i> (2016)	564	WD (0.45/0.83); WC (-0.25/0.83)	0.81
Madsen (2006)	98	WH (0.18/1.00);	0.89
Madsen (2006)	123	WH (-0.02/1.00)	0.89
Major <i>et al.</i> (2002)	513	FD (0.07/0.79); FL (-0.48/0.96); WR (0.50/0.88)	0.91
Mallard and Lance (1998)	143	GOC (0.04/0.89)	0.87

(continued)

Table AII.

Study	<i>n</i>	Correlate (<i>r</i> / α)	α WFC
Martins <i>et al.</i> (2002)	975	CS (-0.10/0.79)	0.64
Masuda <i>et al.</i> (2012)	220	WH (-0.04/1.00)	0.92
Matsui <i>et al.</i> (1995)	131	FD (0.08/0.79); FL (-0.05/0.73)	0.84
Matthews, Wayne and Ford (2014)/ Matthews, Winkel and Wayne (2014)	250	WR (0.40/0.88); FR (0.46/0.89)	0.90
McElwain <i>et al.</i> (2005)	320	FD (0.08/0.85); WD (0.14/0.71)	0.87
McManus <i>et al.</i> (2002)	178	FD (0.04/0.79)	0.88
McManus <i>et al.</i> (2002)	342	WD (0.13/0.72)	0.75
Mellor <i>et al.</i> (2015)	126	WD (0.33/0.81); WR (0.55/0.61); WC (-0.43/0.84)	0.91
Montgomery <i>et al.</i> (2006)	162	WD (0.43/0.73); WH (0.19/1.00)	0.90
Muse and Pichler (2011)	209	WP (-0.06/0.94)	0.90
Netemeyer <i>et al.</i> (1996)	162	WH (0.15/1.00)	0.89
Netemeyer <i>et al.</i> (1996)	182	GOC (-0.23/0.89); WH (0.24/1.00)	0.88
Netemeyer <i>et al.</i> (1996)	186	WH (0.08/1.00); WP (-0.19/0.79)	0.88
Netemeyer <i>et al.</i> (2004)	125	WP (-0.35/0.62)	0.89
Netemeyer <i>et al.</i> (2004)	275	WP (-0.11/0.76)	0.90
Netemeyer <i>et al.</i> (2004)	284	WP (-0.20/0.72)	0.84
Ngo and Lau (1998)	461	FL (0.11/0.69); WH (0.18/1.00)	0.81
Nielson <i>et al.</i> (2001)	502	CDS (-0.03/0.86); WH (0.19/1.00)	0.88
Nohe and Sonntag (2014)	95	WH (-0.22/1.00); WP (-0.32/0.84)	0.82
Noor (2003)	147	WD (0.32/0.83); WC (0.02/0.88); WH (0.16/1.00)	0.84
Noor (2004)	147	WH (0.16/1.00)	0.84
Pal and Saksvik (2008)	247	FL (-0.19/0.61); WD (0.16/0.73); WC (0.12/0.81); WH (0.09/1.00)	0.74
Pal and Saksvik (2008)	455	FL (0.01/0.61); WC (-0.06/0.81); WH (0.13/1.00)	0.74
Parasuraman <i>et al.</i> (1996)	111	JA (-0.19/0.85); CS (-0.13/0.87); FMC (-0.09/0.89); FD (0.10/0.86); FL (-0.20/0.68); WR (0.35/0.77)	0.87
Parasuraman and Simmers (2001)	99	JA (-0.04/0.83); CS (-0.15/0.84); FMC (-0.26/0.89); FD (0.03/0.79); FL (-0.18/0.64)	0.84
Parasuraman and Simmers (2001)	287	JA (-0.13/0.83); FMC (-0.08/0.89); FL (-0.09/0.64)	0.84
Pleck <i>et al.</i> (1980)	940	FL (-0.08/0.73); WD (0.16/0.78); WC (0.06/0.75); WH (0.14/1.00)	0.83
Pleck <i>et al.</i> (1980)	1,012	WH (0.13/1.00)	0.83
Poposki (2011)	269	WH (-0.13/1.00)	0.87
Premeaux <i>et al.</i> (2007)	564	JA (-0.06/0.76); CDS (-0.29/0.72); WD (-0.17/0.71)	0.98
Promislo <i>et al.</i> (2010)	236	WR (0.30/0.92)	0.87
Prottas and Thompson (2006)	3,504	JA (-0.09/0.74); WH (0.18/1.00)	0.86
Rantanen <i>et al.</i> (2005)	155	FD (0.15/0.79); WH (0.22/1.00);	0.79
Reinardy (2011)	155	WR (0.44/0.58)	0.88
Reinardy (2011)	170	WH (0.26/1.00)	0.88
Richardson <i>et al.</i> (1997)	191	CS (-0.32/0.82); WH (0.83/1.00)	0.66
Rowley <i>et al.</i> (2016)	202	CS (-0.16/0.91)	0.85
Russo and Waters (2006)	169	FL (-0.12/0.73)	0.73
Secret and Sprang (2001)	374	WD (0.32/0.78)	0.79
Senécal <i>et al.</i> (2001)	786	JA (-0.09/0.74)	0.73
Shaffer <i>et al.</i> (2001)	324	FMC (-0.12/0.82)	0.81
Shannon <i>et al.</i> (2001)	346	WD (0.25/0.69); WH (0.11/1.00)	0.64
Shockley and Allen (2007)	230	FL (-0.03/0.91); FL (-0.15/0.84); WH (0.10/1.00)	0.89
Simon <i>et al.</i> (2004)	3,565	WD (0.22/0.78); WH (0.08/1.00)	0.83
Smith and Gardner (2007)	153	WD (0.42/0.93)	0.90
Staines and Pleck (1986)	616	FH (-0.06/1.00)	0.83
Steinmetz <i>et al.</i> (2008)	130	WH (0.40/1.00)	0.88
Stevens <i>et al.</i> (2006)	156	FL (-0.53/0.73); WH (0.36/1.00)	0.89
Stevens <i>et al.</i> (2002)	156	WH (0.36/1.00)	0.89

Table AII.

(continued)

Study	<i>n</i>	Correlate (<i>r</i> / α)	α WFC
Taylor <i>et al.</i> (2009)	1,156	WH (0.27/1.00)	0.85
Tepper (2000)	362	GOC (0.02/0.81)	0.93
Thomas and Ganster (1995)	398	FC (-0.45/0.75); FL (-0.09/0.73)	0.92
Thompson and Cavallaro (2007)	187	WH (0.22/1.00)	0.89
Thompson and Prottas (2005)	2,810	JA (-0.08/0.71); FC (-0.31/0.83); FD (0.11/0.79); WD (0.18/0.78)	0.92
Thompson <i>et al.</i> (1999)	242	CDS (-0.43/0.74); WD (-0.52/0.80)	0.86
Thompson <i>et al.</i> (1999)	258	WH (0.38/1.00)	0.86
Tucker <i>et al.</i> (2005)	1,489	WH (0.19/1.00)	0.92
Tuten and August (2006)	58	JA (-0.15/0.91); WD (-0.27/0.73); WH (0.44/1.00)	0.83
Van Daalen <i>et al.</i> (2006)	444	WH (0.23/1.00)	0.70
Van Steenbergen and Ellemers (2009)	1,134	WH (0.01/1.00)	0.80
Van Steenbergen <i>et al.</i> (2007)	352	FMC (-0.08/0.89); FP (-0.08/0.94); WP (-0.07/0.94)	0.77
Voydanoff (2005a)	2,109	FL (-0.08/0.73); WH (0.28/1.00)	0.87
Voydanoff (2005b)	1,567	FD (0.29/0.79); FD (0.13/0.70)	0.80
Voydanoff (2004)	1,938	JA (-0.16/0.68); WH (0.21/1.00)	0.86
Voydanoff (1988)	270	JA (-0.06/0.78); FH (-0.05/1.00); WD (-0.02/0.82); WC (-0.11/0.71); WH (0.26/1.00)	0.83
Voydanoff (1988)	757	WC (-0.07/0.71); WH (0.28/1.00)	0.83
Van Rijswijk <i>et al.</i> (2004)	189	FD (0.34/0.75); WD (0.33/0.83)	0.84
Wayne <i>et al.</i> (2017)	704	FP (-0.21/0.87); GOC (-0.07/0.81); WP (-0.07/0.90)	0.87
Wayne <i>et al.</i> (2013)	408	WH (0.33/1.00)	0.88
Wayne <i>et al.</i> (2004)	2,124	WH (0.19/1.00)	0.82
Weigel <i>et al.</i> (1995)	517	WR (0.48/0.83)	0.76
Westman <i>et al.</i> (2008)	66	FC (-0.10/0.81)	0.84
Westman <i>et al.</i> (2004)	58	FC (-0.03/0.87)	0.77
Westring and Ryan (2011)	357	WD (0.07/0.78); WC (-0.03/0.75)	0.79
Wiese and Salmela-Aro (2008)	131	WH (0.02/1.00)	0.76
Wiley (1987)	191	GOC (-0.17/0.71); WR (0.45/0.81)	0.78
Williams and Alliger (1994)	41	FD (0.06/0.79); WD (-0.05/0.78)	0.71
Williams <i>et al.</i> (2006)	168	WD (0.18/0.89); WH (-0.06/1.00)	0.76
Witt and Carlson (2006)	136	WP (-0.23/0.86)	0.85
Yang <i>et al.</i> (2000)	108	FD (0.53/0.78); WD (0.38/0.76)	0.83
Yavas <i>et al.</i> (2008)	342	WP (-0.04/0.83)	0.83

Notes: α , reported reliability number; *r*, reported correlation number. Scales: WD, work demand; FD, family demand; WC, work control; FC, family control; JA, job autonomy; WH, work hours; FH, family hours; WR, work role overload; FR, family role overload; FL, flexibility (work time/schedule); CS, career satisfaction; CDS, career development consequences; WP, work performance; FP, family performance; GOC, general organisational commitment; Multiple entries for one article refer to the different studies included in that article

Table AII.

Corresponding author

Eko Yi Liao can be contacted at: ekoliao@hsu.edu.hk

For instructions on how to order reprints of this article, please visit our website:

www.emeraldgrouppublishing.com/licensing/reprints.htm

Or contact us for further details: permissions@emeraldinsight.com