

**THE INFLUENCE OF WORK PRESSURE AND INDUSTRY ON WORK-
FAMILY CONFLICT: A META-ANALYTIC REVIEW OF SOUTH
AFRICAN RESEARCH**

by

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Firstly, I thank God for giving me the ability and means to complete this research article. I want to thank my parents for their continual encouragement and support.

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DECLARATION

I, Theo Heyns, declare that THE INFLUENCE OF WORK PRESSURE AND INDUSTRY ON WORK-FAMILY CONFLICT: A META-ANALYTIC REVIEW OF SOUTH AFRICAN RESEARCH is my own unaided work both in content and execution. All the resources I used in this study are cited and referred to in the reference list by means of a comprehensive referencing system. Apart from the normal guidance from my study leader, I have received no assistance, except as stated in the acknowledgements.

I declare that the content of this research article has never been used before for any qualification at any tertiary institution.

Theo Heyns

Signature

Date

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ABSTRACT

Research purpose

The purpose of this study is to examine the effects of work pressure on work-family conflict as reported by South African academic research. Furthermore, the study examines the influence of employees working in gendered industries on the association between work pressure and work-family conflict.

Motivation for study

There is currently no meta-analytic study employing just South African samples to investigate work-family conflict. As researchers are often confronted with conflicting findings from different studies, this study aims to make sense of work-family conflict in South Africa by reporting on its current status using all available published literature.

Research design, approach and methods

This study followed a meta-analytic approach in order to investigate the current state of work-family conflict in South Africa according to the published quantitative academic literature. As such, correlations between sources of work pressure and work-family conflict reported in articles were used in order to calculate overall estimations of the association between work pressure, industry, and work-family conflict.

Main findings

Results indicate that various sources of work pressure, as well as overall work pressure, are positively associated with work-family conflict. Regarding industry, results indicate that the industry, that is, whether industries are numerically male- or female-dominated, moderates the association between work pressure and work-family conflict in such a way that employees in male-dominated industries experience increased work-family conflict compared to employees in female-dominated industries.

Limitations

Results should be interpreted bearing in mind that the types of industries in which samples were collected were very limited, and as such, results might not be applicable to all male- or female-dominated industries in South Africa. Also impinging on the true nature of the work-family conflict relationship with work pressure and industry, is the limited number of articles included in the study because there are a limited number of published studies which have been conducted in South Africa. Lastly, the manner in which samples were categorised as male- or female-dominated does not guarantee a masculine or feminine culture within those organisations respectively.

Future research

It is suggested that similar studies regarding work-family conflict and industry conducted in the future categorise industries as male- or female-dominated according to the nature of the cultures in those organisations--either masculine or feminine. Classifying organisations as male- or female-dominated in this manner should provide more representative results of the true nature of the association between work-family conflict and industry. Researchers should also try to obtain a more representative sample of male- and female-dominated industries in order to make the results applicable to a wider range of sectors.

Conclusion

Insight was given into the current nature of work-family conflict in South Africa as reported by the available published academic literature. The association between work pressure, industry, and work-family conflict is reported.

Key words

Work-family conflict, work-family interference, work pressure, industry

1. Introduction

As a result of the increasing demands of modern day work and the changing nature of economies, the traditional view of a single earner household is no longer possible or sensible for a lot of families. Dual-earner households are the product of such changes and household duties are no longer defined by gender. As a result, more individuals find it difficult to balance the demands of work with that of family (Byron, 2005). Researchers has started to explore the field of work- and family domains in 1964 already from works such as Kahn, Wolfe, Quinn, Snoek and Rosenthal (1964), and the focus thereon has increased ever since (Ford, Heinen, and Langkamer, 2007). According to O’Driscoll, Ilgen, and Hildreth (1992) considerable attention has been given to work- and family domains. This increased focus is a result of the change in family structures, the increasing number of working women, and changes in life style that allows for the integration of work and non-work activities.

One of the most popular areas of research regarding work and family life is the extent to which these two domains influence one another, either positively or negatively. More focus has been placed on the negative effects however (Shockley and Singla, 2011), and more specifically on that of work-family conflict (Byron, 2005; Ford *et al.*, 2007). Work-family conflict (WFC) is defined as “a form of interrole conflict in which the role pressures from the work and family domains are mutually

incompatible in some respect” (Greenhaus and Beutell, 1985, p. 77). According to Gutek, Searle, and Klepa (1991), WFC is bi-directional, meaning that the work domain can interfere with the family domain (e.g., high job demands or pressures prevents one from performing family roles sufficiently) and vice versa (e.g., conflict with one’s spouse, or an illness in the family prevents one from performing work related duties on a satisfactory level).

Researchers have also focused on gender differences in regards to WFC by reporting the extent of negative influence from work- to family life, and vice versa, for male and female employees (De Klerk and Mostert, 2010; Donald and Linington, 2008; Greenhaus, Parasuraman, Granrose, Rabinowitz, and Beutell, 1989; Mostert, 2009). These studies report differences between male and female employees with male employees generally experiencing a higher level of work interference with family (WIF), whereas female employees reported a higher level of family interference with work (FIW). The terms interference, spillover and conflict are often used interchangeably in the literature. The focus throughout this document will be one-directional, only exploring the negative influence of work pressures onto the family domain, and as such, the term WFC will be used to represent interference and spillover as well.

According to Mostert and Oosthuizen (2006) the South African workforce characteristics as well as the nature of work in the country has changed drastically following the first democratic election in 1994. Some of these changes include an

increase in the number of working women, single parents, families where both parents work, as well as fathers who are more actively involved in family roles, for example, raising children. The nature of work has also intensified, with employees experiencing increased pressure at work. As a result of advances in technology, employees are working longer hours and technology makes it possible to do work from various locations (e.g., at home). These changes have greatly affected the relationship between the work and family domains, where role conflict can result. Brien (2013) states that although long working hours are declining in developed countries, they still remain high in developing countries, with South Africa being one of the countries where employees might work even longer hours as a result of informal and unregulated working markets. She notes that this seems to be the norm for employees in developing countries.

Brien (2013) further states that family supportive policies in developing countries are still focused on female employees with most companies in Sub-Saharan Africa not providing paternity leave for male employees. It is therefore important for employers to acknowledge the impact of such changes and economic influences as employees' behaviour at work is affected which impacts organisational functioning. Employers must also be aware of the roles male and female employees perform at home in order to help them to achieve balance between work- and non-work domains.

As there is no meta-analysis of South African studies of WFC, this study aims to provide insight into the association between work pressure, working in gendered

industries, and WFC by examining the body of South African literature on this subject. Reviewing the South African literature on work-family relationships, one finds studies focusing on employees' experiences in different industries, e.g., mining (Mostert and Rathbone, 2001; Oldfield and Mostert, 2007), construction (Mostert, Peeters, and Rost, 2011), police service (Mostert, Cronje, and Pienaar, 2006; Mostert, 2008), nursing (Koekemoer and Mostert, 2006; Mostert and Oosthuizen, 2006) and banking (Hlatywayo, Zingwe, Mhlanga, & Mpofu, 2014). One can argue that some industry sectors are numerically male dominated (mining and construction), while others are numerically female dominated (nursing), which may have implications for how these workers view work and family roles and the intersection of those domains.

Although differences in the way male and female employees experience and are affected by WFC in South Africa have been compared in research, no study in South Africa has looked at how gendered industries might moderate this relationship. In addition to examining the effects of work pressure on WFC as reported by South African literature, this study therefore also examines the effect that gendered industries might have on the association between work pressure and WFC.

According to Kanter (1977), groups composed of varying proportions of people differ dynamically. She states that the difference between groups of people is not only a result of different cultures or statuses of individuals, but also the "proportional representation in the system" Kanter (1977, p. 966). She proposes that

organisational groups can be numerically divided into four categories, namely: uniform-, skewed-, tilted-, and balanced groups. Uniform groups are only composed of one type of individual which can be represented by a ratio of 100:0. Skewed groups are composed “predominantly” by one type, represented by a ratio of 85:15. In tilted groups, one type of individual is considered as the majority, with a ratio of 65:35. Lastly, balanced groups are composed of equal amounts of two different types of people with a ratio of 50:50. Examining the effect that gendered industries might have on the association between work pressure and WFC can provide insight into how the magnitude of the work pressure-WFC relation may vary for workers based on the industry in which they are employed.

2. Theory and hypotheses

2.1 Work-family theories

The literature regarding WFC has been largely dominated by two theories, namely conflict and job demands-resources theories, with conflict theory being the most popular (Michel, Clark, and Jaramillo, 2011). According to conflict theory, navigating the work domain and family domain creates conflict as both domains have different responsibilities and norms. As a result, these domains interfere with one another and cause one of the roles to be negatively influenced by the other (Byron, 2005). Conflict theory in general follows the three dimensions of conflict (time, strain and behaviour) presented by Greenhaus and Beutell (1985). Firstly, time-based conflict

occurs when time spent on one role minimise the time available for other roles (e.g., working long hours will minimise the time one can devote to family). Secondly, strain-based conflict is the result of strain (pressure) in one role that negatively affects one's ability to perform on a satisfactory level in another role (e.g., having a high workload causes fatigue and stress that leads to one being emotionally absent in the family role). According to Greenhaus and Beutell (1985) there is a substantial amount of evidence reporting a positive relationship between work stress and WFC. Thirdly, behaviour-based conflict occurs when one is not able to adjust one's behaviour from a work role to a non-work/family role (e.g., a male supervisor/manager is expected to display certain behaviours at work such as aggressiveness and self-reliance, but is expected to be caring, emotional and warm at home). When one is unable to make this adjustment, behaviour-based conflict occurs. Edwards and Rothbard (2000) note that behaviour-based conflict does not necessarily entail a clash of demands, but rather the incompatibility of distinct role behaviours.

The second work-family theory, job demands-resources theory, proposes that working environments can be categorised according to job demands and job resources (Bakker and Demerouti, 2014), and that individuals only have a certain amount of resources to allocate to different roles (Allen *et al.*, 2012). The more resources spent on one role (e.g., energy and attention), the less resources are available to devote to another (Michel *et al.*, 2011). According to Bakker and

Demerouti (2007) these resources can either be physical, psychological (cognitive and emotional), social or organisational. Job resources aid employees to achieve work goals, reduce the demands of the job, and enable employee development and learning. Job demands on the other hand are considered aspects of the job that “require sustained physical and/or psychological effort and are therefore associated with certain physiological and/or psychological costs” (Bakker and Demerouti, 2014, p. 9). Work pressure or demanding interactions with clients are examples of such demands. Bakker and Demerouti (2014) note that job demands are viewed as negative when such demands require extreme effort from the employee, or when the employee has not yet recovered from previous demands. According to Xanthopoulou, Bakker, Demerouti, and Schaufeli, (2007) job demands and resources are associated with different psychological processes. Whereas job demands may deplete employee resources resulting in energy loss and possible health problems, job resources may lead to organisational commitment and engagement. For example, when employees gain fulfilment from their work they become more committed to their job.

Both of these theories are relevant in the study of work-family conflict, as they point out that work and family roles may become incompatible in some manner and can result in negative outcomes for employees.

2.2 Work pressure and WFC

Work pressure can take a variety of forms such as high workloads, ambiguity, insufficient leader support, amount of mental concentration needed to perform a function and task complexity (Greenhaus and Beutell, 1985; Greenhaus *et al.*, 1989). Greenhaus and Beutell (1985), in their proposed model, find that conflict from working long hours, inflexible schedules, overtime and travelling, indirectly causes work pressure. Evidence that supports a positive relationship between work pressure and WFC is widespread in literature. Samad, Reaburn, and Di Milia (2015) found work pressure and working hours to be main predictors of WFC with correlations of 0.5 ($p = 0.01$) and 0.47 ($p = 0.01$) respectively. These correlations resulted from first-hand data collected at an Australian University. In a meta-analytic review conducted by Byron (2005) whereby the results of more than 60 studies were combined, it was found that work stress (0.48) and schedule inflexibility (0.3) were the strongest predictors of work interfering with family ($p = 0.05$). In another meta-analytic study conducted by Ford *et al.*, (2007), correlations between four sources of work pressures (job involvement, job stress, lack of work support, and working hours) and WFC were reported with job stress being the strongest predictor (0.46) followed by long work hours (0.23) at a significance level of $p = 0.1$. Ilies *et al.*, (2007) reported a much higher correlation between WFC and workload to be 0.6 ($p = 0.01$). Overall work pressure comprises the sum of five types of work pressure as depicted in Figure 1. These five variables have been selected for inclusion in the

study based on criteria for meta-analytic methodology. The selection of these variables is elaborated on in section 3.

The outcomes or consequences of WFC have been reported to include a decrease in job-and life satisfaction (Kossek and Ozeki, 1998), burnout (also emotional exhaustion), absenteeism at work, depression, substance use or abuse, family strain (Amstad, Meier, Fasel, Elfering, and Semmer, 2011), marital dissatisfaction and turnover (Allen, Herst, Bruck, and Sutton, 2000). From the above, it is clear that ample evidence exists that suggest a positive association between sources of work pressure and WFC. Based on this evidence, the following hypothesis was developed:

Hypothesis 1: Overall work pressure and work-family conflict are positively associated.

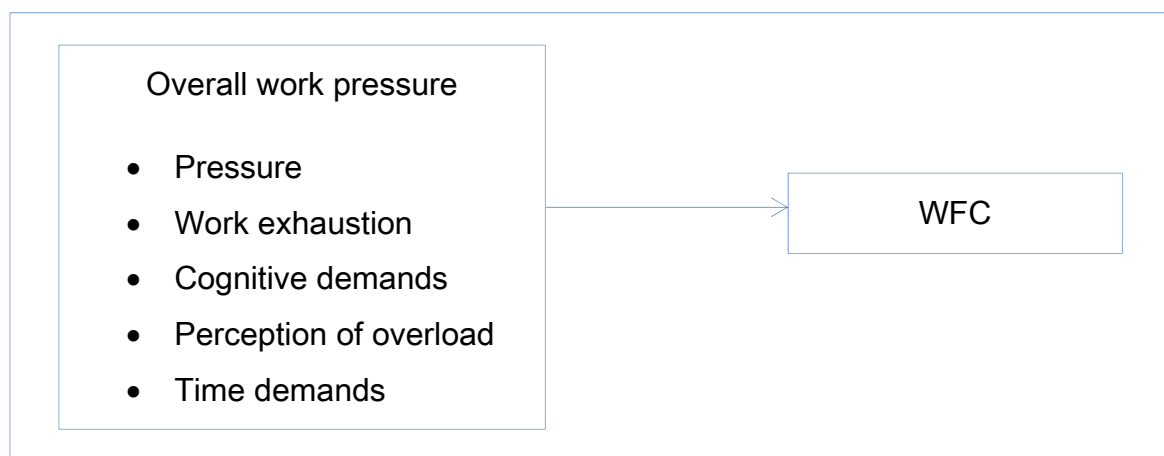


Figure 1: Antecedents of WFC included in this study

2.3 Industry and WFC

Gender is complexly woven into the work and family interface. For example, De Klerk and Mostert (2010) and Ford *et al.*, (2007) note that international studies have revealed hardly any difference between the way males and females experience and report interactions between their work and family lives, whereas some South African studies report a significant difference, with men experiencing much higher levels of WFC than women (De Klerk and Mostert, 2010). Carlson and Kacmar (2000) note that the direction of conflict experienced by individuals, that is, from work to family, or from family to work, is dependent on the life role values one holds. They define role values as “the system of values an individual holds regarding the work and family domains based on what the individual believes to be important to, central to, or a priority in his or her life” (Carlson and Kacmar, 2000, p. 1032). Ford *et al.*, (2007) state that the work domain is more central to the lives of men, whereas the family domain is more central to the lives of women. Based on this, one might expect work pressure to spill over into family life to a greater extent for men, and stresses of family life to spill over into work life to a greater extent for women. For example, if a father spends more time at work, and does not sufficiently participate in family activities as a result thereof, WFC may occur. Carlson and Kacmar (2000, p. 1035) note that taking such life role values into consideration is important as such values are “central to organising meaning and action for working people”.

As far as industry influences, as mentioned previously, quite a number of work and family studies in South Africa have been conducted with a specific focus on certain industries, where some can be considered as male-dominated (e.g., mining) and others female-dominated (e.g., nursing). According to Gardiner and Tiggemann (1999), leadership styles of men and women differ stereotypically. Male leaders focus on the achievement of goals, whereas female leaders focus on relationships with people and are more democratic in their leadership style. One can argue that these differences might impact the pressure experienced by employees at work. Eagly and Johnson (1990) found that leadership styles of women changed when they were in male-dominated organisations (males dominating numerically), such that females' inclination towards the maintenance of interpersonal relationship weakened and they instead adopted a male-like leadership style. They propose this to be the result of women not wanting to lose position or authority.

Gardiner and Tiggemann (1999) found that the ratio of males and females in an organisation influences work stress such that women in male-dominated industries reported increased work pressure. Mostert and Rathbone (2001) conducted a study regarding the interaction between work- and family life for mining employees. Their sample consisted of 79.9% males, and as such can be considered as male dominated. They found a positive correlation of 0.47 ($p = 0.01$) between work pressure and WFC. Koekemoer and Mostert (2006) conducted a study testing the relationship between job characteristics and negative WHI in a nursing environment.

Their sample consisted of 97.7% females and reported a positive correlation of 0.24 ($p < 0.05$) between work pressure and negative WHI. This relationship is much weaker than that reported by Mostert and Rathbone (2001) for a male dominated environment. Byron (2005) investigated whether the composition of a sample (e.g., sex and parental status of respondents) moderated the relationship between WFC and outcomes. She found that female-dominated samples reported a weaker positive relationship between job involvement and WFC than men. She found that male dominated samples reported higher levels of WFC, whereas female dominated samples reported a higher level of FWC.

Taking the above into consideration, employees, both males and females, working in male dominated environments should report higher levels of WFC than employees working in female dominated environments. From a job demands-resources theory perspective, male dominated environments should place a higher value on work roles, with little resources provided for employees to ease the negative conflict of work onto family roles, as compared to female-dominated work environments. In female-dominated industries and environments, employers are more likely to provide resources such as family-friendly benefits and model family supportive supervision, which should be associated with less WFC and less strain for these employees. Family-friendly benefits are implemented by organisations to aid individuals to balance work- and family life. Such policies and practices can include, amongst others, flexible work schedules, referrals for child care or on-site child care as well as

increased leave. Family-friendly benefits in turn help organisations build and retain a committed and motivated workforce (Allen, 2001).

Allen (2001) found that employees' perceptions of their organisations' family-friendly policies and practices, mediated the relationship between family-friendly benefits offered and WFC. Employees who perceived their organisation's policies and practices to be more family-friendly reported less WFC as opposed to employees who perceived their organisations as less family-friendly. Similarly, Thomas and Ganster (1995) found that family supportive practices had a direct positive effect on employees' perceptions of their control over work and family. This perception of control again was associated with lower levels of WFC. They found that flexible work schedules and supportive supervisors had the most influence on such perceptions. As such, I argue that employees working in male-dominated industries should experience greater pressure as a result of WFC as compared to employees working in female-dominated industries. This moderation relationship is visually represented in Figure 2.

Hypothesis 2: Industry moderates the association between work pressure and WFC such that there is a stronger positive association for employees working in male-versus female dominated industries.

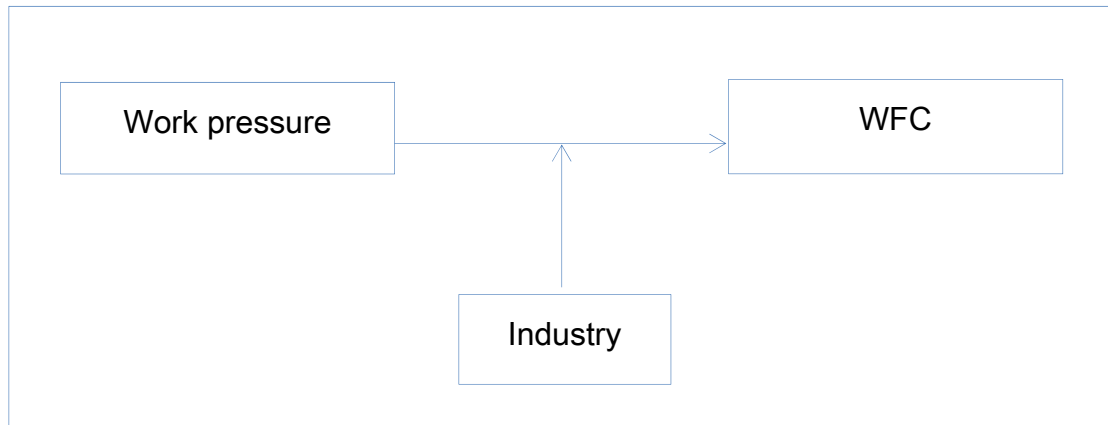


Figure 2. The moderation relationship between work pressure, industry, and WFC.

3. Method

3.1 Literature search

In order to identify all the studies that have employed South African samples to test the relationships between work and family constructs and strain (work pressure), online searches were conducted in the following databases: PsychInfo, EbscoHost, Sabinet and Proquest. A variety of search terms were used to ensure a comprehensive literature search was conducted. “Work-home”, “work-life” and “work-family” were combined with “interference”, “interaction”, “balance”, “conflict”, “integration” and “interface”. All search term combinations were also paired with “South Africa” to narrow down search results. To be included in the study, articles had to be quantitative, and include a Pearson’s correlation coefficient representing the relationships between WFC and a measure of work pressure (e.g., perceptions of work overload and overtime). Studies also had to list the scales used as well as the reliability coefficient (Chronbach’s alpha) for measures. Samples also had to be

South African citizens and/or individuals living or working in South Africa. Theoretical and/or conceptual articles and qualitative studies were excluded, as correlations were needed to conduct a meta-analysis. A total of 6144 hits were returned when conducting searches using the various combinations of search terms, with 91 articles meeting inclusion criteria for the study. Quite a number of articles returned from the search results were not relevant to the research question, and therefore only a small number of articles met the inclusion criteria. In addition to online searches, the reference lists of articles were also inspected to identify any further articles that met inclusion criteria. Furthermore, any article reporting an antecedent of WFC that was not shared by a minimum of two other articles reporting that same antecedent was excluded from the study as data on at least 3 correlations are required to conduct a meta-analysis. Thus articles not sharing antecedents to WFC with two or more studies were excluded. After deleting duplicates and articles not matching all inclusion criteria, a total of 13 articles remained for analysis. This resulted in five antecedents which were included in the study, namely: work pressure, work exhaustion, cognitive demands, perception of overload, and time demands.

3.2 Statistical procedures

In order to test my hypotheses, I made use of the meta-analysis method presented by Hunter and Schmidt (2004). In line with this method, the correlation coefficients

between sources of work pressure and WFC as reported in the selected studies were used as effect sizes. After the results of all individual studies were captured, corrections were made for two types of error, namely measurement (unreliability) and sampling error. In order to correct for measurement error, the reliability values (α) for scales as reported in the studies were used. In rare cases where no reliability values were reported, a value was calculated by obtaining an average value from other studies that made use of the same scale. The next step involved correcting for sampling error, and, as such, samples were weighted according to their size (N). This allowed larger samples to have a larger effect on the overall correlation than smaller samples. Individual values obtained after correcting for measurement and sampling error were then used to calculate the overall weighted correlation. Correlations were calculated for each one of the antecedent variables to work pressure, as well as overall work pressure incorporating all antecedent variables. Capturing, coding, and calculation of the results were done using the software program Microsoft Excel.

In order to examine the WFC reported in male- versus female-dominated industries, study samples were firstly categorised as male- or female-dominated according to their sample's gender compositions. I used Kanter's (1977) proposed *tilted* ratio of 65:35 to categorise samples as male- or female- dominated. In the case where samples consisted of a gender composition where one gender was lower than a 65:35 ratio, the industry type was taken into consideration in order to categorise the

sample. From the thirteen articles included in this study, five articles were categorised as female-dominated and eight as male-dominated. From the five articles categorised as female-dominated, three studies' samples were taken from hospitals and described as 'nursing environments'. These three samples all consisted of a female percentage of 97 and above. One study was conducted in a tertiary institution with a sample consisting of 65% females. The fifth article categorised as female-dominated used a sample of only females from a variety of occupations, and as such the sample consisted of 100% females. Although only females were selected for inclusion in the study, I also deemed the occupations/industries they were selected from as largely female-dominated. Participants were selected from occupations or industries such as hospitals (nursing), education (teachers), and the beauty industry (hairdressers and beauticians).

Samples from articles categorised as having male-dominated industry samples included: mining (2 articles), financial organisations (2 articles), police service (1 article), earthmoving industry (1 article), construction (1 article), and churches (1 article). All samples except those from one of the financial organisations and the police service have a male-dominated sample of 74% and above. The sample taken from police service has a male-dominated percentage of 68.3, and that from the financial organisation has 54%. As the other financial organisation was categorised as male-dominated according to sample composition, this sample was categorised

accordingly. The correlation between overall work pressure and WFC was then calculated separately for studies categorised as male- and female-dominated which yielded one value for male-dominated samples, and one value for female-dominated samples. These two effect sizes were compared in order to test hypothesis 2.

4. Results

4.1 Work pressure and WFC

Table 1 provides the meta-analytic correlations between WFC and overall and specific measures of pressure: overall pressure, work pressure, work exhaustion, cognitive demands, perception of work overload and time demands. Hypothesis 1 predicted that work pressure is positively associated with WFC. As seen in Table 1, overall work pressure, as well as each type of work pressure, is positively associated with WFC. Hypothesis one is therefore supported. The corrected correlations (that is, effect sizes) can be classified according to Cohen's (1992) conventions for the magnitude of effect sizes. He proposed that effect sizes between 0.1 and 0.29 be classified as small, effect sizes between 0.3 and 0.49 as medium, and effect sizes of 0.5 and above as large effects. Overall pressure ($\rho = 0.40$), work pressure ($\rho = 0.38$), work exhaustion ($\rho = 0.48$), overload ($\rho = 0.40$) and time demands ($\rho = 0.46$) can therefore be classified as medium effect sizes, whereas cognitive demands ($\rho = 0.27$) can be classified as a small effect size.

Table 1

Meta-analytic correlations between WFC and measures of pressure

WFC and...	<i>k</i>	<i>n</i>	<i>y</i>	<i>ρ</i>
Overall pressure	13	4129	0.38	0.40
Work pressure	11	3887	0.37	0.38
Work exhaustion	3	1178	0.49	0.51
Cognitive demands	3	895	0.26	0.27
Overload	4	1414	0.32	0.40
Time demands	4	1152	0.44	0.46

WFC = work-family conflict; *k* = number of studies; *n* = cumulative sample size; *y* = average uncorrected correlations; *ρ* = corrected meta-analytic correlations; Overall pressure's cumulative sample size does not add up to the sum of the individual correlations' sample sizes as individual studies reported multiple antecedent variables.

4.2 Industry and WFC

Table 2 provides the meta-analytic correlations for WFC and overall work pressure in male- versus female-dominated environments/industries. Hypothesis 2 predicted that there would be a stronger positive association between work pressure and WFC for employees in male- versus female-dominated environments/industries. As reported in Table 2 there is a difference in the magnitude of the associations between work pressure and WFC for employees working in male-dominated environments ($\rho = 0.45$) and female-dominated environments ($\rho = 0.41$) in South

Africa. Therefore, the industry, as far as being male- or female-dominated, moderates the association between work pressure and WFC. The effect size for the relationship between overall work pressure and WFC is higher in male-dominated industries. These findings support hypothesis 2.

Table 2

WFC for male- and female dominated sectors

WFC and overall strain	Average % of sample	<i>k</i>	<i>n</i>	<i>y</i>	<i>ρ</i>
Male dominated	77.1	8	2163	0.34	0.45
Female dominated	92	5	2233	0.4	0.41

WFC = work-family conflict; *k* = number of studies; *n* = cumulative sample size; *y* = average uncorrected correlations; *ρ* = corrected meta-analytic correlation.

5. Discussion

The purpose of this study was to summarise the current research in South Africa regarding work pressure, industry, and WFC, by means of a meta-analysis. Firstly, this study focused on the association between overall work pressure experienced by employees in the work domain, with conflict in non-work domains (i.e., the family domain). Secondly, the moderation effect of industry type (male- or female-dominated) on the magnitude of the association between overall work pressure and WFC was investigated (as depicted in Figure 2). As such, two hypotheses were developed.

Across all quantitative studies published using South African samples, I examined the magnitude of the positive associations between various antecedents of WFC (e.g., work pressure, overload, and time demands) and WFC. Hypothesis 1 therefore stated that overall work pressure is expected to be positively associated with WFC. Overall work pressure was comprised of five separate constructs, namely: work pressure, work exhaustion, cognitive demands, overload, and time demands. Results indicated that each antecedent variable had a positive association with WFC, as did overall work pressure. The magnitude of associations of all antecedent variables can be classified as medium, except that of cognitive demands which can be classified as small according to Cohen's (1992) conventions for effect sizes. These findings support hypothesis 1.

In line with existing literature on WFC, in South Africa and beyond, these findings indicate that employees will experience conflict between the work- and family domain when they experience various types of work pressure. Work exhaustion ($\rho = 0.48$) and time demands ($\rho = 0.46$) seem to be the strongest antecedents of WFC, with cognitive demands ($\rho = 0.27$) being less strong. These results are in line with international meta-analytic studies as Byron (2005) and Ford *et al.*, (2007) found inflexible schedules (0.3) and long working (0.23) hours to be the main predictors of WFC. Although the magnitude of these correlations is weaker than those reported for the present study, authors found these antecedents to be main predictors of WFC in their studies. While these authors studied what they called inflexible schedules

and long working hours, these are congruent with time demands or time constrictions as reported in the present study. Michel, Kotrba, Mitchelson, Clark, and Baltes (2010) report a correlation of 0.3 between time demands and WFC, and consider this magnitude as moderate, compared to the strongest predictors of WFC that was found to be role overload (0.55) and job stressors (0.5).

As suggested by job-demands resources theory, individuals only have a certain amount of resources to allocate to different roles. According to Grandey and Cropanzano (1999), individuals want to obtain and maintain resources in order to effectively navigate the conflicting demands of multiple roles, and feel threatened in environments where such resources might be lost. The likelihood of the work domain interfering with the family domain decreases the more resources individuals have at their disposal. Work exhaustion and time demands can be regarded as such resources. It is thus reasonable to conclude that the more time spent at work, the less time as a resource is available to spend with family, resulting in WFC. The same can be concluded from exhaustion which is considered as resulting from a physical resource (energy).

Hypothesis 2 postulated that the industry employees work in (that is, whether their industry is numerically male- or female-dominated) should moderate the association between overall work pressure and WFC in such a way that the magnitude of the association between work pressure and WFC is greater in male-dominated environments as opposed to female-dominated environments. Results support this

hypothesis as it was found that the magnitude of the association between overall work pressure and WFC is indeed greater for employees working in male-dominated environments. These results are in line with previous research findings that report that male employees generally experience greater WFC as opposed to female employees (Byron, 2005).

As mentioned previously, the life role values, that is, what individuals regard as most important or central to their lives, differ between men and women. Generally men regard the work domain as more central to their lives whereas women regard the family domain to be more central to theirs (Ford *et al.*, 2007). One might argue this to result from traditional heterosexual gender roles where once the male had the primary responsibility of providing for the family by earning an income, and where the female's primary responsibility would be to raise children and manage the household. As a result of this difference in life role values, male-dominated work environments can be expected to place more importance on work, providing less or even no family-friendly policies or benefits. Thus the conclusion can be drawn (supported by the findings presented here) that male employees experience greater WFC than female employees.

These findings should be understood in regard to studying the South African workplace. As mentioned in section 1, the change in composition of the South African workforce since 1994 has had a definite impact on the WFC experienced by employees. The number of dual-earner households has increased and now both

men and/or women are regarded as the breadwinners. As mentioned previously, developing countries also seem to experience an increase in working hours when compared to developed countries, where long working hours seem to have reached a plateau (Brien, 2013).

Although the South African workforce characteristics have changed in the last two decades, South Africa as a developing country can be regarded as still lagging behind more developed countries in terms of women being the main providers for their families. One can thus argue that traditional roles where men are still considered to be the primary providers for families still play a major role in developing countries, and as such, South Africa as well. Brien (2013) also notes that most organisations in Sub-Saharan Africa still do not provide family friendly benefits or policies (or to a very limited extent) for male employees. Thus one can expect such benefits and policies to be almost non-existent in male-dominated work environments in South Africa.

5.1 Limitations

A number of limitations to the study need to be discussed in light of interpreting the results presented. Firstly, the number of articles included in the study is very limited as a result of the selection criteria. There seems to be a paucity of quantitative, published articles making use of South African samples to investigate WFC and the

antecedents thereof, resulting in a small number of articles meeting the criteria to be included in this study. As a result, it is impossible to rule out, had more studies been available, that other studies' results could have impacted the results presented here. Secondly, in regard to hypothesis 2, the variety of industries sampled in the published articles is very limited. Samples categorised as male-dominated are mostly from mining, construction and policing sectors. These sectors can be argued to be unique in their own right, especially the mining sector, as this can generally be considered to be a harsh environment. As such, the results presented for male dominated sectors should be interpreted bearing this in mind. That is, the results presented might therefore not be applicable to all male-dominated sectors in South Africa.

In regards to articles categorised as female dominated, three of the five articles' samples are from hospital environments, and more specifically nursing. The nursing environment in South Africa is characterised by overcrowded hospitals, financial constraints, high workloads and exposure to HIV patients. These factors contribute to highly stressful and emotionally draining circumstances (Koekemoer and Mostert, 2006). As three of the five articles categorised as female-dominated used samples from this environment, the magnitude of the association between work pressure and WFC might be lower in other female-dominated work environments in South Africa as opposed to the association reported in Table 2 ($p = 0.41$). Again results

presented for female-dominated environments might not be applicable to all female-dominated sectors/industries.

Regarding the method employed, meta-analytic studies rely on the published results from other research and thus poses unique limitations. As this study made use of published academic journal articles, the researcher relied on the review process of the journals in which these articles were published to ensure the rigour and quality of those articles. Furthermore, in general, the meta-analytic researcher can only make use of the information provided in such articles and cannot therefore make alterations thereto. This means the researcher does not have control over variables included in published articles, and is thus limited to publicly available information. As such, a limited number of antecedents to WFC were included, and new control variables could not be introduced into the analyses.

Lastly, the manner in which study samples were categorised as male- or female-dominated might also pose some problems regarding the results presented here. The fact that some industries are numerically male-dominated does not guarantee a masculine culture within the organisation, which does not mean that such organisations do not provide family-friendly policies or benefits, or place higher focus on work than family for example. Classifying samples as male or female-dominated merely based on the gender composition of the sample, might thus cause the results presented here not to be a true representation of the masculine versus feminine cultures in these organisations. Similarly, numerically female-dominated industries

are not a guarantee that employees do receive adequate support in order to balance work and family life. Similar studies conducted in the future might thus focus on defining male- or female- dominated industries in a manner that captures the culture (masculine or feminine) of the organisation to investigate the association between WFC, work pressure, and masculine or feminine cultures in organisations.

5.2 Implications for theory and practice

From a theoretical perspective, the results presented in this manuscript add to the existing body of knowledge regarding WFC in South Africa by providing an overview of the current state of WFC in the country. As no meta-analytic study on WFC currently exists in South Africa, this study could aid researchers to draw conclusions when presented with inconsistent results from different studies. By also arguing from a gendered industry perspective, the results presented here can provide some insight into WFC experienced by employees in gendered industries/sectors. This paper might serve as a stepping stone for future researchers to further investigate the moderation effect of work pressure and gendered industries on WFC. From an applied perspective, the results presented could be used by employers to grasp the effect of various work pressures on WFC. Employers can use this information to accommodate employees in order to potentially minimise WFC experienced by employees. Results regarding gendered industries can also aid employers to recognise the unique nature of certain industries and the impact thereof on

employees' WFC. Employers should consider reviewing family-friendly policies in order to aid employees in balancing work and family life, especially in male dominated sectors.

5.3 Directions for future research

As discussed in section 5.2, the published studies' samples were collected from a very limited number of industries, and might not be representative of all male- or female-dominated industries in South Africa. Future research regarding WFC and industry type might employ a more comprehensive and representative sample of different male- and female-dominated industries. As the number of quantitative studies currently available in South Africa regarding WFC that meet meta-analytic criteria are limited, it is suggested that future researchers collect first-hand data for such a study or widen the scope of the study to other nations. As certain industries might pose unique work pressures, e.g., nursing, future research might also focus on industry specific antecedents to WFC and the moderating effect of numerically male- or female dominated industries.

As mentioned in section 1, Kanter (1977) proposes that organisational groups can be numerically divided into four categories, namely: uniform-, skewed-, tilted-, and balanced groups. Uniform groups are only composed of one type of individual which can be represented by a ratio of 100:0. Skewed groups are composed

“predominantly” by one type, represented by a ratio of 85:15. In tilted groups, one type of individual is considered as the majority, with a ratio of 65:35. Lastly, balanced groups are composed of equal amounts of two different types of people with a ratio of 50:50.

It is suggested that future research explore the effect of work pressure on WFC for all of the four above mentioned ways to calculate gender composition (Kanter, 1977), that is, uniform-, skewed-, tilted-, and balanced groups. This should provide a clearer picture of the moderating effect of different numeric gender compositions, that is, the effects of gendered industries on WFC. This might be done by obtaining a large sample of various industries and categorising samples obtained from these industries according to Kanter’s four groupings. Samples will need to be gathered until similar sample sizes have been obtained for each grouping category. Calculating associations for each grouping and comparing these associations should deliver results that are more conclusive regarding the moderating effect of types of industry on the relation between work pressure and WFC. Based on the results presented in this manuscript, as well as theories presented by previous researchers, e.g., the difference in life role values of men and women (Carlson and Kacmar, 2000), and that the work domain is more central to the lives of men (Ford *et al.*, 2007), I expect research results will indicate a larger magnitude of association between work pressure and WFC for sample groupings with more males. As mentioned previously, researchers should note, however, that numerically male- or

female-dominated industries do not necessarily guarantee the predominance of a male or female culture within these industries.

As most male-dominated samples included in this study were from mining, construction and the police service, and female dominated samples were from nursing, exploring industry specific antecedents to WFC will add valuable knowledge to the WFC literature in South Africa. As mentioned in section 5.3, the manner in which samples were categorised as male- or female-dominated poses limitations on the results presented in this manuscript. It is suggested that similar studies regarding WFC and industry conducted in the future categorise industries as male- or female-dominated according to the nature of the culture in the organisation, either masculine or feminine. Classifying organisations as male- or female-dominated in this manner should provide more representative results of the true nature of how exactly work affects home in these environments. This might be done by investigating the leadership styles of authoritative figures within the organisation, family-friendly policies or benefits offered to employees within the organisation, and how often employees work overtime. To aid researchers to categorise an organisations culture, employees might be requested to complete questionnaires regarding their perceptions of the culture, that is, whether they perceive their organisation's culture to be male- or female-dominated. Focus groups or other qualitative methods may also be useful in order to obtain such rich, descriptive information.

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