

1-1-2016

Burnout and the work-family interface: a two-wave study of sole and partnered working mothers

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Recommended Citation

Robinson, Laura D.; Magee, Christopher; and Caputi, Peter, "Burnout and the work-family interface: a two-wave study of sole and partnered working mothers" (2016). *Faculty of Social Sciences - Papers*. 2190.
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Abstract

Purpose - The purpose of this paper is to examine whether work-to-family conflict (WFC) and work-to-family enrichment (WFE) predicted burnout in working mothers using conservation of resources theory. The authors also examined whether these relationships varied between sole and partnered working mothers. **Design/methodology/approach** - In total, 516 partnered and 107 sole mothers in paid employment completed an online survey twice, six months apart. **Findings** - WFC was significantly positively related to burnout, and WFE significantly negatively related to burnout. Marital status moderated the inverse relationship between WFE and personal burnout, and this relationship was significant for partnered mothers only. **Research limitations/implications** - Limitations include self-report data, and the sample being highly educated thereby limiting generalizability. **Practical implications** - Providing an enriching and supportive work environment may be an important strategy for minimizing burnout in mothers, particularly for sole mothers. **Social implications** - Employed sole mother's risks of burnout may be higher than for other mothers even when experiencing WFE, which can have implications for their functioning and for family well-being. **Originality/value** - This two-wave study is the first to highlight that sole mothers, who are at risk of greater socio-economic disadvantages, do not benefit from WFE to the same degree as partnered mothers. Future work-family and burnout research should further examine differences based family structure.

Keywords

mothers, working, partnered, sole, two, study, wave, burnout, work, family, interface

Disciplines

Education | Social and Behavioral Sciences

Publication Details

Robinson, L. D., Magee, C. & Caputi, P. (2016). Burnout and the work-family interface: a two-wave study of sole and partnered working mothers. *Career Development International*, 21 (1), 31-44.

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Burnout is an important occupational health issue that has a substantial health and well-being, career progression, and organisational productivity. Burnout is typically defined as a state of prolonged and profound physical and psychological exhaustion (Kristensen *et al.*, 2005). Although there are numerous causes of burnout, research has demonstrated that aspects of the work-family interface, particularly in the work to family direction (e.g., work-to-family conflict (WFC) and work-to-family enrichment (WFE)), could be important contributors to burnout. However, few studies have examined the relationships of work-family interface components with burnout in working mothers. This is important given the growing proportion of mothers in paid employment (ABS, 2011), and the increasing recognition that working mothers may be at particular risk of burnout as they manage work and family obligations (Nomaguchi, 2012). Furthermore, very little attention has been paid to work-family experiences of mothers who are not part of a traditional family structure, such as sole working mothers. It is essential to address this gap as family structures are becoming more diverse in many countries (Cohen, 2013), and there is a growing proportion of sole working mothers (Baxter and Renda, 2011).

Sole mothers have a greater risk of socio-economic disadvantages including lower education, greater financial issues and less social support than partnered mothers, and in most cases take sole responsibility for parenting (Baxter and Renda, 2011, ABS, 2008). Thus, sole mothers may face unique challenges (and/or opportunities) when combining work and family roles compared with partnered working mothers. For instance, Ciabattari's (2007) study suggests that conflict between work and family in sole mothers can make it more difficult to maintain stable employment compared to partnered working mothers. According to existing theories, such as the Conservation of Resources theory (Hobfoll and Shirom, 2001), these different experiences could have important implications for outcomes such as burnout. The present two-wave

study aims to investigate the relationships of WFC and WFE with burnout in working mothers, and specifically test whether these relationships differ between sole and partnered working mothers.

Burnout

Burnout is a stress-related outcome that occurs following prolonged exposure to chronic stressors (Maslach *et al.*, 2001). Kristensen *et al.* (2005) defined three dimensions of burnout: personal burnout, work burnout, and client-related burnout. This study focuses on work and personal burnout, as these dimensions may best capture whether mothers attribute any burnout experiences to the work domain, and therefore may inform relevant workplace health strategies and policies. Work burnout is the degree of fatigue and exhaustion that is attributed to work (Kristensen *et al.*, 2005). For instance, work burnout takes into account how exhausted or worn out individuals are from working, or from the thought of working (Kristensen *et al.*, 2005). On the other hand, personal burnout is a generic measure of burnout and refers to the degree of physical and psychological fatigue and exhaustion experienced by a person regardless of occupational status (Kristensen *et al.*, 2005). Personal burnout is not attributed to a specific domain; rather, it is characterised by overall feelings of weakness and susceptibility to illness and emotional and physical exhaustion (Kristensen *et al.*, 2005). Numerous studies indicate that burnout impairs physical and psychological health and productivity and is related to lower job satisfaction (Burke *et al.*, 1996, Schaufeli *et al.*, 2009).

The Conservation of Resources (COR) theory has been used extensively to understand how burnout develops (Hobfoll, 2001, Grandey and Cropanzano, 1999). According to the COR theory, individuals seek to acquire, maintain and protect resources, which are “objects, personal characteristics, conditions, or energies that are valued in their own right” (Hobfoll, 2001, p339). In the present context, examples of resources include work social support and spousal support, self-efficacy, time and money (Grandey and Cropanzano, 1999, Hobfoll, 2001). According to the COR, stress occurs (i) when actual resources are lost, (ii) there is a perceived loss of resources, or (iii) a lack of return following investment of

resources (Hobfoll and Shirom, 2001). When experiencing any of these conditions, individuals attempt to minimise stress by taking actions to avoid further resource loss, and to conserve energy. However, additional resources loss often occurs during the process, which can lead to an ongoing spiral of resource losses (Grandey and Cropanzano, 1999). This prolonged cycle of resource loss and depletion can lead to burnout (Innstrand *et al.*, 2008).

Burnout in working mothers

There is a scarcity of research examining whether and how levels of burnout differ between employees based on family structure. Some limited research has demonstrated that employed mothers have a greater risk of burnout compared to employed men or women who are not mothers (Innstrand *et al.*, 2008, Peeters *et al.*, 2005). Working mothers may be at greater risk of burnout compared with other working populations because of greater home demands, and demands on time and energy (Nomaguchi, 2012). Higher burnout not only adversely affects individuals and organisations but also family functioning and child welfare.

It is plausible that sole working mothers are at a greater risk of personal and work burnout compared with other working parents (e.g. partnered working mothers). Sole mothers have less access to resources such as money, and social support, compared to partnered or married mothers, and they also balance the competing demands of work and family without the contribution from a partner (ABS, 2008). According to a corollary of the COR theory, individuals with relatively greater resources (e.g. partnered compared to sole mothers) are less vulnerable to resource loss, and more capable of resource gains (Hobfoll and Shirom, 2001). In an occupational setting, mothers who have support from their supervisors, family members to help with child care, and money to hire help with household tasks, will be more capable of taking opportunities for professional development and a sense of fulfilment from work than mothers who lack resources. These resources may act to protect an individual against burnout.

A further COR corollary states that individuals with fewer resources are more vulnerable to resource loss (Hobfoll, 2001). Resource loss tends to lead to

behaviours aimed at avoiding and preventing further losses, which can drain resources and hinder the capacity to acquire further resources (Hobfoll, 2001). Because sole mothers may have fewer resources to draw on, it could increase their vulnerability to work and personal burnout compared to partnered mothers.

Nevertheless, there may be instances where single parenthood is a positive experience for mothers, particularly following a transition away from a negative relationship. Some women also choose to be sole mothers (e.g., Mannis, 1999), and there is evidence that sole mothers who have never been married have better mental health than those who have divorced (Afifi *et al.*, 2006). Thus, being a sole mother could be beneficial for some women. However, on average, sole mothers tend to have fewer resources given that they do not have a partner to pool resources with. Consistent with the propositions of the COR, it is likely that sole mothers experience greater resource depletion, and stress-related outcomes in both an occupational settings and in general. Correspondingly, we propose the following hypothesis:

H1. Sole working mothers will have higher levels of work and personal burnout compared with partnered working mothers.

Aspects of the work-family interface could provide important insight into burnout in working mothers. For example, previous research shows that components of the work-family interface, such as WFC and WFE, are associated with burnout (e.g. Innstrand *et al.*, 2008, Carlson *et al.*, 2006). Additionally, compared with men, women often report greater interference from work to family (Duxbury *et al.*, 1995), and tend to spend more hours engaged in family and child caring activities (OECD, 2011). This paper focuses on two specific work-family interference components: work-to-family conflict (WFC) and work-to-family enrichment (WFE).

Work-to-Family Conflict and Burnout

Work-family conflict broadly refers to a form of inter role conflict, and unlike work-life conflict which refers to incompatibility between work and any component of an individual's personal life, WFC occurs when role pressures from

work are incompatible with those in the family domain only (Greenhaus and Beutell, 1985). WFC is bi-directional, that is the demands of work can interfere with family (WFC) and family can interfere with work (work-to-family conflict) (Netemeyer, *et al.*, 1996). This paper focuses specifically on work-to-family conflict (WFC), which is an important issue for sole and partnered working mothers. It can contribute to poor health and well-being, and also make it difficult to enter the workforce and remain in employment (Ciabattari, 2007).

Past studies show that WFC is a significant predictor of burnout (Greenhaus *et al.*, 2006). According to the COR theory, interrole conflict such as WFC leads to resource loss, as resources are lost in the process of meeting demands from both work and family roles (Grandey and Cropanzano, 1999). Should WFC continue over time, without resource replenishment, these losses increase the likelihood of burnout (Hobfoll and Shirom, 2001, Grandey and Cropanzano, 1999). For instance, a mother who finds it difficult to attend a child's school performance on a regular basis may experience anxiety and conflict; in an attempt to compensate they may invest greater energy and time at home. This could lead to further resource losses and WFC, and subsequently higher levels of burnout (Hobfoll and Shirom, 2001). Thus, the following hypothesis is proposed:

H2. Higher WFC will be associated with higher levels of personal and work burnout in working mothers.

Consistent with the COR theory, it is also feasible that the association between WFC and burnout differs in sole and partnered mothers. This proposition is based on the premise that sole mothers have lower resource levels, such as income, social support and poorer health, compared with partnered mothers. Lower resource levels may promote greater inter role conflict (reflected by higher WFC) in sole mothers relative to partnered mothers. This could occur because access to fewer resources hampers the ability of sole mothers to manage the negative influence of WFC. This may therefore mean that sole mothers are more susceptible to the negative effects of WFC compared with partnered mothers. The potential differences in associations between WFC and personal and work burnout in mothers is concerning as WFC in sole mothers can

make it difficult to enter the workforce and remain in employment (Ciabattari, 2007). Work discontinuity is often seen as a potential barrier to career advancement (Metz, 2005). Hence, we propose the following hypothesis.

H3. The positive association between WFC and work burnout, and WFC and personal burnout, will be moderated by family type. In particular, the nature of the positive association will be more pronounced in sole mothers compared with partnered mothers.

Work-to-Family Enrichment and Burnout

Work-family enrichment occurs when work-related resource gains improve quality of life and functioning in the home domain and vice-versa (Carlson *et al.*, 2006). Similar to WFC, WFE is bi-directional. In the present paper, we focus specifically on work-to-family enrichment (WFE).

The Resource Gains Development (RGD) (Wayne *et al.*, 2007) model provides a framework for understanding enrichment processes. The main proposition of the RGD theory is that individuals are driven to grow, develop and achieve as much as possible in order to benefit themselves and any system they are part of, such as family or organisations (Wayne *et al.*, 2007). Enrichment occurs when the gains from one domain (e.g. work) are applied, maintained or endorsed in another (e.g. family). There are two key facilitators of this process: 1) personal characteristics, such as positive affect, and 2) environmental resources such as objects, conditions, energy and support. In the work domain, personal characteristics can be facilitated through opportunities for professional development and job prestige, whilst environmental resources can include support from co-workers and salary (Wayne *et al.*, 2007).

WFE is associated with positive health and organisational outcomes, such as improved physical and mental health, job satisfaction, and lower turnout intentions (McNall *et al.*, 2010, Magee *et al.*, 2012). However, while several studies have demonstrated a link between WFC and burnout (Allen *et al.*, 2000, Burke *et al.*, 1996), comparatively few have examined whether WFE is related to burnout (e.g. Innstrand *et al.*, 2008). In a longitudinal study by Innstrand *et al.* (2008) work-to-family facilitation (a similar construct to WFE, where involvement in work positively influences functioning at home) was inversely

associated with burnout. Thus, a relationship between WFE and personal burnout, and WFE and work burnout, is plausible within the context of the COR, and in particular the corollary that resource gains beget further gains (Hobfoll and Shirom, 2001). For instance, an individual with health resources are better able to take advantage of professional development opportunities, which in turn leads to further gains and organisational benefits (Hakanen *et al.*, 2011). WFE also improves performance and affect in the family role (Carlson *et al.*, 2006). Therefore, we expect that mothers with high resource levels will be better positioned to gain further resources, as reflected by higher WFE levels, which will lead to lower work and personal burnout levels.

H4. Greater WFE will be associated with lower work and personal burnout in working mothers.

These associations may vary between sole and partnered mothers. It is plausible that partnered mothers have greater resource reservoirs compared to sole mothers. Both COR and RGD theories propose that individuals with higher resources have greater potential for resource accumulation than those with low resources (Hobfoll and Shirom, 2001, Wayne *et al.*, 2007). Therefore, when partnered mothers experience a work-related gain, such as acquiring a new skill or promotion, the impact on burnout will be greater than for sole mothers who have lower resource levels. Consequently, it is expected that the inverse association between WFE and burnout (both personal and work) will differ between sole and partnered mothers, with a stronger relationship for partnered mothers.

H5. The inverse relationship between WFE and work burnout, and WFE and personal burnout, will be stronger for partnered than sole mothers.

Control Variables

In examining the study hypotheses, we controlled for a range of covariates that could affect these associations. There is evidence that individual- and family and work -related variables (e.g. Nicklin and McNall, 2011; Grzywacz and Marks, 2000) are related to the work-to-family interface (i.e. WFC and WFE). For instance, WFC and burnout have been found to be inversely related to

education, age of youngest child and income (Dziak *et al.*, 2010, Grzywacz and Marks 2000) and positively related work hours (Soares *et al.*, 2007). WFE has been found to be positively associated with education and income, and negatively associated with the number of children, and age (Nicklin and McNall 2011).

Method

Data were collected by online self-report surveys at two time points, six months apart. Methods were employed to collect data from respondents, including email, social media and online parenting forums. Emails were sent via authors' contacts that were then asked to refer on the email to others who possess the required characteristics. In this instance, respondents needed to be in paid employment with a dependent child. Finally, permission was sought from online parenting forum administrators to post information about the study with a link to the survey and further information.

Participants

The first wave of data collection resulted in 1132 Australian respondents (225 sole and 907 partnered). The second wave resulted in 644 respondents, and following coding, matching and data cleaning the final sample of working mothers was 623, which included 107 (17 percent) sole and 516 (83 percent) partnered matched respondents. Working mothers were defined as women engaged in paid employment (full-time or part-time) and with parental responsibility for a child less than 18 years of age. Partnered mothers were classified as those in a couple relationship cohabitating together, and sole mothers as those who were not in a relationship cohabitating together.

The mean age was 39.6 years (SD = 6.91 years), and the majority were tertiary educated (65 percent). The mean number of children in families was 1.99 (.85), and the mean age of the youngest child was 6.98 years. The sample had a large proportion of tertiary qualified women (65 percent) which is higher than the national Australian rate of 25 percent (ABS, 2014), which may be a consequence of the recruitment method. This research has approval from the University's Human Research Ethics Committee.

Measures

Burnout. Burnout was measured using two subscales of the Copenhagen Burnout Inventory (CBI): personal burnout and work-related burnout (Kristensen *et al.*, 2005). The personal burnout sub-dimension is a generic scale of burnout; the work-related sub-dimension assumes that the respondent is engaged in paid employment (Kristensen *et al.*, 2005). Each sub-dimension has six items with responses on a 5-point Likert scale ranging from (1) “never/almost never” to (5) “always”. Construct reliability was measured using two approaches. Firstly, Hancock (2001) coefficient H, which is “the squared correlation between the latent construct and the *optimum* linear composite formed from the measured indicators”. Construct reliability was assessed against a .80 guideline (Hancock, 2001). The coefficient H was considered adequate for both personal burnout (Coefficient H=.93), and work burnout (Coefficient H=.98). Secondly, Cronbach’s alpha showed sufficient reliability for personal burnout ($\alpha=.99$), and work burnout ($\alpha=.98$).

Work-family conflict. WFC was measured using Netemeyer *et al.*’s (1996) five-item scale with responses on a 5-point Likert scale ranging from (1) “strongly disagree” to (5) “strongly agree”. An example item is: “The amount of time my job takes up makes it difficult to fulfil family responsibilities” (Coefficient H=.94, Cronbach’s alpha = .89).

Work-family enrichment. Carlson *et al.*’s (2006) nine items were used to measure WFE, with three items each measuring the three subscale WFE Development (e.g. ‘My involvement in work helps me acquire skills and this helps me be a better family member’); WFE Capital (e.g. “my involvement in my work provides me with a sense of accomplishment and this helps me be a better family member”); and WFE Affect (e.g. ‘My involvement in work makes me feel happy and this helps me be a better family member’). Responses are on a 5-point Likert scale ranging from (1) “strongly disagree” to (5) “strongly agree” (Coefficient H=.89, Cronbach’s alpha = .93).

Statistical Analysis

Comparisons of individual, work-related and family-related variables between sole and partnered mothers were examined using t-tests and chi-squared tests conducted with SPSS (IBM, 2010). Hypotheses 2 to 5 were tested with hierarchical regression analyses. In each of the four models, Step 1 represents the base model estimates, including the control variables: age, age of youngest child, number of children, income, education, burnout and work hours. Marital status was added at Step 2. The work-family interface variables (WFC and WFE), were added at Step 3, providing the test of Hypothesis 2 and 4 respectively. The interaction terms – either WFC x marital status or WFE x marital status – were then introduced at Step 4. At each step, the significance of change in squared multiple correlation was assessed. In order to minimise the influence of multicollinearity among the interactions and main effects, variables were centred prior to analysis (Aiken and West, 1991). Any significant interactions were then evaluated using simple slopes analysis (Aiken and West, 1991) in PROCESS for SPSS (Hayes, 2013).

Results

Sample characteristics

Table I displays the descriptive characteristics of the sample as well as chi-square analysis results of differences between sole and partnered mothers. Approximately half (53 percent) of the sole mothers and 73 percent of partnered mothers had tertiary qualifications, and this difference was significant. Annual household income also differed significantly with the majority (74 percent) of sole mothers having an income less than \$80,000, whereas the majority (60 percent) of partnered mothers had an income of more than \$120,000.

Paired-sample *t*-tests show that sole mothers worked significantly longer hours than partnered mothers (Table I). Sole mothers were also significantly older than partnered mothers. Partnered mothers had more children than sole mothers, and the age of partnered mothers' youngest child was significantly younger than those of sole mothers.

Paired sample *t*-tests were also conducted to compare means between sole and partnered mothers for personal and work burnout and work-family enrichment and work-family conflict. Personal and work burnout did not differ between groups of mothers, thus *H1* was not supported. There were no other significant differences between the two groups at $p < .001$, however work-family conflict was significantly different at $p < .01$.

[Insert Table I about here]

WFC and burnout (work and personal)

The standardised regression coefficients of the hierarchical regression analysis are in Table II. The first model tested associations between WFC and work burnout. The control variables accounted for a significant amount of variance ($\Delta R^2 = .38, p < .001$; total adjusted $R^2 = .37, F(7, 587) = 51.54, p < .001$). At Step 2, marital status was entered, and was not significant ($\Delta R^2 = .38, p = .54$; total adjusted $R^2 = .37; F(8, 586) = 45.10, p < .001$; Marital: $\beta = .03, ns$). At Step 3, WFC was entered, and accounted for a unique variance ($\Delta R^2 = .04, p < .001$; total adjusted $R^2 = .41; F(9, 595) = 47.35, p < .001$, WFC: $\beta = .26, p = .001$). The WFC x Marital status interaction terms did not add significant variance.

The second model tested associations between WFC and personal burnout. The control variables accounted for a significant amount of variance ($\Delta R^2 = .51, p < .001$; total adjusted $R^2 = .51, F(7, 587) = 87.57, p < .001$). At Step 2, marital status was entered, and was not significant ($\Delta R^2 = .00, ns$; total adjusted $R^2 = .51; F(8, 586) = 76.61, p < .001$). At Step 3, WFC was entered and was significant ($\Delta R^2 = .01, p < .001$; total adjusted $R^2 = .52, F(9, 585) = 71.04, p < .001$; WFC: $\beta = .13, p < .001$). At Step 4, the WFC x Marital status interaction term did not add significant variance. Therefore *H2* was supported, and *H3* was not supported.

[Insert Table II about here]

WFE and burnout (work and personal)

The third model tested associations between WFE and work burnout. As shown in Table II, the control variables accounted for a significant amount of variance ($\Delta R^2 = .37, p < .001$; total adjusted $R^2 = .37, F(7, 587) = 51.54, p < .001$). Marital status was entered at Step 2, and did not account for significant variance ($\Delta R^2 = .00, ns$; total adjusted $R^2 = .37; F(8, 586) = 45.10, p < .001$). At Step 3, WFE was entered and accounted for a unique variance ($\Delta R^2 = .03, p < .001$; total adjusted $R^2 = .40, F(8, 585) = 45.12, p < .001$; WFE: $\beta = -.19, p = .001$). The cross-product terms were entered at Step 4, and WFE x Marital status did not account for significant incremental variance.

The final model tested associations between WFE and personal burnout. Again the control variables accounted for a significant amount of variance ($\Delta R^2 = .51, p < .001$; total adjusted $R^2 = .51; F(7, 587) = 87.58, p < .001$). At Step 2, marital status was entered and did not account for significant variance ($\Delta R^2 = .00, ns$; total adjusted $R^2 = .51; F(8, 586) = 76.61, p < .001$). WFE was entered at Step 3 and accounted for a unique variance ($\Delta R^2 = .01, p < .001$; total adjusted $R^2 = .51, F(9, 585) = 70.62, p < .001$; WFE: $\beta = -.11, p = .001$). The cross-product terms were entered at Step 4, and WFE x Marital status accounted for significant variance in PB ($\Delta R^2 = .01, p = .015$; total adjusted $R^2 = .52; F(10, 584) = 65.69, p < .001$; WFE x marital status: $\beta = -.07, p = .015$). Therefore, *H4* was supported and *H5* partially supported, as the interaction was significant for personal, but not for work burnout.

To further investigate the interaction effect, the simple slopes for sole mothers and partnered mothers were estimated (Figure I). The analyses indicated a significant negative association between WFE and personal burnout for partnered mothers ($b = -3.20, p < .001$). However, for sole mothers, the association was not significant ($b = 1.09, p = .50$).

[Insert Figure I about here]

Discussion

This two-wave study compares burnout between sole and partnered mothers; explores relationships between WFE and burnout, and WFE and burnout; and tests whether these relationships differ between sole and partnered mothers. The current study addresses gaps in the literature, including

a lack of research on burnout in working mothers and on work-family experiences across diverse family types. Finally this study builds on limited research on the nature of the relationship between WFE and burnout. Our findings show no differences in burnout levels between sole and partnered mothers. In addition, high WFC was associated with high personal and work burnout, and high WFE was associated low personal burnout and work burnout. Finally, the inverse relationship between WFE and personal burnout was stronger for partnered than sole working mothers, suggesting that the benefits of an enriching work environment are greater for partnered working mothers.

Although unexpected, the lack of significant differences between mothers in regards to burnout (work and personal) and WFC, and the moderating role of marital status on this relationship, can be explained within the context of COR Theory. For example, COR theory, which posits that enduring resource loss, could have a greater impact than having few resources (Hobfoll, 2001). Thus, even with low resource reservoirs, individuals can minimize resource loss (Hobfoll *et al.*, 2003). For instance, sole mothers, although having a lower household income may manage finances carefully to avoid further loss of income, or gain further education to raise their potential for promotion and also job stability. These activities may build resilience and guard against personal and work burnout and WFC. This proposition has received some support in previous research (Ennis, *et al.*, 2000); for example, vulnerable inner-city women have been found to employ strategies to minimize resource loss and create a life niche that is supportive. Another possible explanation is that the present sample of working mothers was highly educated and thus not representative of the general population. Education is an important indicator of socioeconomic status, and is an important personal resource. It is plausible that higher education levels offset the differences between sole and partnered mothers that would be observed in a more representative sample; this requires further investigation in future research.

We also found that WFE was associated with lower levels of personal and work burnout. These results are consistent with past studies, and with the corollary of COR stating that individuals with high resource levels are better positioned to gain further resources. Finally, the relationship between WFE and personal burnout was more pronounced in partnered than sole mothers;

however, no significant results were observed for work burnout. The stronger relationship between WFE and personal burnout could be attributed to greater buffering effects from enrichment in partnered mothers compared to sole mothers. Greater buffering in partnered mothers occurs because of higher resource levels, particularly in the family domain, with access to spousal support, intimacy and sharing childcare and household responsibilities with a partner or spouse.

Contrary to expectations, the interaction of marital status on the relationship between WFE and burnout was significant for personal burnout only but not work burnout. This finding may be due to sole mothers having substantially fewer parenting/personal resources, whilst still coping with full-time parenting responsibilities. Whereas, in the work domain, resources differences between the two groups may be less pronounced, resulting in differences for personal but not work burnout.

Contributions and implications

This study supports the role of COR theory as an explanatory mechanism for understanding the relationships between burnout and the work-family interface in working mothers. This research extends our knowledge on the relationships between work-family variables and burnout in an understudied sample of the working population, working mothers. It is the first study to compare the relationships between WFC and burnout, and WFE and burnout between mothers from different family structures. Further, the present study contributes to the literature by showing that enrichment may have a greater impact on burnout for partnered than sole mothers. Thus careers facilitating resource gains, such as progression and development opportunities, may assist in preventing burnout, particularly for partnered mothers. Whilst, these gains also benefit sole mothers, more studies are needed to determine other relevant factors including resources like social support and job autonomy, that impact on their burnout.

An important practical implication from this study is that enrichment may protect mothers to some extent from experiencing burnout. This buffering effect suggests that adopting strategies and workplace practices fostering enrichment,

such as professional development, job autonomy, and social support should be included in workplaces. However, the present results also suggest that these benefits may not be as strong for sole mothers, who have a particularly stressful role in combining work and family (Cheeseman *et al.*, 2011). This is especially concerning as WFC plays a role in keeping sole mothers out of the workforce and also in attaining stable employment (Ciabattari, 2007). Those in unstable employment are less likely to enjoy career development and progression opportunities and thus remain in disadvantageous occupational positions, which can compound the difficulties of combining work and family and inhibit resource gains and WFE. Consequently, additional strategies need to be offered to sole mothers to manage the work-family interface.

As suggested by other researchers (e.g. McNall *et al.*, 2010) further studies examining relationships between WFE and burnout, rather than just WFC and burnout are needed. Finally, there is a need for ongoing research into the health and work-family experiences of parents in diverse family structures. Further research may inform strategies to facilitate mothers in the workforce and utilise the talents of all members of the workforce, regardless of family factors.

Strengths and limitations

There are some limitations associated with this study. First, we used self-report measures; therefore, there is possible response and recall bias. Second, due to the sampling method the mothers in our sample were more highly educated than the general population and this limits generalizability. Despite this, the results are likely to be similar in a sample of women with more variability across education as our study included education as a covariate. However, future studies might include a more diverse sample in regards to education levels.

Conclusion

This study shows there are few differences between sole working mothers and partnered working mothers in personal and work-related burnout. High conflict levels were associated with high burnout levels in mothers, and

high enrichment levels were associated with low burnout levels. Therefore, adopting strategies to facilitate enrichment may be a worthwhile approach to managing burnout in organisations. The benefits of such a strategy are two-fold as the positive outcomes of enrichment extend beyond mothers, also benefitting organisations through improved productivity, satisfaction and health. Importantly, this study suggests that the buffering effects of enrichment may be greater in partnered mothers. Therefore, sole mothers may not benefit from the protective nature of WFE to the same extent as partnered mothers, which could make them more vulnerable to burnout, and potentially inhibit career progression. Further research on sole working mothers is needed, thus reflecting the increasing diversity of family forms in many societies.

References

- ABS. (2008), *Mother's Day Facts and Figures*, Canberra, Australian Bureau of Statistics.
- ABS. (2011), *Family Characteristics, Australia, 2009-10*, Canberra, Australian Bureau of Statistics.
- ABS. (2014), "Gender Indicators, Australia, August 2014". Canberra, Australian Bureau of Statistics.
- Afifi, T., Cox, B. and Enns, W. (2006), "Mental health profiles among married, never-married, and separated/divorced mothers in a nationally representative sample", *Soc Psychiatry Psychiatr Epidemiol*, vol. 41, pp. 122-129.
- Allen, T., 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.
- Baxter, J. and Renda, J. (2011), "Lone and couple mothers in the Australian labour market: Differences in employment transitions", *Australian Journal of Labour Economics*, Vol. 14 No. 2, pp. 102-122.
- Burke, R. J., Greenglass, E. R. and Schwarzer, R. (1996), "Predicting teacher burnout over time: effects of work stress, social support, and self-doubts on burnout and its consequences", *Anxiety, Stress, and Coping: An International Journal*, Vol. 9 No. 3, pp. 261-275.
- Carlson, D. S., Kacmar, K. M., Wayne, J. H. and Grzywacz, J. G. (2006), "Measuring the positive side of work-family interface: Development and validation of a work-family enrichment scale", *Journal of Vocational Behaviour*, Vol. 68.

- Cheeseman, S., Ferguson, C. and Cohen, L. (2011), "The experience of single mothers: Community and other external influences relating to resilience", *The Australian Community Psychologist*, Vol. 23 No. 2, pp. 32-49.
- Ciabattari, T. (2007), "Single mothers, social capital, and work-family conflict", *Journal of Family Issues*, vol. 28, pp. 34-60.
- Cohen, P. N. (2013), "Marriage is declining globally: Can you say that?", *Family Inequality*, Maryland.
- Duxbury, L., Higgins, C. and Lee, C. (1995), "Work-family conflict: A comparison by gender, family types, and perceived control", *Journal of Family Studies*, vol. 15, p. 449.
- Dziak, E., Janzen, B.L. and Muhaarine, N. (2010), "Inequalities in the psychological well-being of employed single and partnered mothers: the role of psychosocial work quality and work-family conflict", *International Journal for Equity in Health*, vol. 9, no. 6.
- Ennis, N. E., Hobfoll, S. E., and Schroder, K. E. E. (2000), "Money doesn't talk, it swears: How economic stress and resistance resources impact inner-city women's depressive mood", *American Journal of Community Psychology*, vol. 28, pp.149-173.
- Grandey, A. and Cropanzano, R. (1999), "The Conservation of Resources Model applied to work-family conflict and strain", *Journal of Vocational Behaviour*, Vol. 54, pp. 350-370.
- Greenhaus, J. H., Allen, T. and Spector, P. E. (2006), "Health consequences of work-family conflict: the dark side of the work-family interface", *Research in Occupational Stress and Well Being*, Vol. 5, pp. 61-98.
- Greenhaus, J. H. and Beutell, N. J. (1985), "Sources of conflict between work and family roles", *The Academy of Management Review*, Vol. 10 No. 1, pp. 76-88.
- Grzywacz, J.G. and Marks, N.F. (2000), "Reconceptualising 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, pp. 111-126.
- Hakanen, J. J., Peeters, M. C. W. and Perhoniemi, R. (2011), "Enrichment processes and gain spirals at work and at home: A 3-year cross-lagged

- panel study", *Journal of Occupational and Organisational Psychology*, Vol. 84, pp. 8-30.
- Hancock, G. R. (2001), "Effect size, power, and the same size determination for structured means modelling and mimic approaches to between-groups hypothesis testing of means on a single latent construct", *Psychometrika*, Vol. 66 No. 3, pp. 373-388.
- Hayes, A.F. (2013), *Introduction to mediation, moderation, and conditional process analysis. A regression-based approach*, The Guilford Press, New York London.
- Hobfoll, S. E. (2001), "The influence of culture, community, and the nested-self in the stress process: advancing conservation of resources theory", *Applied Psychology: An International Review*, Vol. 50 No. 3, pp. 337-421.
- Hobfoll, S. E., Johnson, D. C., Ennis, N. and Jackson, A. P. (2003), "Resource loss, resource gain and emotional outcomes among inner city women", *Journal of Personality and Social Psychology*, Vol. 84 No. 3, pp. 632-643.
- Hobfoll, S. E. and Shirom, A. (Eds.) (2001), *Conservation of resource theory: Applications to stress and management in the workplace*, Dekker, New York.
- IBM (2010), *IBM SPSS Statistics 19.0*.
- Innstrand, S. T., Melbye Langbelle, E., Arild Espnes, G. and Gjerlow Aasland, O. (2008), "Positive and negative work-family interaction and burnout: A longitudinal study of reciprocal relations", *Work & Stress*, Vol. 22 No. 1, pp. 1-15.
- Kristensen, T. S., Borritz, M., Villadsen, E. and Christensen, K. B. (2005), "The Copenhagen Burnout Inventory: a new tool for the assessment of burnout", *Work & Stress*, Vol. 19 No. 3, pp. 192-207.
- Magee, C. A., Stefanic, N., Caputi, P. and Iverson, D. C. (2012), "The association between job demand/control and health in employed parents: The mediating role of work-to-family interference and enhancement", *Journal of Occupational Health Psychology*, Vol. 17 No. 2, pp. 196-205.
- Mannis, V.S. (1999), "Single mothers by choice", *Family Relations*, Vol. 48, pp. 121-128.

- Maslach, C., Schaufeli, W. B. and Leiter, M. P. (2001), "Job burnout", *Annual Review of Psychology*, Vol. 52, pp. 397-422.
- Metz, I. (2005), 'Advancing the careers of women with children', *Career Development International*, vol. 10, no. 3, pp. 228-245.
- McNall, L. A., Nicklin, J. M. and Masuda, A. D. (2010), "A meta-analytic review of the consequences associated with work-family enrichment", *Journal of Business Psychology*, Vol. 25, pp. 381-396.
- Netemeyer, R. G., Boles, J. 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.
- Nicklin, J.M. and McNall, L.A. (2011), 'Work-family enrichment, support and satisfaction: A test of mediation', *European Journal of Work and Organisational Psychology*.
- Nomaguchi, K. M. (2012), "Marital status, gender and home-to-job conflict among employed parents", *Journal Family Issues*, Vol. 33 No. 3, pp. 271-294.
- OECD (2011), *Families are changing. Doing Better for Families*.
- Peeters, M. C. W., Montgomery, A. J., Bakker, A. B. and Schaufeli, W. B. (2005), "Balancing work and home: how job and home demands are related to burnout", *International Journal of Stress Management*, Vol. 12 No. 1, pp. 43-61.
- Schaufeli, W. B., Leiter, M. P. and Maslach, C. (2009), "Burnout: 35 years of research and practice", *Career Development International*, Vol. 14 No. 3.
- Soares, J.J.F., Grossi, G. and Sundin, O. (2007), 'Burnout among women: associations with demographic/socio-economic, work, life-style and health factors', *Archival Womens Mental Health*, vol. 10, pp. 61-71.
- Wayne, J. H., Grzywacz, J. G., Carlson, D. S. and Kacmar, K. M. (2007), "Work-family facilitation: A theoretical explanation and model of primary antecedents and consequences", *Human Resource Management Review*, Vol. 17, pp. 63-76.

Table I.
Sample characteristics and chi-square analysis of differences between sole and partnered mothers

<i>Variables</i>	Sole (n=107)		Partnered (n=516)			
	n	%	n	%	x²	p
Ethnicity						
Australian	91	85	450	87	0.36	.55
Other	16	15	66	13		
Education					16.45	<.001
Non-tertiary	50	47	139	27		
Tertiary	57	53	377	73		
Income					205.80	<.001
Less than \$80K	79	74	60	12		
\$81k to \$120K	21	20	149	29		
More than \$120k	7	7	307	60		
	M	SD	M	SD	t	p
Number of children	1.95	0.89	2.02	0.81	-0.78	0.44
Age of youngest child	8.87	4.77	5.08	4.73	7.53	<.001
Mother's age	41.40	7.30	37.83	6.52	5.05	<.001
Years in current role	5.21	5.26	5.69	5.01	-7.73	0.46
Work hours	33.07	11.54	30.91	10.84	1.85	0.06
Work family enrichment	3.48	0.82	3.58	0.73	-1.33	0.18
Work family conflict	3.44	0.90	3.28	0.87	1.82	0.07
Personal burnout	53.66	17.93	50.83	18.76	1.40	0.16
Work burnout	47.24	17.61	45.69	18.60	.768	0.44

Table II.
Hierarchical regression analysis coefficient betas for the work-family interface and burnout – a. work-family conflict; b. work-family enrichment

Variables	Personal burnout (time 2)				Work burnout (time 2)			
	Step 1	Step 2	Step 3	Step 4	Step 1	Step 2	Step 3	Step 4
a. Work-family conflict								
Step 1: Control variables								
Number of children	.01	.01	.00	.00	.07*	.07*	.04	.04
Age of youngest child	-.04	-.05	-.04	-.04	-.05	-.05	-.02	-.02
Age	.00	-.00	-.02	-.02	.04	.04	.01	.01
Education	-.02	-.02	-.03	-.03	.03	.03	.02	.02
Income	-.06	-.04	-.04	-.05	-.09*	-.10*	-.08*	-.08*
Work hours	.01	.01	-.03	-.03	.05	.05	-.02	-.02
Personal burnout time 1	.70***	.70***	.64***	.64***				
Work burnout time 1	-	-	-	-	.60***	.60***	.48***	.48***
Step 2: Marital		-.02	-.02	-.02	.03	.03	.03	.03
Step 3: WFC			.13***	.07			.26***	.19*
Step 4: WFC x marital				.07				.08
Change R ²	.51	.00	.01	.00	.38	.00	.04	.00
Total adjusted R ²	.51	.51	.52	.52	.37	.37	.41	.41
b. Work-family enrichment								
Step 1: Control variables								
Number of children	.01	.01	.02	.02	.08*	.08*	.08*	.07*
Age of youngest child	-.04	-.05	-.05	-.06	-.05	-.05	-.05	-.05
Age	.00	.00	-.01	-.02	.04	.04	.02	.02
Education	-.02	-.02	-.01	-.01	.03	.03	.05	.05
Income	-.06	-.04	-.04	-.04	-.10*	-.10*	-.08	-.08
Work hours	.01	.01	.01	.01	.05	.05	.06	.06
Personal burnout time 1	.70***	.70***	.67***	.67***				
Work burnout time 2				.67***	.60***	.60***	.52***	.52***

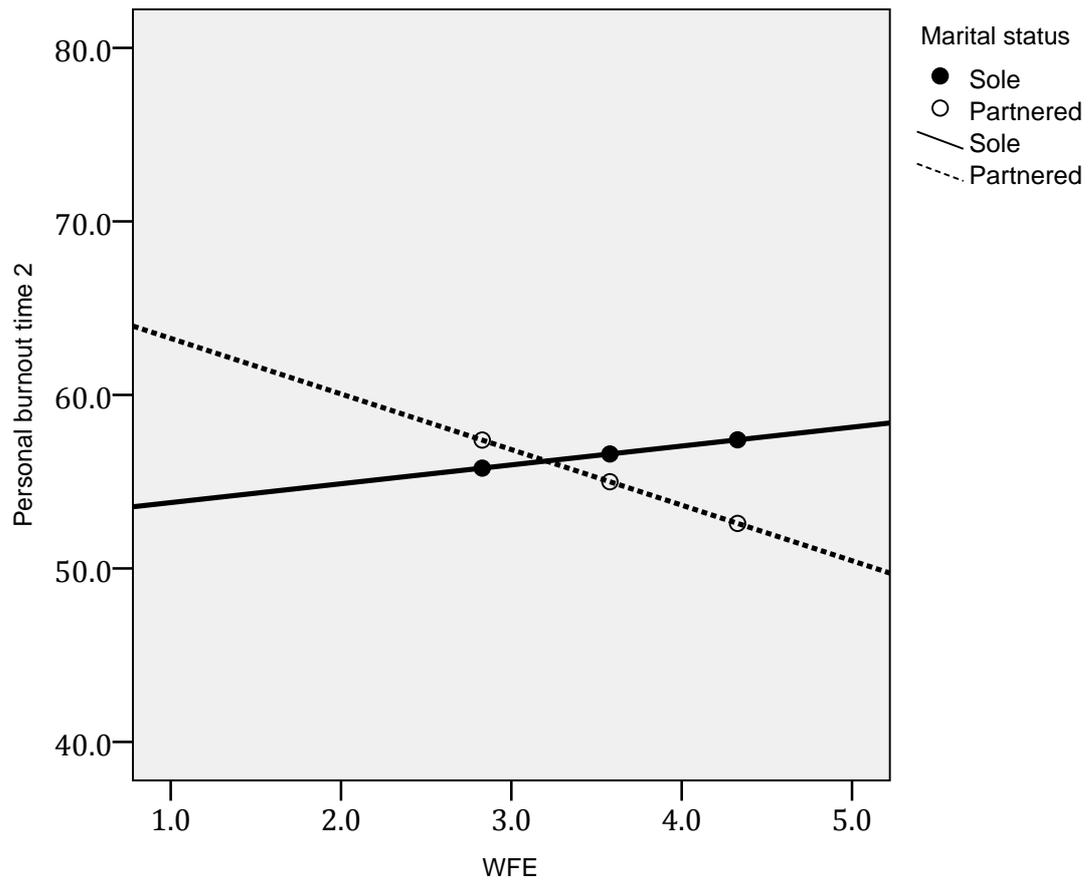


Figure 1 The interaction effect of marital status on the relationship between WFE and personal burnout at time 2