The Motherload: Predicting Experiences of Work-Interfering-with-Family Guilt in Working Mothers

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Accepted: 24 October 2020 / Published online: 8 November 2020
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Abstract
Despite receiving significant attention from sociological scholars and a growing discourse in popular culture, relatively little psychological research has investigated experiences of guilt in working mothers. This study aimed to explore potential predictors of guilt in response to a specific kind of work-family conflict where work interferes with the parenting role or family life (work-interfering-with-family guilt). Participants were 1375 mothers of children aged 12 or under who worked or studied a cumulative 15 hr per week or more. Data were gathered via an online questionnaire where participants completed measures of work-interfering-with-family guilt, work-family conflict, parenting self-efficacy, perceived social norms regarding maternal employment and the degree to which they felt they deviated from an “ideal” mother. Results revealed that mothers who experienced high work-family conflict and perceived themselves as highly deviant from an “ideal” mother reported higher levels of guilt. Moreover, high parenting self-efficacy and strong peer norms in favour of maternal employment were associated with less guilt. Demographic variables such as participant age, whether the mother engaged in study, and the number of hours worked per week were also significantly related to guilt. This study provides preliminary evidence of potential risk and protective factors in the development of employment-related guilt in working mothers. These factors may prove effective targets in future psychological interventions aimed at reducing distress in working mothers or parents.

Keywords Motherhood · Work-family conflict · Work-interfering-with-family · Guilt

Highlights
- This study aimed to explore predictors of work-interfering-with-family (WIF) guilt in working mothers.
- Mothers with high WIF conflict and large ideal-self discrepancy reported more guilt.
- Mothers with high parenting self-efficacy and working peers reported less guilt.
- Younger mothers, those who study, and those working fewer hours reported more guilt.
- Future therapies for maternal WIF guilt may target self-efficacy/ideal-self discrepancy.
life (Borelli et al. 2017). Psychological researchers are well-positioned to extend upon existing sociological literature by examining factors associated with WIF guilt and the impact it might have on women and their families. This study attempts to add to this burgeoning body of research by exploring the predictors of WIF guilt in a sample of working mothers.

**Theoretical Background**

Guilt is typically defined as an unpleasant affective experience that manifests when an individual believes her/his behaviour has violated an ethical standard, and that this has resulted in harm to another person (Baumeister et al. 1994). More recently, Kenworthy et al. (2011) conceptualised guilt as a state of cognitive dissonance between what an individual believes is morally just versus her/his behaviour. As originally described by Festinger (1957), cognitive dissonance occurs when an individual holds conflicting beliefs or engages in behaviour which contradicts their beliefs. This dissonance is thought to create emotional discomfort, which individuals are motivated to reduce either by modifying beliefs/behaviour or avoiding situations which cause them to confront dissonance (Festinger 1957). Thus, in understanding how guilt may develop in women within the parenting role, it is essential to consider the cultural and moralistic discourses that surround motherhood which influence women’s beliefs about what constitutes a “good mother”. For this reason, the sociological construct of “intensive motherhood” as initially described by Hays (1996) is useful.

Intensive motherhood is an ideology which dictates that motherhood should be profoundly child-centric, emotionally absorbing, time-intensive, involve constant physical availability and consistent sacrifice of the mother’s own needs for the sake of the child (Hays 1996). Intensive motherhood also assumes that any failure to meet these standards will hinder the child’s physical and emotional development (Hays 1996). Indeed, a number of studies from the social psychology literature have documented significant interpersonal consequences for women, such as working mothers, who fail to conform to intensive motherhood. For example, studies have suggested that working mothers are perceived by laypeople as colder (Bridges and Etaugh 1995; Cuddy et al. 2004), more selfish (Gorman and Fritzschke 2002) and less competent parents (Okimoto and Heilman 2012; Shpancer et al. 2006) than women presented as “traditional” mothers. These public perceptions appear to have persisted despite empirical research finding no advantage in adjustment for children whose mothers did not work outside the home during their early childhood compared to children of employed mothers (Goldberg et al. 2008; Lucas-Thompson et al. 2010).

Intensive motherhood creates a significant dilemma for contemporary working women (Hays 1996). The social pressure to mother intensively is incompatible with basic elements of employment (Hays 1996). For example, it is impossible to offer children constant physical and emotional availability when one needs to physically separate from them to participate in work. Moreover, it is even more challenging for women to simultaneously fulfill the expectations of the “good worker” role, which may be an equally normative pressure (Johnston and Swanson 2006). For instance, one cannot meet the standards of intensive motherhood while choosing to work on a report due early the next morning instead of reading to one’s child before bedtime. Likewise, a mother who needs to leave work at precisely 5 pm to collect her child from preschool may fail to meet the standards of co-workers who demonstrate their dedication by staying an extra hour at the office. At a psychological level, this tension can place working mothers in a state of cognitive dissonance (Johnston and Swanson 2006), especially during instances of work-family conflict.

Work-family conflict is typically understood as the experience of competing demands from the work and home sphere, such that simultaneously fulfilling both roles is challenging or impossible. It is typically delineated into work-interfering-with-family (WIF) and family-interfering-with-work (FIW) conflict (Greenhaus and Beutell 1985). Borelli et al. (2017) theorised that WIF conflict may be a stronger source of guilt for working mothers than FIW conflict due to the social context of motherhood, particularly the notion that failure to mother intensively is harmful to children. Although the degree to which individuals hold beliefs consistent with intensive motherhood undoubtedly varies (Walls et al. 2016), Henderson et al. (2016) note that exposure to macro-level discourses like intensive motherhood likely impact most women’s definition of a “good mother” to some degree.

**Existing Literature on WIF Guilt**

At the time of writing, Borelli et al. (2017) presented the only explicit attempt to study WIF guilt. Using a measure created by the authors, Borelli et al. (2017) examined experiences of WIF guilt in parents of toddlers. They demonstrated that WIF conflict predicted WIF guilt ($r = 0.54$) and that this relationship was significantly stronger than the correlation between FIW conflict and WIF guilt. (Note, FIW guilt was not assessed). They also found that WIF guilt was associated with depression, anxiety and engagement in permissive parenting behaviours. Moreover, in a separate study, they demonstrated that amongst...
individuals with high levels of WIF conflict, mothers experience more WIF guilt than fathers (Borelli et al. 2017). Additionally, number of hours worked outside the home was associated with increased guilt for mothers, but it had no impact on fathers’ guilt levels (Borelli et al. 2017). It is important to note that while WIF guilt is theoretically believed to develop in response to WIF conflict (i.e., WIF guilt can only be experienced in conjunction with some level of WIF conflict), the relationship between WIF conflict and guilt was only of moderate strength. This suggests that factors other than simply perceived WIF conflict influence individuals’ guilt levels and provides a strong rationale for further study into predictors of WIF guilt.

**Proposed Predictors**

**Ideal-Self Discrepancy**

First, we propose that the degree to which an individual perceives she deviates from an “ideal” mother influences her vulnerability to WIF guilt. Due to the moralistic elements of how an “ideal mother” is culturally defined, large discrepancies between the perception of the actual self and the ideal self can be thought of as a state of cognitive dissonance. Thus, such women may be more prone to guilt in the face of WIF conflict, as this represents a state where their actions (e.g., instances of prioritising work over family) contradict with what they feel an “ideal mother” would do. This assertion is supported by a study conducted by Liss et al. (2013) with 181 mothers of young children. Participants were exposed to a list of descriptors associated with intensive motherhood (e.g., loving, patient, self-sacrificing) and asked to rate how much this described both an “ideal mother” and themselves as a mother. Significant relationships emerged between the degree of discrepancy between these two ratings and both shame and guilt (hereafter referred to as “ideal-self discrepancy”). This finding also complements previous sociological scholarship which conceptualises the perception of “failing” intensive motherhood standards as a causal mechanism in the development of employment-related guilt (Arendell 2000). For example, in Johnston and Swanson’s (2007) work, women who reported minimal tension between their mother and worker identities constructed “good mothering” in terms of meeting basic physical and emotional needs, and viewed themselves as achieving this standard. Thus, it could be speculated that women with very low ideal-self discrepancy can tolerate WIF conflict with minimal associated guilt. Conversely, women who view themselves as highly divergent from an ideal mother may find even low levels of WIF conflict guilt-inducing.

**Parent Self-efficacy**

Parenting self-efficacy may also be a factor which contributes to the development of WIF guilt. Parenting self-efficacy is defined as the degree to which individuals believe they are able to perform the tasks of parenting, such as managing children’s behaviour (Vance and Brandon 2017). Thus, it relates to beliefs about competence to carry out the behaviours needed to care for a child, rather than not adhering to the intensive motherhood standard per se. High parenting self-efficacy may buffer against the guilt induced by a large ideal-self discrepancy. For example, working women who feel that they are unable to meet some aspects of intensive motherhood (e.g., less than constant availability to the child, not sacrificing their own needs) may mitigate guilt by reassuring themselves that they are competent at the tasks of parenting when with their child, thus reducing dissonance and perceived wrongdoing. No research has directly examined the relationship between WIF guilt and parenting self-efficacy. However, Kuhn and Carter (2006) demonstrated a significant negative association between parenting self-efficacy and parenting-related guilt in mothers of children with Autism Spectrum Disorder. Similarly, a recently published study by Haslam et al. (2020) found a negative relationship between self-reported parenting self-efficacy and general parenting guilt, but this failed to reach statistical significance.

**Peer Group Norms**

Socio-cultural factors, such as the degree to which one’s regular social group actively promotes and subscribes to intensive motherhood standards may also be influential in the development of guilt. Peer norms which promote intensive motherhood may increase guilt in several ways. First, they may increase the degree to which the individual develops beliefs consistent with intensive motherhood, thus increasing the potential for cognitive dissonance during WIF conflict and exaggerating the individual’s ideal-self discrepancy. This is consistent with work by Chae (2014) who found that mothers’ tendency to engage in social comparison predicted the strength of self-reported intensive motherhood beliefs. Second, such peer norms may increase the likelihood a mother encounters rejection or criticism during instances of WIF conflict, thus contributing to the perception that a behavioural transgression has occurred.

**Financial Motivation to Work**

In a related vein, an individual’s motivation to return to work may also be influential in the development of WIF guilt. A number of studies from the social psychology
literature have demonstrated that while working mothers are generally perceived less favourably (i.e., less warm, more selfish, less committed to motherhood) than non-working mothers, this attenuates when the woman’s return to work is presented as driven by financial necessity rather than intrinsic desire to work (Bridges and Etough 1995; Okimoto et al. 2007). Thus, strong financial motivation to work may alleviate guilt by reducing actual or anticipated negative feedback from others. Additionally, it may resolve the internal dissonance women experience between their work role and intensive motherhood by eliminating perceived choice (therefore reducing culpability), and allowing women to construct the decision to work as beneficial to the child (through access to financial capital) (Johnston and Swanson 2007).

The Current Study

In the current study, we aimed to extend upon the work of Borelli et al. (2017) and Liss et al. (2013) by exploring potential predictors of WIF guilt in working and/or studying mothers. Based on the theoretical background described above, we examined the predictive power of WIF conflict, ideal-self discrepancy, parenting self-efficacy, peer norms regarding mothers working and financial motivation to work. We put forward the following hypotheses:

Hypothesis 1: The strength of peer norms in favour of mothers working, financial motivation to work and parenting self-efficacy will be negatively associated with WIF guilt.

Hypothesis 2: Consistent with the work by Borelli et al. (2017), number of hours worked (or studied) per week will be positively related to WIF guilt.

Hypothesis 3: While we expect a positive relationship between WIF conflict and WIF guilt, we hypothesise that ideal-self discrepancy will moderate this relationship, such that the association between WIF conflict and guilt will be strongest at high levels of ideal-self discrepancy.

Method

Participants

Participants were mothers with at least one child in their care under 13 years of age, who engaged in paid work or formal study for a minimum of 15 hr per week at the time of their participation (N = 1375). Previous research has restricted samples to parents of infants and preschool children (Aycan and Eskin 2005; Borelli et al. 2017; Martínez et al. 2011) but in the current study, we wished to also explore the potential experiences of WIF conflict and guilt beyond the early childhood years. Similarly, previous studies have focused on parents who work full-time (Allen and Finkelstein 2014; Aycan and Eskin 2005; Borelli et al. 2017), whereas we elected to also include participants who work part-time, to a minimum of 15 hr per week. This figure equates to approximately two working days per week and is also the minimum number of working hours required to access childcare subsidies in Australia (Australian Government 2017). For participants who did not have full-time custody of their child, no minimum number of childcare hours per week was stipulated. The definition of “mother” included any female or gender non-binary person who is in a caring role and identifies as a mother (including foster mothers or step-mothers). Participants who indicated they were on maternity leave at the time of survey completion were excluded. The final sample was predominantly female, Caucasian, well-educated, partnered and had at least one child in their care full-time. As individuals from single-parent households may be more vulnerable to work-family conflict (Minnotte 2012), it is worth noting that our percentage of non-partnered participants (single, separated/divorced and widowed) was 10.03%. This is only slightly lower than the percentage (13.19%) of single female parent households recorded in the 2016 Australian census (Australian Bureau of Statistics 2019). Most participants had approximately two children under 13 years of age. Approximately 96.95% of the sample were engaged in paid work, with 22.61% both working and studying. Full participant details can be found in Table 1.

Procedure

This study employed a cross-sectional survey design completed online. Data were collected via Key Survey software (an online questionnaire creation and distribution platform). Participants were recruited through a paid Facebook advertisement, postings on parenting blog websites/social media groups, snowball sampling via the researchers’ personal social media accounts, and flyers displayed at school-aged childcare services operated by Jabiru Community, Youth and Children’s Services Association in Brisbane, Australia. As an incentive, participants were able to enter a prize draw to win one of four $50 gift vouchers. All advertisements used the call to action “Help us understand experiences of guilt in motherhood” and provided information on the prize draw.

Ethical Considerations

This study was approved by the Queensland University of Technology Human Research Ethics Committee (approval number: 1800000131). Participants completed an online consent form prior to completing the questionnaire.
Measures

Demographic information

Participants were asked to provide a range of demographic information including their age, ethnicity, level of educational attainment, relationship status, number of children, child/ren’s age, child/ren’s sex, number of care hours they provide per week (if not full-time carer), number of hours of work/study per week and their child care arrangements while working/studying. Only student status, age, age of youngest child, number of children aged under 13 years, and cumulative hours worked and studied per week (hereafter referred to as “hours worked per week”) were entered into the regression model. Student status was dummy-coded (0 = not engaged in study; 1 = engaged in study). Age of participant and age of youngest child were measured in years.

WIF conflict

WIF conflict was measured using the Work-Family subscale of the Work-Family and Family-Work Conflict Scales (Netemeyer et al. 1996). It consists of five items which ask participants about the degree to which their work interferes with their family-related responsibilities. A sample item is “The demands of my work interfere with my home and family life”. All items were re-worded to reflect both work and study related commitments. Participants responded on a 7-point Likert-type scale ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (7), giving a potential range of 5 to 35. The authors of this measure reported high internal consistency with Cronbach alphas ranging from 0.88 to 0.89 (Netemeyer et al. 1996). This was consistent with its reliability in the current sample (α = 0.90).

WIF guilt

WIF guilt was assessed via the Work-Interfering-with-Family Guilt Scale (WIFGS) designed by Borelli et al. (2017). It consists of 19 items, nine of which measure WIF guilt and 10 distractor items which relate to general guilt. Only the nine WIF guilt-specific items were used. For these items, participants responded to the prompt “How often do you…” and then rated the frequency at which they experienced various WIF guilt cognitions and emotions on a 5-point Likert-type scale (1 = Never, 5 = Always). Example items include “feel like your decision to work was selfish” and “feel like you really should be at home when you’re at work”. Items were amended so that they were applicable to both work and study. Possible scores range from 8 to 40.

Borelli et al. (2017) reported satisfactory internal consistency (α = 0.71–0.8) for the WIFGS. The initial Cronbach’s alpha in the current study was marginally lower than this (α = 0.69) but only borderline acceptable according to Field’s (2009) recommendations. Item 4 “Feel like you really should be at work/studying when you’re at home” appeared to be responsible for the poor reliability. Cronbach’s alpha raised to 0.78 when this item was removed. Upon inspection of the wording of this item, the item appeared to better relate to FIW than WIF guilt. In the original questionnaire, this item was reverse coded presumably under the assumption that FIW guilt represents the opposite of WIF guilt. However, it has been well demonstrated that WIF and FIW conflict are positively correlated and individuals experiencing high levels of WIF conflict often have high FIW conflict also (Byron 2005). The same may be true of WIF and FIW guilt, thus this item may be conceptually inappropriate. The amended 8-item version of WIFGS was used for all main analyses.

Ideal-self discrepancy ratings

This study employed the self-discrepancy rating protocol described by Liss et al. (2013). Participants were presented with 15 adjectives associated with intensive motherhood (e.g., “loving”, “self-sacrificing” and “responsible”). First, they were asked to rate the degree to which they felt the word characterised an ideal mother, using a 5-point Likert-type response format (1 = not at all characteristic, 5 = very characteristic). After this, participants rated the degree to which they felt these descriptors described themselves as a mother, again using a 5-point scale (1 = not at all, 5 = very much). Discrepancy scores were calculated by subtracting the average of the participants’ self-ratings from the average of their ideal mother ratings. Thus, higher scores indicate larger perceived deviation from being an “ideal mother”. Reliability analyses were conducted on participants’ self and “ideal mother” ratings before calculating the discrepancy scores, which revealed good internal consistency (α = 0.87 in both cases).

Parenting self-efficacy

The Parental Self-Agency Measure (Dumka et al. 1996) was used to measure parenting self-efficacy. It consists of 5 items which tap the degree to which the participant feels that they are a competent parent, measured on a 7-point Likert-type scale (1 = rarely, 7 = always). Items were adapted so that they read “mother” rather than “mother/father” as is originally listed. Example items included “I feel sure of myself as a mother” and “I can solve most problems between my child and me”. The measure had satisfactory reliability in this sample (α = 0.71), as well as previous studies (α = 0.68 and α = 0.70 in Dumka et al. 1996). Potential scores ranged from 5 to 35.

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Employment-related peer norms

Employment-related peer norms were measured by one item: “In my social circle, it is normal for women to work while raising children” which was presented on a 5-point Likert-type scale ranging from ‘strongly disagree’ (0) to ‘strongly agree’ (4).

Financial motivation to work

Participants’ motivation to work was assessed via two items using a 5-point Likert-type scale ranging from ‘strongly disagree’ (0) to ‘strongly agree’ (4). These were: “I have no choice but to work because my family needs the money” and “If I wanted to, I could choose not to work without my family experiencing financial hardship” (reverse coded). Higher scores denote more financial pressure to work. Reliability analyses indicated high internal consistency (α = 0.85). Potential scores ranged from 0 to 8.

Analytic Strategy

All analyses were conducted using the IBM Statistical Package for the Social Sciences Version 22 statistics package. The number of missing values ranged from 0 to 18 cases per variable, meaning no variable had more than 1.3% missing data. Little’s Missing Completely at Random (MCAR) test was significant, χ² (5280) = 6003.12, p < 0.001 which in typical circumstances indicates missing data are systematic. However, the MCAR test is sensitive to large sample sizes and given the very small percentage of missing data, MCAR was judged as inaccurate in this instance (Tabachnick and Fidell 2007). Analyses proceeded with original data using list-wise deletion.

Hierarchical linear regression models were generated to test hypotheses. All assumptions of multiple linear regression were satisfied, including normality of residuals, and no influential outliers were detected using Cook’s distance. Demographic variables were entered in the first step, followed by the control variables, the main variables of interest (centred) and finally interaction terms to test for the hypothesised moderation (WIF conflict x Ideal-self discrepancy).

Originally, working hours was intended to be used as a control variable, however preliminary analyses indicated a suppressor relationship between this variable and WIF conflict in predicting WIF guilt. That is, hours worked per week was not associated with guilt at a bivariate level, but a significant relationship between hours worked and guilt emerged when WIF conflict was entered into the regression model. Further analysis indicated this suppressor relationship was explained by a moderation between WIF conflict and hours worked in predicting WIF guilt, p = 0.04. Specifically, the association between hours worked and WIF guilt was stronger when participants reported low levels of WIF conflict. Please consult the supplementary materials provided for further details on these analyses. To account for this interaction, the final model was amended to test for a 3-way moderation (WIF conflict x Ideal-self discrepancy x Hours worked per week).

At the time of writing, no previous research had examined WIF guilt in a student sample. Independent t-tests were used to determine whether student status influences WIF conflict and guilt. These revealed that students (n = 349) reported higher levels of WIF conflict, t (676.19) = 5.0, p < 0.001, d = 0.3 and guilt t (1332) = 4.02, p < 0.001, d = 0.24 than participants who were not engaged in study. Thus, student status was included as a control variable in the regression model. The impact of participants’ carer status (full time care of child/ren vs. less than full time care) on WIF conflict and guilt was also evaluated. There was no significant difference in self-reported WIF conflict t (1341) = 0.78, p = 0.44, or guilt, t (1321) = 1.09, p = 0.27, according to carer status: thus this was not retained as a predictor.

Results

Descriptive Statistics

Table 2 displays the bootstrapped means, range, bias-corrected and accelerated 95% confidence intervals and standard deviations for each variable of interest. Correlations between variables are also displayed in this table (see supplementary materials for full correlation matrix). Frequency histograms were also generated and visually inspected (see supplementary materials). WIF guilt was normally distributed, and the average score was close to the mid-point of the scale. WIF conflict, by contrast, was negatively skewed, indicating a trend towards higher WIF conflict (skewness = −0.72, SE = 0.66). The mean ideal-self discrepancy score was positive, suggesting the average participant viewed themselves as less characteristic of the traits in the list than an “ideal mother”. Similarly, the majority of the sample (79.05%) had an ideal-self discrepancy score above zero. Only 9.53% of participants had an ideal-self discrepancy score below 0 (indicating that they rated themselves, on average, as higher than an “ideal mother”). Approximately 3.93% had an ideal-self discrepancy score of exactly zero. The signiﬁcant majority of students (85.21%) were working as well as studying.

Main Analyses

Table 3 reports the unstandardised coefficients (including their standard errors and bias-accelerated and corrected 95%
confidence intervals), standardised coefficients, p values and semi-partial correlations for each step of the hierarchical regression. For ease of reading, only the statistics for each new variable is reported at each intermediate step in Table 3, with full statistics for all variables reported in the final step (consult supplementary materials for full model).

Of the demographic variables, only participant’s age and student status significantly predicted WIF guilt, with younger participants and students reporting higher guilt levels. This was the case at every step of the model. Social norms, parenting self-efficacy and motivation to work were all significant predictors when entered in Step 2, but motivation was no longer significant once hours worked per week, WIF conflict and ideal-self discrepancy were entered into the model. The directions of these relationships were such that participants who did not perceive maternal employment as “normal”, had lower self-efficacy and reported higher financial pressure to work experienced more WIF guilt.

Numbers of hours worked per week, WIF conflict and ideal-self discrepancy were entered in Step 3. They were

Table 1 (continued)

| Range | Mean/n (%) | Min | Max | SD |
|-------|------------|-----|-----|----|
| South American | 7 (0.51%) |     |     |    |
| North American | 14 (1.02%) |     |     |    |
| African | 5 (0.36%) |     |     |    |
| Other | 60 (4.36%) |     |     |    |
| Unknown | 8 (0.58%) |     |     |    |
| Educational attainment |     |     |     |    |
| Under Year 10 education | 2 (0.15%) |     |     |    |
| Completed Year 10 | 27 (1.96%) |     |     |    |
| Completed Year 12 | 157 (11.42%) |     |     |    |
| Bachelor’s degree | 674 (49.02%) |     |     |    |
| Higher degree (e.g. Masters/PhD) | 514 (37.38%) |     |     |    |
| Unknown | 1 (0.07%) |     |     |    |
| Relationship status |     |     |     |    |
| Single | 59 (4.29%) |     |     |    |
| Married/Living with long term partner | 1236 (89.89%) |     |     |    |
| Divorced/Separated | 78 (5.67%) |     |     |    |
| Widowed | 1 (0.07%) |     |     |    |
| Unknown | 1 (0.07%) |     |     |    |

If a participant had only one child, this child’s age was recorded under both “age of youngest child” and “age of eldest child” for that particular participant. For ethnicity, care source and employment status participants were able to endorse all which applied.
Table 2 Correlation matrix including predictors of WIF guilt

| Hours worked | WIF guilt | WIF conflict | Ideal-self | Self-efficacy | Social norms | Motivation |
|--------------|-----------|--------------|------------|---------------|--------------|------------|
| Hours worked | –         | 0.03         | 0.27**     | –             | –0.02        | –0.13**    | 0.22**     |
| WIF guilt    | –         | 0.54**       | 0.42**     | –0.32**       | –0.11**      | 0.13**     |
| WIF conflict | –         | 0.24**       | 0.11**     | –0.06*        | 0.19**       |
| Ideal-self   | –         | –           | –0.47**    | –0.02         | 0.16**       |
| Social norms | –         | –           | –          | –             | –0.02        | –0.07*     |

Mean: 34.37; Range: 15–90; BCI 95% CI: 33.7–35.02

Mean, range, confidence intervals and standard deviations are based on 1000 bootstrapped samples; “Ideal-Self” refers to ideal-self discrepancy; *indicates significance at 0.05 level; ** indicates significance at 0.01 level

Discussion

The purpose of this study was to examine the ability of a variety of theoretically indicated variables to predict WIF guilt in working mothers. As hypothesised, peer norms in favour of maternal employment and parenting self-efficacy were negatively related to guilt (H1). Thus, participants who perceived working during motherhood as “normal” within their social group and viewed themselves as competent at the task of parenting reported lower WIF guilt. Effect sizes associated with these variables were relatively small, however, particularly in the case of social norms. Financial motivation to work was a significant predictor of WIF guilt in early steps of the model but failed to reach significance once hours worked per week, WIF conflict and ideal-self discrepancy were accounted for (H1). Also contrary to our hypothesis, number of hours worked per week was negatively associated with guilt once WIF conflict was accounted for (H2). The hypothesis that ideal-self discrepancy would moderate the relationship between WIF conflict and guilt (H3) was not supported, however, WIF conflict and ideal-self discrepancy were significant positive predictors of WIF guilt (with small to moderate effect sizes). This suggests that participants who view themselves as highly divergent from an “ideal mother” and have a high amount of WIF conflict experience more WIF guilt.

It was originally predicted that the relationship between WIF conflict and guilt would be strongest at high levels of ideal-self discrepancy, however, no such moderation was observed. This was based on the speculation that women with low ideal-self discrepancy (i.e., view their actual self as close to an “ideal” mother) may be able to withstand higher levels of WIF conflict without developing guilt, compared to women with a higher discrepancy. Our findings suggest that even mothers with low ideal-self discrepancy are vulnerable to WIF guilt at high levels of WIF conflict. This has important implications for the understanding of how discourses of intensive motherhood contribute to the development of WIF guilt. Some previous sociological commentary has presented intensive motherhood as the causative agent of women’s distress within the work-family interface (Arendell 2000; Henderson et al. 2016). It could be argued that studying women with very low ideal-self discrepancy is an artificial means of partitioning out the impact of intensive motherhood discourse on the development of guilt. Thus, the finding that low ideal-self discrepancy did not buffer against the development of WIF guilt at high levels of conflict, highlights the need to consider that factors other than intensive motherhood expectations may drive WIF guilt development. It is important to acknowledge, however, the limitations of operationalising the impact of intensive motherhood as an ideal-self discrepancy as we have done here. The self-report rating scale relies on participants having sufficient insight and psychological-mindedness to evaluate their identity as a mother and their definition of an “ideal mother”. Henderson et al. (2016) argues that even women who do not consciously value or aspire towards the intensive motherhood ideal are still emotionally impacted by the pressure of the discourse. Additionally, it is also possible that women may have a general perception of themselves as a “good mother”, but this may change markedly during times of stress or dissonance-inducing events such as instances of WIF conflict. Perhaps a stronger influence of ideal-self
discrepancy, or even the hypothesised moderation, would have emerged if participants had completed the rating scale during an active experience of WIF conflict.

Another unanticipated finding was the interaction between number of hours worked per week and WIF conflict in predicting guilt. At a bivariate level, no significant relationship emerged between hours worked per week and WIF guilt, however a weak significant negative relationship emerged when WIF conflict was included in the model. This constituted a significant moderation during preliminary analyses when only these variables were considered, but not at the final step. At a conceptual level, this finding is somewhat confusing, especially the negative direction in the association between hours worked and WIF guilt observed in the final model. Moreover, it is inconsistent with the findings reported by Borelli et al. (2017) who observed a positive correlation. One explanation for our findings is that women who opt to work few hours per week may be more

|                       | b    | SE  B | BCa 95% CI | β    | p     | sr   | R²  |
|-----------------------|------|-------|------------|------|-------|------|-----|
| Step 1                |      |       |            |      |       |      |     |
| Constant              | 26.18| 1.13  | 23.85, 28.66| 0.001|       |      | 0.03|
| Age                   | −0.1 | 0.03  | −0.16, −0.04| −0.11| 0.001 | −0.09|
| Youngest child age    | −0.01| 0.05  | −0.12, 0.1  | −0.01| 0.87  | −0.004|
| Student status        | 1.09 | 0.34  | 0.43, 1.75  | 0.1  | 0.004 | 0.01 |
| No. children          | −0.15| 0.21  | −0.56, 0.22| −0.02| 0.47  | −0.02|
| Step 2                |      |       |            |      |       |      |     |
| Social norms          | −0.4 | 0.16  | −0.7, −0.1  | −0.07| 0.01  | −0.07|
| Parenting self-efficacy| −0.35| 0.03  | −0.42, −0.29| −0.31| 0.001 | −0.3 |
| Motivation            | 0.26 | 0.06  | 0.15, 0.37  | 0.13 | 0.001*| 0.13 |
| Step 3                |      |       |            |      |       |      |     |
| Hours worked (centred)| −0.65| 0.14  | −0.91, −0.4 | −0.13| 0.001*| −0.12|
| WIF conflict (centred)| 2.29 | 0.13  | 2.01, 2.55  | 0.47 | 0.001 | 0.43 |
| Ideal-self discrepancy (centred)| 1.16 | 0.14 | 0.88, 1.42 | 0.24 | 0.001 | 0.2  |
| Step 4                |      |       |            |      |       |      |     |
| WIF Conflict x Hours worked| 0.1  | 0.13  | −0.18, 0.38 | 0.02 | 0.46  | 0.02 |
| WIF Conflict x Ideal-self discrepancy| −0.25| 0.13 | −0.5, −0.02| −0.05| 0.052 | −0.05|
| Hours worked x Ideal-self discrepancy| 0.3  | 0.1   | 0.09, 0.49 | 0.07 | 0.01  | 0.06 |
| Step 5                |      |       |            |      |       |      |     |
| Constant              | 30.89| 1.28  | 28.2, 33.61 | 0.001|       |      | 0.43|
| Age                   | −0.07| 0.02  | −0.12, −0.02| −0.08| 0.01  | −0.06|
| Youngest child age    | −0.03| 0.04  | −0.11, 0.06 | −0.02| 0.56  | −0.01|
| Student status        | 0.59 | 0.27  | 0.08, 1.13  | 0.05 | 0.02  | 0.05 |
| No. children          | −0.21| 0.16  | −0.53, 0.08 | −0.03| 0.18  | −0.03|
| Social norms          | −0.41| 0.13  | −0.67, −0.16| −0.08| 0.003 | −0.07|
| Parenting self-efficacy| −0.17| 0.03  | −0.24, −0.11| −0.15| 0.001 | −0.13|
| Motivation            | 0.07 | 0.05  | −0.02, 0.16 | 0.04 | 0.16  | 0.03 |
| Hours worked (centred)| −0.72| 0.14  | −1.01, −0.46| −0.15| 0.001 | −0.13|
| WIF conflict (centred)| 2.28 | 0.13  | 1.99, 2.57  | 0.47 | 0.001 | 0.4  |
| Ideal-self discrepancy (centred)| 1.13| 0.14 | 0.82, 1.4  | 0.23 | 0.001 | 0.18 |
| WIF Conflict x Hours worked| 0.13 | 0.13 | −0.15, 0.4 | 0.03 | 0.36  | 0.02 |
| WIF Conflict x Ideal-self discrepancy| −0.21| 0.12 | −0.44, 0.05| −0.04| 0.08  | −0.04|
| Hours worked x Ideal-self discrepancy| 0.23| 0.12 | −0.02, 0.51| 0.05 | 0.06  | 0.04 |
| WIF Conflict x Hours worked x Ideal-self discrepancy| 0.15| 0.12 | −0.06, 0.4 | 0.04 | 0.16  | 0.03 |

Based on 1000 bootstrapped samples; bold-face font denotes significance at p < 0.05.
vulnerable to guilt because this choice could reflect a
stronger prioritisation of family or subscription to intensive
motherhood than women who prefer to work more hours.
Similarly, women who are highly prone to WIF guilt may
be more likely to reduce their working hours in an attempt
to reduce dissonance and alleviate guilt. Borelli et al.’s
(2017) sample was limited to parents employed full time
(more than 34 h per week) and thus likely did not capture
this population of women who elect to work only a few
days per week. However, in interpreting these results, it is
important to remember the strength of this relationship was
weak and that, overall, number of hours per week was a
comparatively less important predictor of WIF guilt in the
final model. Perhaps a more useful construct would have
been to examine the perception of being “overworked”, as
this may more closely relate to negative emotional experi-
ences within the work-family interface (Jacobs and Gerson
2001).

Additionally, contrary to our hypothesis, there was no
significant relationship between degree of financial moti-
vation to work and WIF guilt, except for in an early step in
the model where it was first introduced. Furthermore, the
bivariate correlation between financial motivation and WIF
guilt was not in the anticipated direction, with women who
reported high financial pressure to work also reporting
higher guilt. Thus, instead of acting as a guilt-alleviating
factor as theorised, high financial motivation may be asso-
ciated with the perception that one is being “forced” to work
despite holding potentially strong beliefs or preferences
about not working during motherhood. Women who engage
in paid work despite low financial pressure are likely to hold
more positive beliefs about working during motherhood and
thus be less guilt-prone. Moreover, these women may be
motivated to work for other reasons, such as personal
growth, sense of challenge or social opportunities. These
positive work-related experiences may indeed benefit one’s
participation in their family role, as has been demonstrated
in research in work-family enrichment (see Lapierre et al.
2018), and therefore buffer against guilt.

Despite the unexpected findings described above, the
relationship between WIF guilt and the remaining variables
was predominantly as hypothesised and consistent with the
limited existing literature. Direct effects of WIF conflict and
ideal-self discrepancy on WIF guilt were observed. Par-
eting self-efficacy was negatively associated with WIF
guilt, consistent with Kuhn and Carter (2006)’s research
examining general parental guilt in an ASD-affected sam-
ple, as well as the non-significant association reported by
Haslam et al. (2020). At the time of writing, no research had
examined the role of perceived social norms about maternal
employment and the experience of WIF guilt. However, the
finding that social norms in favour of mothers working are
associated with reduced guilt is consistent with general
literature documenting the role of peer influence in emo-
tions related to motherhood (Chae 2014; Coyne et al. 2017).
It is important to emphasise that the effect size associated
with peer norms was very small so, while it may display
some influence on WIF guilt development, other variables
are likely more important to consider.

In addition to the above demographic variables, partici-

tant age and student status were also found to be significant
predictors of WIF guilt, with younger women and those
studying reporting more guilt. In the case of younger
women, this finding may reflect that younger women are
likely to have transitioned more recently to motherhood
than their older counterparts. Thus, they may be less
experienced at balancing competing family and work
demands and therefore experience more WIF conflict and
guilt. A number of possible explanations exist for the ele-
vation of guilt amongst participants engaged in study.
Firstly, studying does not have the immediate financial
reward associated with work and is more likely to be driven
by an individual’s desire for intellectual growth. Hence
there may scope for women to view the decision to study as
“selfish” as has been indicated in qualitative research
(O’Shea 2015; Stone and O’Shea 2013). Alternatively,
study may be more likely than work to be completed in the
home, concurrent with childcare or supervision. This may
result in an increased opportunity for work to interfere with
family. However, this finding should once again be inter-
preted within the context of a small associated effect size.

Strengths, Limitations and Future Directions

To our knowledge, this study was the first to examine
predictors of WIF guilt despite decades of academic dis-
cussion of experiences of working mothers. Thus, it
addresses a critical gap in the existing literature. Many of
the variables identified as contributing to WIF guilt, such as
parenting self-efficacy and ideal-self discrepancy, are likely
malleable and may be altered through therapeutic processes.
The findings of this research may, therefore, inform the
development of psychological interventions aimed at redu-
cing motherhood or work-related guilt. Moreover, this
research benefitted from a very large sample which cur-
rently exceeds most similar research in the area.

Nonetheless, our results are qualified by several limita-
tions. Despite promising reports of validity and reliability
by its developers (Borelli et al. 2017), the WIFGS is yet to
be evaluated independently. Adequate internal consistency
was achieved here only after the removal of an item that
was unreliable and had low face validity. Further work
which documents the WIFGS as a valid and reliable
assessment of WIF guilt would strengthen the trustworthi-
ness of the results presented here. Similarly, the limitations
of using very brief measures of motivation to work and peer
norms which have not been evaluated in terms of validity, as well as the potential for common method variance arising from a single data source, are also acknowledged.

Both the sampling method and the characteristics of the sample employed in our study also have implications for the generalisability of its findings. Most notable is the decision to exclude fathers from participating. While this was necessary to examine uniquely gendered variables, such as ideal-self discrepancy, the application of our findings to men is unclear. It would be valuable for future research to examine men’s experiences of WIF guilt and how perceived deviations from an “ideal father” impact this. Additionally, women of low socioeconomic background and non-Caucasian ancestry were poorly represented in this sample. Critical scholarship of intensive motherhood has argued that this concept is not inclusive of the experience of women from diverse or minority backgrounds, noting that mothering may be constructed differently within these groups (Arendell 2000). Thus, not only were these women underrepresented in the current sample, but our operationalisation of an “ideal” mother may not have reflected their lived experiences. This compromises the meaningfulness of these results to such populations. In addition to this, our convenience sampling method may have introduced additional bias by encouraging particular individuals to self-select into the study. For instance, women with higher levels of WIF guilt may have been more motivated to contribute to research that they felt strongly reflects their lived experience. Finally, while this study was able to successfully identify predictors of WIF guilt our results reveal little about the mechanisms which underlie these relationships. Earlier, we offered cognitive dissonance theory as a theoretical explanation for the role of these variables in guilt development, but currently, this remains untested.

Researchers aiming to extend upon the findings of this study may like to investigate whether support can be found for theoretical mechanisms presented here. Replication with ethnically diverse and lower socio-economic samples would also be valuable, with particular emphasis on understanding ethnically diverse and lower socio-economic samples would also be valuable, with particular emphasis on understanding the appropriateness of intensive motherhood related constructs (like the ideal-self-discrepancy scale used here). Moreover, as student status was identified as associated with increased WIF guilt in the current study, exploration of the unique perspective of mothers who study, or indeed study-interfering-with-family guilt, would be interesting. Efforts to replicate the current study’s protocol may benefit from adjusting the presentation of the ideal-self discrepancy scale so that participants are primed for WIF conflict. For instance, participants may be asked to recall a recent episode of WIF conflict prior to completing the scale or be exposed to a vignette depicting a commonly experienced WIF conflict event, such as the one used by Borelli et al. (2017). Additionally, as the cultural definition of “ideal motherhood” continues to evolve over time (and indeed, as multiple definitions emerge), it may be helpful to include adjectives that reflect motherhood standards beyond intensive motherhood (e.g. “financial provider”). Including a measure which assesses perceptions of “overwork” in complement to their number of hours worked is also recommended.

Despite the limitations identified above, this research makes a valuable contribution to an unusually neglected aspect of the psychological understanding of motherhood. While gender roles in relation to the division of labour, parenting and representation in the workplace appear to be shifting towards equality (Australian Bureau of Statistics 2009), guilt related to employment continues to be a source of significant distress for many working mothers. Our hope is that the work presented here will inspire future research to help better understand the emotional impact of WIF conflict on women, men and children.

Acknowledgements Please note this study was granted approval by the Queensland University of Technology Human Research Ethics Committee (approval number: 1800000131). Participants provided informed consent via an online consent form before commencing the study.

Compliance with Ethical Standards
Conflict of Interest The authors declare that they have no conflict of interest.

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