



How Work-Family Guilt, Involvement with Children and Spouse's Support Influence Parents' Life Satisfaction in a Context of Work-Family Conflict

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Abstract

Work-family guilt (WFG) is sometimes perceived as an adaptive characteristic, since it has been found to encourage working parents to engage in more activities with their children in off-work time (Cho & Allen, 2012). However, while it may be an adaptive characteristic for the parent-child relationship, the same may not be true for parents' psychological health. Using insights from the work-home resources model (W-HR), this study aims to determine WFG's influence on parents' life satisfaction. This study also investigates if parents' belief regarding the investment of their spouse in recreational activities with their children is a resource that could foster their life satisfaction. A cross-sectional design was used with a sample of 289 working parents with at least one child aged between 5 and 10. A path analysis shows a significant moderated mediation model. Parent-child activities were found to partially mediate the relationship between strain-based work interference with family and parents' life satisfaction. Furthermore, WFG moderated this mediation. Specifically, it worsened the detrimental effect of doing fewer parent-child activities on parents' life satisfaction. Results also show that a spouse's investment in activity with their child is a resource that motivates parents to invest more in their children and directly contributes to parents' life satisfaction.

Keywords Work-family guilt · Strain-based work interference with family · Parent-child activities · Life satisfaction

Highlights

- Level of parental engagement mediates the link between strain-based work interference with family and life satisfaction.
- High work-family guilt combined with low parent-child activities is detrimental to parents' life satisfaction.
- High spouse-child activity has a direct and indirect positive relationship to parents' life satisfaction.

Background

Social and economic changes such as globalization, rapid technological advances, and transformations in industrial structures all influence individuals' work-related demands (e.g., increased nonstandard work

hours, market uncertainties, etc.; Obschonka and Silbereisen, 2015). To meet these job-related demands, individuals may choose or must dedicate more energy to their work and less to other spheres of their life. For parents, this situation may lead to the experience of a high level of strain-based work-interference-with-family (WIF; i.e., a perception that the stress coming from work interferes with individuals' performance in the family domain; Greenhaus and Beutell, 1985). Such decisions to focus on work-related demands can engender a sense of work-family guilt (WFG) if parents believe their engagement in the work sphere constitutes a moral transgression to their role as a parent (Hochschild, 1997; Judge et al., 2006). WFG may prove costly in terms of parents' family life and personal well-being (Korabik and McElwain, 2005).

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Research regarding the impact of WFG has, however, found it to be associated with both positive and negative consequences. Some authors have suggested that guilt can have deleterious consequences such as reduced well-being and psychological distress (Borelli et al., 2017; Glavin et al., 2011; Harder et al., 1992; Korabik and McElwain, 2005; O'Connor et al., 2002). However, others have argued that feelings of guilt are adaptive as they motivate employees to engage in behaviors that have the potential to compensate for their perceived shortcomings (e.g., Cohen et al., 2012; De Hooge et al., 2007; Ketelaar and Tung Au (2003); Nelissen et al., 2007; Nelissen and Zeelenberg, 2009). For instance, Cho and Allen (2012) found, with two samples of working parents, that WIF is negatively associated with parents' engagement in educational and recreational activities with their children. However, they further found that this negative relationship was moderated by trait guilt in that those who experience high levels of guilt, compared to those with low levels of guilt, engage in more educational and recreational activities with their children. However, it remains unclear what the consequences are for the working parent.

This study builds on the results obtained by Cho and Allen (2012). It first aims to expand their model and, second, determine the role of WIF and WFG on a domain-unspecific consequence for the working parent (i.e., life satisfaction). Third, it verifies if parents who feel guilty are less likely to gain resources and positive outcomes (e.g., life satisfaction) from engaging in parent-child activities than those who feel less or no guilt (ten Brummelhuis & Trougakos, 2014; Volman et al., 2013). Fourth, this study also integrates the assessment of spouse instrumental support (spouse-child activity, that is a perception of one's spouse investment in recreational activities with their children), a contextual resource that could buffer the effect of demands from the environment (i.e., strain-based WIF and activities with children) and foster parents' life satisfaction.

Strain-Based Work Interference with Family

Work-family conflict refers to the perception that demands relative to work-related and familial roles are incompatible in certain respects (Greenhaus and Beutell, 1985). According to resource drain theory (Edwards and Rothbard, 2000) and role theory (Biddle, 1979), individuals have a limited quantity of resources with which to respond to family and professional demands. According to the JD-R model, demands are physical, emotional, or cognitive aspects of one of these roles that require effort to be carried out and that come at a personal cost (Bakker and Demerouti, 2007). Resources refer to elements such as time and energy that make it possible to achieve goals and personal

growth and that help to reduce the physical and psychological costs of work and family demands (Bakker and Demerouti, 2007). When individuals choose to invest resources in a role, it contributes to a reduction of the resources available for other roles. Work-family conflict (WFC) thus refers to a bidirectional conflictual relationship. Work-related demands can result in a decrease in employees' available resources, thus affecting their investment in the family domain (i.e., strain-based work-interference-with-family; WIF). Inversely, family-related demands can cause a decrease in personal resources and result in a negative impact on the professional domain (i.e., strain-based family-interference-with-work; FIW; Netemeyer et al., 1996). The focus of the present study is on strain-based WIF, since the aim is to determine how investment of energy in the workplace interferes with the family sphere, more specifically, with how employees engage in activities with their children.

While previous research on family interactions has considered the effect of time-based WIF (i.e., when time devoted to work limits the available time for fulfilling one's family responsibilities; e.g., Cho and Allen, 2012), the present study focuses solely on strain-based WIF and the extent of parent-child shared activities. According to Cho and Allen (2012), strain-based WIF is the most relevant form of WIF to investigate in order to highlight the effects of WFG on parent-child interactions. They have shown that time-based WIF does set parents back from sharing activities with their children, as parents do not have enough time after work for parent-child interactions. It is thus unlikely that employees reporting time-based WIF will experience guilt for the choices they make after work, as they simply do not have the luxury to decide if they want to devote more time to parent-child activities. On the other hand, if parents perceive that their workday has drained all of their resources and thus feel strain-based WIF, they can freely choose to reduce the amount of energy invested in all kinds of parent-child activities. Individuals struggling with strain-based WIF are thus more likely to make internal attributions and feel guilty about the choices they make in terms of using their energy on parent-child activities during off-job time than those with a time-based WIF, since they have greater decisional latitude in this regard (Martínez et al., 2011). The factors that contribute to this feeling of WFG are presented in the subsequent section.

The Relationship between Strain-Based WIF and Work-Family Guilt

According to Morgan and King (2012), WFG can be defined as an emotion that arises when individuals do not reconcile responsibilities related to work and family in a

way they judge to be the most appropriate according to personal norms, thus harming others. Tangney (1990) suggested three conditions when a person is likely to experience guilty feelings, when they (1) are not investing enough energy in a role, (2) have violated personal standards regarding how to fulfill a role, or (3) have disappointed important people. Strain-based WIF meets these three conditions (McElwain, 2009). First, it potentially prevents affected individuals from investing energy in their parent role as they have less energy left for parent-child activities. Second, it violates their “good mother/father” standards. Third, their children could be disappointed of their parental investment. Since strain-based WIF meets these three conditions, individuals struggling with it are subject to feeling guilty (McElwain, 2009).

Recent research suggests that mothers, and especially mothers of young children, are more likely to experience guilt regarding the negative impact of work on family than fathers (Aarntzen et al., 2021; Borelli et al., 2017). Furthermore, the COVID-19 pandemic has led to increased levels of WIF and WFG in working parents (Miller and Riley, 2022; Montazer et al., 2022). For working parents, the COVID-19 pandemic has blurred the line between the roles of parent and worker which has amplified WIF and WFG (Aplin-Houtz et al., 2021). This is highly relevant as when parents do not meet their expectations regarding the parent they believe they should be, they also report more parental burnout (Roskam et al., 2021).

The Influence of Strain-Based WIF on Parent-Child Activities

Investing time in parent-child activities is recognized as beneficial for children, since it fosters warm and positive interactions that allow them to develop adequately both socially and cognitively (Ginsburg, 2007). However, according to ecological systems theory (Bronfenbrenner, 1989), strain-based WIF can contribute significantly to a reduction in the frequency with which parents engage in activities with their children. In fact, underlying this theory is the notion that daily experiences in the work environment influence the well-being of parents and thereby shape the nature of their interactions with their children (Repetti and Wood, 1997). Experiences at work (e.g., excessive workload) can engender tensions and fatigue (Ilies et al., 2007), and these emotional states can then spill over into the family sphere, with important consequences on familial interactions (i.e., *negative work-family spillover*; Ilies et al., 2007). The tension and fatigue caused by work-related demands can be detrimental to the quality of the parent-child relationship, since it is known that employees with such feelings also experience a higher level of parental attention

deficit than those who do not experience such emotions (Ilies et al., 2007). In fact, in order to recover energy expended at work, individuals whose job involves a high level of stress will sometimes choose to limit their social interactions during off-job time, and to engage in activities that require little involvement, such as watching television (Ilies et al., 2007). Accordingly, the following hypothesis will be examined in the present study:

Hypothesis 1. Strain-based WIF (IV) will be negatively linked to the extent of parent-child activities (DV).

Parent-Child Activities as a Mediator between Strain-Based WIF and Parents’ Life Satisfaction

Although numerous studies have suggested that factors such as strain-based WIF (Cho and Allen, 2012) can explain the reduction in parent-child activities, the influence of the extent of these activities on the parent is unknown. Several researchers have suggested that one of the most important consequences of WFC is the reduction of employees’ life satisfaction (e.g., Allen et al., 2000, 2020). High levels of life satisfaction are expected when individuals perceive their various life experiences as satisfying both their physical and psychological personal needs and aspirations (Rice, 1984). In their meta-analysis, Amstad et al. (2011) stated that this influence of WFC on life satisfaction may be explained by the additive models of well-being. Their meta-analysis has shown that job and family domain-specific outcomes (e.g., job and family satisfaction) usually combine their effect and thus have a stronger joint influence on domain-unspecific outcomes such as life satisfaction than when considered alone. Also, according to the source attribution perspective (Shockley and Singla (2011)), employees usually experience more negative affective reactions in the domain where the interference originates than in the domain receiving the interference. Accordingly, an employee is more likely to blame his/her work and experience negative effect at work than at home if s/he perceives that his/her workload has interfered with his/her family role (Shockley and Singla (2011)). As strain-based WIF originates from the work domain and parent-child activities take place in the family domain, these two domain-specific sources of strain may impair both job and family satisfaction. Both strains may thus jointly reduce individual’s life satisfaction, explaining why WFC has such a significant influence on this domain-unspecific outcome. To the best of our knowledge, no prior study has investigated if the negative relationship between strain-based WIF and life satisfaction could in part be explained by a reduction in the perceived frequency of parent-child activities during off-job time.

The conservation of resources theory (COR; Hobfoll, 1989) can help understand how demands arising from the work environment and family life can limit the frequency of parent-child activities and thereby impair employees' life satisfaction. Hobfoll (1989) proposes that individuals try to conserve, protect, and consolidate their resources. A stress reaction occurs when resources (e.g., motivation, energy or concentration) are threatened, when resources are lost, or when there is an insufficient increase in resources following an important investment. The work sphere is potentially stressful, since the demands that may arise from it can weaken employees' resources. Off-job time consequently appears to be essential for successful recovery of the resources invested in work (von Thiele Schwarz, 2011). Numerous empirical studies have shown that positive experiences between work shifts are crucial for avoiding problems linked to occupational stress, such as a decline in life satisfaction (Fritz and Sonnentag, 2006).

According to Volman et al. (2013), parent-child activities can be a positive experience that helps employees recover cognitive resources between off-work periods since engaging in educational and recreational activities with one's children increases the possibility of cognitive distraction from job-related duties. In fact, since parents are likely to be absorbed when they devote time to these enjoyable activities with their children, they may experience psychological detachment from work, an important antecedent of individuals' recovery (Sonnentag and Fritz, 2007, Volman et al., 2013). To date, no study has clearly shown whether engaging in parent-child activities facilitates or hinders employees' recovery of resources, thereby influencing their level of life satisfaction. This study examines if a reduction in the extent of parent-child activities due to strain-based WIF explains its negative relationship with life satisfaction.

Hypothesis 2: The extent of the activities that the participant engages in with children (Mediator) will mediate the relationship between strain-based WIF (IV) and life satisfaction (DV).

WFG as a Moderator of the Indirect Relationship between Strain-Based WIF and Life Satisfaction

Although Cho and Allen (2012) present WFG as being adaptive and potentially beneficial for children since it fosters greater investment by parents in activities shared with their children, it is unclear what the consequences are for parents. WFG may have a darker side since it involves an inherent sense of failure regarding family responsibilities (Borelli et al., 2016; Glavin et al., 2011; Korabik and McElwain, 2005). This sense of failure could in fact be very costly over the long term (Borelli et al., 2016; 2017). In

order to limit these negative feelings, parents can avoid recognizing their own need for recovery and continue to invest energy in the parent-child relationship (Johnston and Swanson, 2007) which could result in negative long-term consequences such as a decrease in life satisfaction. However, it is also possible that WFG lead parents to be more inclined to invest resources in their children to lower their sense of failure (Cho and Allen, 2012; Seagram and Daniluk, 2002). Engaging in more parent-child activities, even if motivated by guilty feelings, may be resourcing for parents by offering parents more opportunities to experience psychological detachment from work (Sonnentag and Fritz, 2007). Based on the COR theory (Hobfoll, 1989), these activities parents share with their children in off-work time may facilitate parents' recovery of cognitive resources regardless of their guilty feelings (Volman et al., 2013). Accordingly, a moderated mediation is postulated in this study.

Hypothesis 3: The effect of strain-based WIF (IV) on life satisfaction (DV) through the extent of parent-child activities (Mediator; demand) will be moderated by WFG (Moderator; individual characteristic). The positive relationship of perceived parent-child activities with parents' life satisfaction will be different depending on parents' levels of WFG.

Familial Factors Influencing Life Satisfaction

Social support has been found to be a resource that reduces the negative impact of occupational stress on workers' health (Cohen and Syme, 1985; House, 1981) and of organizational politics (e.g., perceiving it is easier to remain quiet than to fight the system) and WIF on family satisfaction (Arefin et al., 2020). However, some have argued that for social support such as instrumental support to be beneficial, a person should receive a type of support that corresponds to their specific needs (French et al., 2018). As the present study investigates the role of strain-based-WIF, parents' activities with their children, and WFG, it is posited that instrumental support in the family environment will be related to parents' life satisfaction. Perceiving tangible assistance from one's spouse in the form of their active engagement with their children is posited as a predictor of parents' life satisfaction, above and beyond the potentially deleterious impact of the work-family stressors. Perceiving one's spouse as investing time in recreational activities with the children could also help parents accumulate resources such as time and energy (Wood and Repetti, 2004) which could result in the investment of this gained time and energy in such ways that could positively contribute to their life satisfaction (Sonnentag and Fritz, 2007).

The following hypothesis will therefore be verified:

Hypothesis 4: The extent of recreational activities performed by spouses (IV; perceived spouse-child activity) will be positively linked to parents' life satisfaction (DV).

Method

Design and Protocol

The present study used a cross-sectional design in order to provide insights into the proposed research questions. The study took place in the French-speaking province of Quebec (Canada). The administration of 14 schools, 5 schools board parents' committees, 11 day-camps, and 1 professional order facilitated the recruitment of participants by sending an email to their affiliated parents. This email communication contained a presentation of the general goals of the study as well as a link to the on-line questionnaire. The platform *SurveyMonkey* was utilized for the on-line questionnaire which contained a detailed consent form underlying that the study was strictly confidential and voluntary. Data was collected between February and December of 2015. No detail information is available regarding the number of email invitations that were sent. Participants were offered a chance to win a one of seven \$50 prize for their participation. The Institutional Review Board of the researchers' institution reviewed the study protocol and approved the present study.

Participants

To be included in the study, potential participants had to be 18 years and older, be working more than 30 h per week, be living with a spouse, and have at least one child aged between 5 and 10 living with them and who presents no pervasive developmental disorder or learning disability. The final sample was composed of 289 parents. The sample was mainly composed of women (81.7%), the average age was 38.28 years old ($SD = 4.62$), most had a university education (65.1%; 40.8% Bachelor's degree, 20.1% Master's degree, 4.2% Doctorate degree). Participants reported working an average of 39.05 h per week ($SD = 5.88$, $min = 30$, $max = 78$), working mostly in the public (50.9%) or private (38.4%) sectors. They occupied a large range of jobs such as project managers, consultants, lawyers, directors, nurses, pharmacists, police officers, social workers, and administrative agent. Most participants reported having at least two children living at home (87.2%) and having full custody of their children (95.5%). In addition to being a parent of at least one child between the ages of 5 and 10, nearly half of participants also had at least one child younger than five years old living at home (48.4%). Finally,

most were married (49.8%) or in a common-law relationship (47.8%).

Measures

Work-family guilt

McElwain's (2009) Work-Family Guilt Scale (WFGS) was used to assess participants' WFG. A short 4-item version was used with items such as "I feel guilty for not being able to take care of my child(ren) as well as I would like to". Each item was answered on a 6-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). A higher score indicates more work-related guilt that interferes with family life.

Strain-based WIF

Carlson and Kacmar (2000) strain-based WIF subscale was used. This scale is composed of 3 items such as "I am often so emotionally drained when I get home from work that it prevents me from contributing to my family" that were answered on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Parent-child activities

Cho and Allen's (2012) Parent-Child Interactive Behaviors Measures (PCIBM) was used to evaluate the extent of activities generally engaged in by parents with their children. This scale is composed of a list of 13 activities such as "I read to my child" and "My child and I exercise together". In the present study, a 5-point scale ranging from 1 (*never*) to 7 (*25 times or more in the past 4 weeks*) was used to evaluate the general extent to which participants perceive they engage in these activities with their children. A higher score indicates a higher extent of perceived parent-child activities.

Life satisfaction

Diener and colleagues' (Diener et al., 1985) Satisfaction with Life Scale was used to assess life satisfaction. The scale is composed of 5 items (e.g., "In most ways, my life is close to my ideal") answered on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). A higher score indicates higher satisfaction with life.

Spouse-child activity

Cho and Allen's (2012) subscale addressing recreational activities with children was modified to assess spouse-child activity. The general extent to which participants perceived

Table 1 Descriptive statistics, Pearson's correlations, and point-biserial correlations

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Gender	1.82	0.39	–									
2. Age	38.28	4.63	–0.22***	–								
3. Number of children	2.25	0.81	–0.13*	–0.12	–							
4. Hours of work/week	39.05	5.88	–0.23***	0.16**	–0.05	–						
5. Neuroticism	2.10	0.58	0.26***	–0.19**	0.01	–0.15**	(0.87)					
6. Strain-based WIF	2.92	1.04	0.09	–0.02	0.11	0.03	0.44***	(0.86)				
7. Work-family guilt	3.17	1.24	0.12*	–0.09	0.06	0.01	0.67***	0.46***	(0.89)			
8. Parent-child activities	2.96	0.59	0.11	–0.15*	–0.11	–0.06	–0.35***	–0.36***	–0.07	(0.84)		
9. Life satisfaction	4.98	1.13	–0.02	–0.04	–0.02	0.04	–0.48***	–0.47***	0.38***	–0.42***	(0.92)	
10. Spouse-child activity	2.70	0.77	0.08	–0.12*	–0.06	–0.01	–0.15*	–0.14*	0.35***	0.38***	–0.12	(0.81)

n between 264 and 289 due to missing data; Cronbach's alphas are reported in brackets; Gender: 1 = men, 2 = women. Strain-based WIF = strain-based Work-Interference-with-Family. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

their spouse as performing each of the listed activities with their children (e.g., 5 items; “My spouse plays outside with my child”) on a 1 (*never*) to 7 (*25 times or more in the past 4 weeks*) point scale. A higher score indicates higher perceived spouse-child activity.

Control variables

A number of socio-demographic variables known to influence life satisfaction were included in the present study such as marital status (Kosseck and Ozeki, 1998), number of work hours per week (Bonebright et al., 2000) and number of children (Angeles, 2010). The trait of neuroticism was also measured, considering that it is negatively associated with life satisfaction (Diener et al., 2003). The neuroticism subscale from the Zuckerman-Khulman Personality Questionnaire (ZKPQ, Eysenck and Eysenck, 1975) which contains 10 items such as “I often worry about things others consider not important” on a 5-point scale ranging from 1 (*completely disagree*) to 5 (*completely agree*), was used in the present study.

Data analysis

Descriptive and correlational analysis were conducted with IBM SPSS statistics version 20.0 (IBM Corp (2011)). In order to test for common method deviations, the widely used Harman's single-factor test was conducted. Specifically, an exploratory factorial analysis including all items of the questionnaires included in the present model using the principal axis factoring extraction and forced to load on one single latent factor resulted in an explained total variance of 28.9 which is lower than the conservative cut-off of 40% (Podsakoff et al., 2003). Finally, the Mplus 7.31 software (Muthén and Muthén, 2015) was used to model a path

analysis representing the proposed moderated mediation. As a first step, all variables were centered, then Hayes's (2012) macro PROCESS for model 14 was used (available at: <http://www.offbeat.group.shef.ac.uk/FIO/model14.htm>). A bootstrap test of significance with 10,000 bootstrap samples (Hayes, 2012) was performed to test for the presence of a moderated mediation.

Results

Preliminary Analysis

Descriptive, Pearson correlations, point-biserial correlations, and all indices of internal consistencies are presented in Table 1. Neuroticism was first found to be significantly related to three of the other control variables, specifically gender ($r = 0.26$, $p < 0.001$), age ($r = -0.19$, $p < 0.001$), and hours of work per week ($r = -0.15$, $p < 0.01$). Neuroticism was further found to be strongly related to several core model's variables. Specifically, neuroticism was found to be positively associated with strain-based WIF ($r = 0.44$, $p < 0.001$), WFG ($r = 0.46$, $p < 0.001$), and negatively with life satisfaction ($r < -0.42$, $p = 0.001$). Gender was significantly associated with WFG ($r = 0.12$, $p < 0.05$) suggesting that women experience significantly more WFG than men. Age was negatively related to parents' activities with children ($r = -0.15$, $p < 0.05$) and spouse-child activity ($r = -0.12$, $p < 0.05$) suggesting that older parents report doing fewer activities with their children and perceive their spouse as investing less time in recreational activities with their children. All primary model variables were found to be significantly inter-related and significantly related to life satisfaction.

Fig. 1 The final model. *Note:* Values are standardized coefficients. † $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Covariances not shown to increase clarity

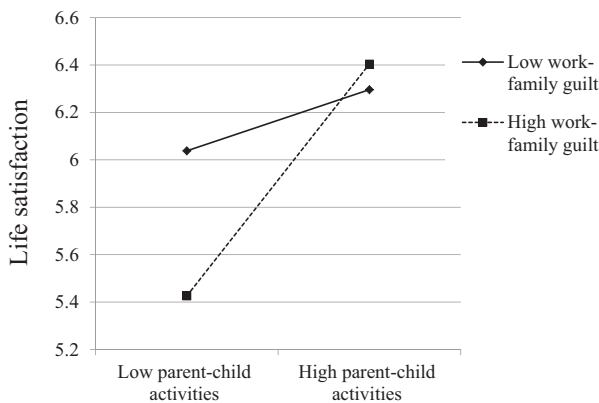
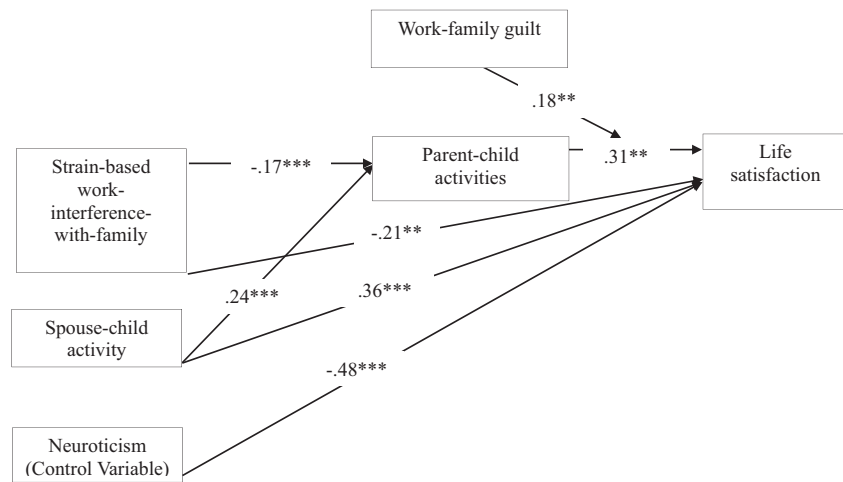


Fig. 2 Conditional effect of parent-child activities on life satisfaction for low and high values of work-family guilt

Moderated Mediation Model

Because of the strong negative association found between neuroticism and life satisfaction in this study as well as in past research (e.g., Diener et al., 2003; Liu et al., 2012; Lun and Yeung, 2019), it was decided that neuroticism should be included in the proposed moderated mediation model as a control variable. Furthermore, among the control variables included in the questionnaire, only neuroticism was found to be related to our outcome of interest, that is life satisfaction.

Model 14 from Hayes's (2012) macro PROCESS was used to test the proposed moderated mediation. First, parent-child activities were modeled as a mediator in the relationship between strain-based WIF and parents' life satisfaction. Second, WFG was modeled as a moderator of the relationship between parent-child activities and their life satisfaction. Direct relationships from strain-based WIF and spouse-child activity to parents' life satisfaction were

postulated. Covariances were specified between all exogenous variables. The fit indices for this model did not adequately fit the data: $\chi^2(8) = 54.76$, $p < 0.05$, $RMSEA = 0.14$ [0.11; 0.18], $CFI = 0.80$, $SRMR = 0.06$. Inspection of the results and modification indices suggested a path from spouse-child activity to parent-child activities. The model was tested with this additional path included and fit indices were greatly improved: $\chi^2(7) = 22.59$, $p < 0.05$, $RMSEA = 0.09$ [0.05; 0.13], $CFI = 0.93$, $SRMR = 0.03$. Thus, this second model was retained as the final model.

Figure 1 presents the final model. First, supporting the proposed mediation, strain-based WIF was significantly related to parent-child activities ($\beta = -0.17$, $p < 0.001$), which was in turn significantly related to life satisfaction ($\beta = 0.31$, $p < 0.01$). Second, supporting the proposed moderation, WFG significantly moderated the relationship between parent-child activities and life satisfaction ($\beta = 0.18$, $p < 0.01$). Third, strain-based WIF ($\beta = -0.21$, $p < 0.01$) and spouse-child activity ($\beta = 0.36$, $p < 0.001$) were found to be significantly related to life satisfaction. Finally, spouse-child activity was significantly related to parent-child activities ($\beta = 0.24$, $p < 0.001$).

Results from the bootstrap test of significance supported the proposed moderated mediation with a significant index of moderated mediation (-0.03 , $SE = 0.01$, $p < 0.05$, 95% $CI = [-0.06, -0.01]$). Results further indicates that the conditional indirect effect of strain-based WIF on parents' life satisfaction through their level of activities with their children is not significant for low values of work-family guilt (-0.01 , $SE = 0.02$, $p > 0.05$, 95% $CI = [-0.06, 0.02]$) but is significant for average (-0.05 , $SE = 0.02$, $p < 0.05$, 95% $CI = [-0.09, -0.02]$) and high (-0.09 , $SE = 0.03$, $p < 0.01$, 95% $CI = [-0.14, -0.05]$) values of work-family guilt. Figure 2 presents the results of the conditional indirect effects for high and low values of the moderator.

Discussion

The aim of this study was to highlight the effects of WFG on parents' perception of their investment with their children and their life satisfaction. The main objective of the present study was to extend on Cho and Allen's (2012) study and provide an initial test of a moderated mediation model in which strain-based WIF impacts parents' life satisfaction through the extent to which they engage in parent-child activities. This mediation was found to be moderated by parents' feelings of guilt. One significant advantage of the present study compared to Cho and Allen's (2012) study is the fact that the present study's findings show the working parents' point of view, revealing that the parents who feel guilty and who do not perceive they engage in sufficient parent-child activities after work, regardless of actual frequency, experience lower levels of life satisfaction than those who perceive their parent-child engagement as sufficient. Furthermore, the present study, compared to Cho and Allen's (2012) study, considered individuals interiorized norms regarding the extent (e.g., a great deal) of activities they should engage in during off-work periods rather than the actual frequency (e.g., twice a day). Thus, assessing the perceived level of investment in parent-child activities instead of the actual frequency of parent-child activities after work refines our understanding of the consequences associated with WFG.

In line with our first and second objectives, we highlighted the detrimental effect of strain-based WIF and the beneficial effect of parent-child activities on parents' life satisfaction. The more parents experience strain-based WIF, the less satisfied they are. Parents who perceive they perform a high extent of activities with their child are the most satisfied, no matter how guilty they feel. This is probably due to the fact that parent-child activities are not draining the same resources as those needed for work-related duties. By engaging more in activities with their children, parents have more opportunities to experience psychological detachment from work, which is an important antecedent to recovery from work (Sonnetag and Fritz, 2007). In line with the COR theory (Hobfoll, 1989), active activities allow cognitive distraction from job-related duties so engaging in them might facilitate parents' recovery of cognitive resources after work no matter how guilty they feel (Volman et al., 2013). Thus, this study supports the idea that spending time doing all sorts of activities with children is beneficial for working parents and parents who report doing a low extent of those activities also report lower life satisfaction.

The present article also contributes to the literature on WFG. As displayed in Fig. 2 the deleterious effect of performing a low extent of parent-child activities is worst for parents who feel guilty. Parental guilt may generate from

parents' perceptions that they are not the parent they wish to be or believe they should be, a domain-specific self-discrepancy that has been recently shown to be related to parental burnout (Roskam et al., 2021). The high standards of parenthood, and especially the high standards of the ideal mother (Elanda, 2021), added to the recent pressure imposed on parents by the COVID-19 pandemic have increased the WFG experienced by working parents (e.g., Montazer et al., 2022; Walters et al., 2021). The impact of WFG found in the present study could be further explained by the so-called loss spiral of resources. According to COR (Hobfoll, 1989) resources capital need to be invested to gain new resources. The fewer activities parents do with their children the more likely they are to feel guilty and the fewer resources are gained. In line with the COR theory (Hobfoll, 1989), parents who struggle with a high level of strain-based WIF might have already drained their resources reservoir at work and might thus have had fewer resources to invest in activities with their children after work. Coupled with high levels of WFG, only investing a small amount of energy in parent-child activities negatively influences parents' level of life satisfaction, much more so than parents who invest more energy in parent-child activities despite their strain-based WIF. Accordingly, as Cho and Allen (2012) showed that guilt can perhaps be beneficial for children since they receive more attention from their parents, the present study adds to this model suggesting that parents struggling with WIF are somewhat protected from negative domain-unspecific consequences when they perceive they invest sufficiently in activities with their children.

Another objective of this study was to determine whether a familial factor, spouse instrumental support in terms of the parents' perceived investment of their spouse in recreational activities with their children, serves as a resource that contributes to a parent's life satisfaction. Results show that spouse-child activity does indeed foster parents' life satisfaction, both directly and indirectly. It appears that high perceived spouse-child activity directly fosters parents' life satisfaction as well as facilitates an increase in subjective frequency of parent-child activities. The spouse's participation thus serves as a contextual resource (ten Brummelhuis and Bakker, 2012) that motivates parents to invest more in their child, thus increasing their level of life satisfaction. Bronfenbrenner (1989) and Feldman (2000) offer a possible explanation for the indirect effect. They suggest that the birth of a child often brings an imbalance in the division of household responsibilities, even in couples who previously divided tasks in an egalitarian fashion. This imbalance can lead to a perception of inequity and contribute to the emergence of resentment in the partner taking on more responsibilities. These authors note that the resentment experienced by this spouse is often transferred to the parent-child relationship and manifests itself in a

reduction of the physical and mental energy invested in interactions with his/her child. Furthermore, according to Bronfenbrenner's (1989) ecological systems theory, when there is an egalitarian division of family responsibilities among the two parents, both are more open to involvement with the child, since they have no resentment towards their spouse (Feldman, 2000). In today's modern society, where women mainly adhere to egalitarian views, childcare is still mainly the responsibility of mothers (Feldman, 2000). Based on this premise, fathers' engagement in activities with their children is often perceived as a "social support" provided to mothers. This is interesting in the light that more than three quarters of the present sample are mothers. The present results suggest that when mothers perceive their spouse as investing time in activities with their children, they are more likely to invest time and energy in children's activities themselves. In short, consistent with the assertions made by Bronfenbrenner (1989), the present results suggest that when parents, and mainly mothers, perceive their spouse as providing instrumental support with their active engagement in parent-child activities, they, first, experience a boost to their life satisfaction and, second, are more prone to also engage in parent-child activities themselves which also benefit their satisfaction (Feldman, 2000). Thus, the present study deepens our understanding of the role of spouse instrumental support in the context of WFC.

Finally, although this was not the focus on our study the present results add to the body of evidence suggesting that the personality trait of neuroticism might be an individual factor that differentiates parents' psychological adaptation in a WFC context. Past research has shown that individuals with high neuroticism tendency report more negative affect in the evening and more negative interactions with their family than those lower on this trait (Wang et al., 2011). Results from a meta-analysis suggested that neuroticism may make employees' more susceptible to experiencing WFC (Allen et al., 2012). Also, neuroticism has been found to be a significant predictor of job burnout (Sholi et al., 2011), lower well-being (Gale et al., 2013), and, as it was also shown in our study, lower life satisfaction (Liu and Wang, 2012; Lun and Yeung, 2019). Future research is nonetheless needed in order to further compare parents high vs low in neuroticism and to identify other potential influential within-person factors.

Practical Implications

Considering that the present study suggests that guilt has a negative effect on parental life satisfaction, it seems important to identify strategies to attenuate such guilt. Festinger's (1957) cognitive dissonance theory can be useful in this regard. This theory suggests that individuals experience uncomfortable strain, referred to as cognitive

dissonances, when certain circumstances lead them to engage in behaviors that conflict with their personal beliefs. For example, parents who adhere to current social norms that encourage them to invest more at work and at home (Hobson and Fahlén, 2009) are subject to feeling cognitive dissonance, and therefore guilt, if work-related pressure prevent them from performing adequately in their role as a parent (Johnston and Swanson, 2007). Johnston and Swanson (2007) suggest that parents can implement two main strategies, one behavioral and the other cognitive, in order to lower their level of dissonance and ease their uncomfortable emotional state. On the one hand, they can increase the frequency of their interactions with their children (behavioral strategy) by changing the situational constraints associated with their professional status (e.g., by decreasing their work hours). However, few employees have the economic privilege of adopting this strategy and renegotiating their employment conditions in this direction (Johnston and Swanson, 2007). On the other hand, to reduce their guilt feelings, these parents may also adopt a cognitive strategy of reformulation, and change the cognitions linked to their parental ideology. For example, consistent with the theory of work-family enrichment (Greenhaus and Powell, 2006), these parents can integrate the idea that by becoming actively involved in the sphere of their professional life, they gain resources (e.g., self-esteem) that allow them to increase their well-being and thus improve the quality of their interactions within the family sphere. By adopting the idea that participation in the labor market can restore personal resources and consequently benefit the quality of the parent-child relationship, these parents could reduce their guilt feelings and improve their life satisfaction.

Recent research also suggests that organizations can help mothers who experience WFC by developing more egalitarian organizational norms (Aarntzen et al., 2021). This could be encouraged by ensuring that organizations present adequate work-family policies (e.g., flexible hours) that apply and are used by both fathers and mothers. Increased flexibility in how workers control their work (i.e., flexible working (Kelly et al., 2011), specifically when they do their work or where they work, has been shown to be very beneficial for mothers (Chung and Van der Horst 2018; Cooper and Baird, 2015; Fuller and Hirsh (2019)) as well as workers in general (Bentley et al., 2016). However, some pitfalls to flexible working need to be considered as some research has revealed a decrease in WFC (e.g., Wheatley, 2012a; Wheatley, 2012b) while other studies have reported increases in WFC (Rafnsdóttir and Heijstra, 2013, Thornton, 2016). Institutional and managerial support have been proposed as significant variables favoring positive outcomes to flexible working (Choi, 2018) as well as significant predictors of working parents' life satisfaction (Zhao et al.,

2020). However, it should be noted that past research has shown that even though more and more family-friendly policies are offered to employees, many, and especially fathers, will not take advantage of them (Hobson and Fahlén, 2009; Rothbard et al., 2005). As work-family policies have been shown to be beneficial for employees' performance in the workplace (Fritz and Sonnentag, 2005; Jones, 2006; Swaab and Galinsky, 2015), organizations would profit from encouraging their employees to take advantage of such policies.

The present study further highlights the significant role of the spouse on the life satisfaction of parents struggling with strain-based WIF. Considering recent research suggesting that mothers experience more guilt due to the impact of their work on their family than fathers (Aarntzen et al., 2021; Borelli et al., 2017) and that four in five participants in the present study were mothers, the significant impact of spouse-child activities on participants' life satisfaction is noteworthy. Furthermore, evidence exists supporting the importance of the source of support and its significance when occurring where it is perceived to be the most needed (French et al., 2018). It thus appears important that families are composed of egalitarian relationship where fathers are highly involved in recreational activities with their children.

Strengths and Limitations of the Present Study and Recommendations for Future Research

A few strengths and limitations should be addressed. One major strength is that the present study was able to show a significant moderated mediation model exposing the work-family experience of a large sample of parents who have at least one young child. This model allowed for a better understanding of how a number of important work-family variables may impact parents' life satisfaction. However, the main limitation is the design of the study. The cross-sectional design used does not make it possible to examine the consequences of WFG over time, to verify the directionality of the phenomenon being studied, and to examine the prospective relation between X (i.e., strain-based WIF) and M (i.e., parent-child activities). Future longitudinal designs will be necessary in order to replicate and extend the present moderated mediation model as well as to demonstrate its external validity. Furthermore, although the Harman's single factor test suggested no common method deviations in the present dataset, longitudinal studies would further reduce this bias (Podsakoff et al., 2003).

A second limitation relates to the fact that most of the sample was composed of women. Even though some research (Goncalves et al., 2018; Martinez et al., 2011) suggested that WFG is experienced similarly by men and women, others revealed that mothers may be more prone to

such feelings (Borelli et al., 2016). The present sample did not allow for a test of this hypothesis. This high representation of women in the present sample currently limits the external validity of our findings to mothers. Future research will be necessary to determine if fathers' experience with strain-based WIF and WFG relates to their engagement in parent-child activities and life satisfaction similarly to mothers'. Future research would also benefit from the inclusion of more parents with lower levels of education in order to determine if education has an impact on the proposed model. Other socio-economic indicators such as household income as well as household characteristics such as division of child-care tasks between parents would be highly informative. Furthermore, no information was available regarding participants' spouse employment status. Future research would benefit from comparing the experience of single vs. dual-income families.

Third, a limit is linked to the fact that the measure of parent-child activities used in this study does not make it possible to know the actual time parents devote to different activities. In future studies, it would be relevant to note the actual duration of activities parents engage in with their children (e. g. by using experience sampling devices). The spouse could be invited to provide information on this point as well, in order to triangulate the data and thus further reduce the common method variance bias (Podsakoff et al., 2003).

Fourth, the impact of the spouse on participants' involvement in parent-child activities, and on their life satisfaction was only explored in relation to their involvement in parent-child activities: spouse-child activities. We conceptualized this construct as a form of instrumental support. However, future research would benefit from a complete measure of spousal support including both the instrumental support dimension and the emotional support dimension.

Finally, the present study solely focused on parents' life satisfaction. Although highly important, it would also be beneficial to study the impact of WFG and parent-child activities on domain-specific satisfaction such as satisfaction with family life.

Conclusion

Our study constitutes the first study that shows that WFG is negatively related to parents' life satisfaction. More precisely, data show that strain-based work interference with family is negatively associated to the extent of parent-child activities engaged in by parents, thus decreasing life satisfaction and that such negative relationship is worst for working parents who feel guilty. Hopefully, by giving support to the proposition that spouse involvement in parent-child activities constitutes a strategy that fosters both

greater involvement with children and greater life satisfaction in a context of strain-based WIF, this study will encourage practitioners to implement interventions that will allow parents to take advantage of this important contextual resource.

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Compliance with Ethical Standards

Conflict of Interest All authors declare no competing interests.

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