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## **When Guilt Drains You: The Impact of Work–Family Conflict on Emotional Exhaustion, Mediated by Guilt and Moderated by Supervisor Support**

### **Abstract**

*Aims:* Grounded in Boundary Theory, this study examined whether work–family guilt mediates the relationship between work–family conflict (WFC) and emotional exhaustion and whether perceived supervisor support moderates this indirect effect. We hypothesized that the negative impact of WFC on emotional exhaustion via guilt would be stronger for individuals perceiving lower supervisor support.

*Methodology:* A three-wave longitudinal study was conducted with 396 employees from luxury Portuguese hotels, with one-week intervals between data collections.

*Findings:* Results showed that WFC was positively associated with emotional exhaustion ( $\beta = 0.66$ ,  $p < .001$ ). However, the mediating effect of guilt was not supported. The moderated mediation model was significant ( $\beta = -0.20$ ,  $p < .01$ ), indicating that the indirect relationship between WFC and emotional exhaustion through guilt was stronger when perceived supervisor support was low.

*Practical implications:* These findings advance understanding of the psychological mechanisms linking WFC and emotional exhaustion and underscore the protective role of supervisor support in reducing employees' guilt and emotional strain.

*Originality:* By integrating affective and contextual factors, this study highlights that supportive supervision can buffer the emotional costs of WFC, offering actionable insights for promoting employee well-being in demanding service contexts.

*Keywords:* work-family conflict; guilt family conflict; emotional exhaustion; perceived supervisor support.

## Introduction

Over recent decades, profound social and organizational transformations have reshaped the nature of work and family life. There has been an increase in single-parent households (National Employment Institute, INE, 2021), greater participation of mothers in the labor market, and a growing number of adults simultaneously caring for children and elderly family members. The rise of dual-career families and individuals holding multiple jobs has further intensified the complexity of managing work and family roles (Gahlawat et al., 2019).

In parallel, organizational structures have evolved to accommodate these societal changes, with the introduction of flexible work arrangements (Wright et al., 2014), but also higher workloads and prolonged working hours, often resulting in role overload (Fiksenbaum, 2014; Michel et al., 2011). These developments have brought new challenges to employees' well-being, particularly by amplifying experiences of work–family conflict (WFC; Marques et al., 2021).

WFC arises when the demands of work and family are incompatible, hindering individuals from fulfilling their responsibilities in one or both domains (Greenhaus & Beutell, 1985). Although both spheres are deeply valued, their competing demands can generate tension and strain, which, over time, deplete employees' psychological and emotional resources (Wayne et al., 2020). Empirical research consistently shows that WFC is associated with negative outcomes such as lower well-being and heightened emotional exhaustion—a core component of burnout characterized by feelings of depletion and fatigue (Maslach & Jackson, 1981; Dodanwala & Shrestha, 2021; Yuan et al., 2023).

Boundary Theory (Ashforth et al., 2000) and Work–Family Boundary Theory (Clark, 2000) offer valuable frameworks for understanding how individuals navigate work–family boundaries. These theories posit that people continuously negotiate the permeability and

flexibility of these boundaries to achieve balance across domains. Effective boundary management promotes well-being, whereas poorly managed boundaries increase the likelihood of strain and negative affective experiences such as guilt (Gull et al., 2022).

Work-family guilt—a negative emotional response to perceived failure in fulfilling family or work obligations (Korabik, 2015)—commonly arises when professional demands encroach upon family life or vice versa (Junça-Silva, 2024). This guilt can intensify the emotional toll of WFC, depleting personal resources and heightening exhaustion. However, Boundary Theory also suggests that contextual resources, such as social support, can mitigate these detrimental effects (Ashforth et al., 2000).

Among various forms of support, supervisor support is particularly critical (Zhang et al., 2020). It reflects employees' perceptions that their supervisors value their contributions and care about their well-being (Qiu & Fan, 2015). From the perspective of Conservation of Resources (COR) theory (Hobfoll, 1989), supportive supervisors provide valuable resources—emotional, instrumental, and social—that can buffer the strain caused by WFC. This aligns with the social support buffering model (Cohen & Wills, 1985), which posits that social support mitigates the negative effects of stressors on well-being. Accordingly, the adverse effects of WFC on employees' emotional outcomes are expected to be weaker when supervisory support is high (Zhang et al., 2020).

Grounded in Boundary Theory and COR theory, the present study examines whether work-family guilt mediates the relationship between WFC and emotional exhaustion, and whether perceived supervisor support moderates this indirect relationship. This study contributes to the literature in several ways. First, it deepens theoretical understanding of how and under what conditions WFC affects employee well-being, integrating affective (guilt) and contextual (supervisory support) mechanisms. Second, it advances empirical knowledge on work-family guilt, an underexplored construct in the Portuguese context (Junça-Silva, 2025).

Finally, by highlighting the buffering role of supervisory support, the study offers actionable insights for organizations seeking to prevent strain and promote employees' mental health in demanding work environments, like the hospitality industry.

## Theoretical Background

### Work-family conflict

In recent years, there have been various social and organizational transformations. One notable example is the advancements in information and communication technologies, which have contributed to changes within organizations (Ipsen *et al.*, 2021), enabling greater flexibility in task execution due to the availability of different work arrangements (e.g., telework). These changes have had repercussions on the family domain and, consequently, on how individuals perform their various roles (Halinski and Duxbury, 2019).

Moreover, new generations, particularly Millennials and Generation Z, place greater priority on work-family balance compared to previous generations (Robak, 2017). These generations are increasingly unwilling to make compromises or sacrifice other aspects of their personal lives to meet work expectations (Junça-Silva, 2024). As a result, individuals from these age groups prioritize strategies that allow them to reduce WFC (Rzemieniak and Wawer, 2021; Tennakoon and Senarathne, 2020).

WFC was conceptualized by Greenhaus and Beutell (1985) as a form of inter-role conflict that arises when the energy, time, or behavioral demands of the professional role conflict with those of the family role (Greenhaus and Beutell, 1985). A fundamental assumption of WFC is that the demands and expectations of work (e.g., working late) often conflict with those of family (e.g., picking up a child from school to take them to football practice or music class), which frequently forces individuals to choose between one domain at the expense of the other, as they have limited resources such as time and energy (Shin and Shin, 2020). This construct is based on role theory (Kahn *et al.*, 1964), which proposes that

each individual performs multiple roles throughout their life, associating expectations with each of them, which they may not always be able to meet. Thus, conflict arises from the multiplicity of roles, leading to difficulty in successfully fulfilling them.

Time-based role conflict occurs when the time demands of work and family compete with each other (Greenhaus and Beutell, 1985). That is, the more time spent at work or the more rigid the work schedule, the less time employees have for their family and/or personal responsibilities. For example, working overtime reduces the time a parent can spend with their children, leading to WFC.

In turn, strain-based conflict occurs when the strain from one role limits the individual's ability to perform another role in a different domain (Greenhaus and Beutell, 1985). This conflict arises when work-related stressors, such as anxiety or fatigue, affect the individual's effectiveness and task performance within the family, making it difficult to meet family demands. For instance, when an individual misses a family commitment due to exhaustion from work demands. According to Bande *et al.* (2019), WFC leads to strain (e.g., emotional exhaustion), which can spill over into family life, limiting role performance in the family domain (Kinman and Jones, 2008).

Finally, behavior-based conflict occurs when the behavioral patterns required by work and family are incompatible (Greenhaus and Beutell, 1985). However, this type of conflict may not be relevant to all occupations; nonetheless, certain occupations, such as military personnel or prison guards (Kinman *et al.*, 2017), may require hostile or aggressive interpersonal interactions that may not be suitable in family interactions (WFC; Dierdorff and Ellington, 2008). An example of this type of conflict is when a person in a leadership role must exhibit a more assertive behavior at work, while at home, they are expected to behave more passively.

WFC can also be associated with resource scarcity, as individuals have a limited set of tangible and intangible resources, such as time, attention, and energy (Lapierre and Allen, 2006). Engaging in one role can deplete resources available for performing another, meaning that the more roles an individual takes on, the fewer resources they have at their disposal (Bande *et al.*, 2019). Related to resource scarcity, the COR (Hobfoll, 1989) is another theoretical model that explains WFC (Chen and Huang, 2016). This theory assumes that individuals strive to protect, maintain, and develop personal resources in biological, cognitive, and social domains to minimize stressors and negative outcomes, such as emotional exhaustion. Resources can include conditions, objects, personal characteristics, or energy that are valued by the individual or are important to achieving their goals. For example, when an individual works excessive hours and has less time (resources) to dedicate to their family it leads to WFC (Brummelhuis and Bakker, 2012). WFC has been shown to make employees experience a wide range of negative emotional experiences, such as depression, distress or anxiety (Bande *et al.*, 2019) and also guilt (Junça-Silva, 2024).

### **WFC and guilt**

According to Greenhaus *et al.* (2006), guilt can be associated with work-family challenges, as both family and work are essential to an individual's identity. Additionally, guilt can arise as a negative emotional response to conflicts emerging from the interaction between these two domains (Borelli *et al.*, 2017). Therefore, it is expected that when an individual prioritizes work demands over family demands, or vice versa, they will experience a range of negative emotions, including guilt (Singe *et al.*, 2022). An example of guilt related to the interaction between the two domains is when parents feel guilty when their work demands interfere with their responsibility to care for their children (Aarntzen *et al.*, 2019).

Guilt consists of cognitive components, such as the recognition of wrongdoing; affective components, meaning unpleasant feelings; and motivational components, where

there is a desire to reverse the mistake (Hoffman, 1982). Korabik (2015) applied terminology from the WFC literature to differentiate two subtypes of work-family guilt. She argued that work-family guilt may arise when work interferes with family life or vice versa (Hochwarter *et al.*, 2007). Therefore, it is possible to distinguish between work-family guilt, which results from WFC in any direction, and work-interference-with-family guilt, which is related to work and hinders the ability to fulfill family responsibilities. For example, work-interference-with-family guilt may arise when a work meeting is scheduled to run late, preventing a parent from seeing their children awake.

In WFC episodes, work is the source of the conflict, and family is the victim (Zhang *et al.*, 2019). According to previous studies, failing to fulfill family responsibilities leads to guilt because individuals care about their family identity and the impact their mistakes have on others. In line with these arguments, some studies have shown that WFC is positively related to both discrete states of guilt (Livingston and Judge, 2008) and relatively stable states of work-family guilt (Singe *et al.*, 2022). Guilt can have negative consequences, such as a decrease in life satisfaction (Gomez-Ortiz and Roldan-Barrios, 2021), job satisfaction (Zhang *et al.*, 2019), and an increase in emotional exhaustion (Junça-Silva, 2024).

### **The mediating role of guilt**

The Boundary Theory and the Role Theory suggest that WFC, when poorly managed, may lead individuals to experience work-family guilt. Additionally, it can negatively impact their mental health, contributing to emotional exhaustion or even burnout (Yuan *et al.*, 2023). Maslach and Jackson (1982) defined burnout as a state of emotional exhaustion, accompanied by cynicism related to work and a sense of personal inadequacy. However, emotional exhaustion is considered the most crucial component of burnout (Halbesleben and Bowler, 2007).

Emotional exhaustion refers to the depletion of emotional resources, manifesting as a loss of energy, as individuals lack sufficient resources to meet the demands of their work (Gupta and Srivastava, 2020). This depletion is more commonly observed during interpersonal interactions in the workplace, where emotional demands exceed individuals' capacity to manage them (Leineweber *et al.*, 2018).

According to Huang *et al.* (2019), WFC is one of the primary predictors of burnout. Individuals experiencing this conflict are in a state of resource depletion, which increases stress and exhaustion levels, with emotional exhaustion being the most significant symptom (Bianchi *et al.*, 2018). Numerous studies have demonstrated a strong correlation between WFC and burnout, indicating that perceptions of high familial responsibility are positively related to emotional exhaustion and conflict between the two domains (Trzebiatowski and Triana, 2018). Thus, WFC is positively associated with emotional exhaustion, particularly when the demands from both work and family are high (Leineweber *et al.*, 2018; Trzebiatowski and Triana, 2018). Based on these findings, the following hypothesis was proposed:

*H1: WFC is positively related with emotional exhaustion.*

On the other hand, work-family guilt is also a predictor of emotional exhaustion (Zhang *et al.*, 2019). When work-family guilt occurs, individuals tend to feel dissatisfied with their role at work because it is the work that leads to behaviors harmful to family members, thereby triggering the feeling of guilt (Junça-Silva, 2024). Several studies showed a direct or indirect effect of job demands on the relationship between WFC, and the experience of work-family guilt (e.g., Gonçalves, 2018). Furthermore, some studies have demonstrated the mediating role of work-family guilt in the relationship between WFC and work-related

outcomes, such as job satisfaction and emotional exhaustion (Korabik, 2017; Korabik and McElwain, 2011).

Based on the above, it is proposed that WFC increases work-family guilt, which, in turn, increases emotional exhaustion. Thus, the following hypothesis is proposed:

*H2: Work-family guilt mediates the relationship between WFC and emotional exhaustion.*

### **The moderating role of perceived supervisor support**

According to boundary theory, there are strategies that can mitigate the negative impact of WFC on guilt and emotional exhaustion (Ashforth *et al.*, 2000). One of the most relevant strategies appears to be the perception of social support (Stanley *et al.*, 2019), such as supervisor support (Zhang *et al.*, 2020). Supervisor support refers to employees' perceptions of the support, encouragement, care, as well as the organizational climate and culture provided by their supervisor (Menguc *et al.*, 2013; Straub, 2018).

Perceived supervisor support is critical in overcoming the impacts of WFC (Frone *et al.*, 1997) as it enhances individuals' psychological resources, which help them cope with various stressors in their daily lives (Zhang *et al.*, 2019). Support provides individuals with the protection and security they need, making them feel recognized, supported by the group they belong to, and more committed to the organization. When individuals perceive that their supervisors value their work and care about their well-being, they tend to perform their tasks more effectively (Shi and Gordon, 2019).

According to the COR (Hobfoll, 1989), perceived supervisor support can provide new resources that help cope with the demands of work and family. Workers feel more secure when accompanied and supported, especially by their supervisor, which can buffer the negative impact of WFC. This implies that gaining resources from one domain (perceived

supervisor support) will likely compensate for the loss of resources in another domain (WFC). When individuals lose resources due to WFC, supervisor support acts as a resource gain that has the potential to counterbalance the negative impact of WFC.

In line with this, the literature suggests that individuals who receive more support from colleagues and supervisors are better able to achieve their goals and are more likely to succeed in their roles, easily coping with unexpected and adverse situations like WFC (Astuti and Helmi, 2021). Thus, in accordance with the COR, it is expected that the relationship between WFC and emotional exhaustion through guilt will be weaker when workers receive greater support from their supervisors (Zhang *et al.*, 2020) (Figure 1).

*H3: Perceived supervisor support moderates the relationship between work-family guilt and emotional exhaustion, such that the positive association between work-family guilt and emotional exhaustion is weaker when supervisor support is higher.*

*H4: Perceived supervisor support moderates the indirect effect of WFC on emotional exhaustion via work-family guilt, such that the mediating effect is stronger for individuals with lower perceived supervisor support and weaker for those with higher perceived supervisor support.*

--Figure 1--

## **Method**

### **Design and Procedure**

Prior to starting the survey, participants were informed of the study's aims/objectives and the right to refuse participation or withdraw from the study at any time. The authors confirm that this study adheres to the relevant ethical guidelines for human subjects, and that the anonymity and confidentiality of the participants were maintained throughout the study. This study's procedures were reviewed and approved by the university's Ethics Review Board. This study employed a three-wave longitudinal design, with data collected at one-week

intervals from Portuguese employees. Participants were recruited through personal contact networks and various social media platforms (e.g., LinkedIn, Instagram) to maximize sample size.

The invitation message included detailed instructions for participation and specified the eligibility criteria, namely that individuals had to be employed for at least one year. The first survey (T1) began with an informed consent form, which outlined the study's objectives and guaranteed the anonymity and confidentiality of all responses. After providing informed consent, participants completed a set of sociodemographic questions and measures of WFC and perceived supervisor support.

At the end of the T1 survey, participants were asked to provide their email addresses, which were used exclusively for communication and for distributing follow-up questionnaires in the subsequent weeks. One week later (T2), work-family guilt was assessed, followed by emotional exhaustion at T3. To ensure confidentiality, email addresses were kept strictly private and were not included in the dataset for analysis. Instead, each participant created a unique identification code, allowing responses to be matched across all three time points. Therefore, there was no foreseeable risk associated with their participation. Data was collected between November and December of 2024.

## **Participants**

The sample consisted of 612 employees at T1, 401 at T2, and 396 at T3. The highest attrition occurred after T1 (34.4%), followed by a relatively stable retention rate after T2 (9.87%). To rule out the risk of selective attrition, we conducted Little's missing completely at random test (Little *et al.*, 2014), which confirmed that data were missing completely at random ( $\chi^2=4.39$ ,  $df=3$ ,  $p=0.22$ ). Additionally, independent samples t-tests were performed to examine potential differences between participants who dropped out after T1 and those who completed all three waves. The results indicated no significant differences in the focal

variables at T1, namely WFC ( $t=0.24$ ,  $p=0.40$ ) perceived supervisor support ( $t=0.46$ ,  $p=0.32$ ), work-family guilt ( $t=0.38$ ,  $p=0.35$ ) and emotional exhaustion ( $t=1.95$ ,  $p=0.06$ ). These findings suggest that attrition was not systematically related to key study variables.

The sample comprised employees from luxury Portuguese hotels, all rated with at least four stars—a sector known for its demanding work environments and pronounced work-family interface challenges. Among participants who completed all survey waves, 73% were women. The mean age was 32 years ( $SD = 11$ ), and the mean organizational tenure was 10 years ( $SD = 11.5$ ). Regarding educational attainment, the majority of respondents held a higher education degree (72%), followed by those with secondary education (25%). In terms of employment status, 64% of participants reported having a permanent contract, 21% were employed on a fixed-term basis, and 9% were self-employed. Most participants (66%) worked in large hotel establishments with more than 50 employees, whereas 34% were employed in medium-sized hotels with 10 to 49 employees. Reported weekly working hours ranged from 5 to 70 ( $M = 39$ ,  $SD = 10$ ).

## Measures

### **Work-Family Conflict (T1)**

WFC was assessed using the WFC scale (Netemeyer *et al.*, 1996). The scale includes five items rated on a 5-point Likert scale (1="Strongly Disagree" to 5="Strongly Agree"). An example item example is: "The demands of my work interfere with my home and family life?" ( $\alpha=0.83$ ;  $\omega=0.83$ ).

### **Perceived Supervisor Support (T1)**

Perceived supervisor support was measured using the short version of the Copenhagen Psychosocial Questionnaire (COPSOQ II; Kristensen and Borg, 2000; Pejtersen *et al.*, 2010). This study used the 'Supervisor Support' subscale, which falls under the broader dimension of social relations and leadership. The subscale comprised three items (e.g., "How often do you

get help and support from your immediate superior, if needed?) rated on a 5-point Likert scale (1="Never"; 5="Always") ( $\alpha=0.90$ ;  $\omega=0.90$ ).

### **Work-Family Guilt (T2)**

Work-family guilt was measured using the Work-Interfering-with-Family Guilt Scale (Borelli *et al.*, 2017; 2014). This scale comprises 19 items, nine of which measure work-family guilt, while the remaining ten are distractor items assessing general guilt. Only the nine work-family guilt items were used in this study. Participants responded to the question "How often do you..." and then rated the frequency of various work-family guilt-related cognitions and emotions on a 5-point Likert scale (1="Never"; 5="Always"). Example items included "feel like your decision to work was selfish" and "feel like you really should be at home when you're at work". ( $\alpha=0.73$ ;  $\omega=0.73$ ).

### **Emotional Exhaustion (T3)**

Emotional exhaustion was assessed using five items from the Maslach Burnout Inventory (Schaufeli *et al.*, 1996). Participants rated their responses (e.g., "I feel used up at the end of the workday.") on a 5-point Likert scale (1="Never"; 5="Always") ( $\alpha=0.84$ ;  $\omega=0.86$ ).

### **Control Variables**

Participant gender and age were included as control variables. Gender was controlled for, as previous research has indicated that women tend to experience higher levels of WFC and subsequent guilt compared to men (Maclean *et al.*, 2021). These gender differences may influence both the predictor and mediator variables (i.e., WFC and work-family guilt). Similarly, age was controlled for, as it may impact both WFC and emotional exhaustion. Prior studies have identified differences in how younger and older individuals navigate work and family life, which in turn affects their levels of emotional exhaustion due to WFC (Allen and French, 2023; Leineweber *et al.*, 2018; Nilsen *et al.*, 2017).

### **Data Analysis**

To test the mediation hypothesis, Model 4 of the PROCESS macro in SPSS (Hayes, 2018) was employed. This macro is particularly useful for estimating indirect effects as it applies bootstrapping (5,000 resamples) to generate confidence intervals (CIs). To test the moderation hypothesis, Model 1 of the PROCESS macro was used, while the moderated mediation hypothesis was tested using Model 14 (Hayes, 2018). Interaction terms (moderations) were mean-centered, and bootstrapping (5,000 resamples) was applied to calculate CI.

### **Common Method Bias Examination**

Although we followed several recommended procedures to reduce common method bias (CMB)—such as using closed-ended questions mixed throughout the survey (e.g., "I have pets") and employing previously validated measurement instruments to assess the study variables—complete avoidance of this bias was not possible (Podsakoff *et al.*, 2024). To understand its presence, we followed several guidelines suggested by Podsakoff *et al.* (2024).

First, we conducted Harman's single factor test to assess CMB. The results indicated that the first factor explained only 32 % of the total variance, suggesting that CMB was not a significant issue in the study. Second, we conducted four confirmatory factor analyses (CFAs) to verify the independence of the study variables. To assess model fit and compare it with other reasonable alternative models, several fit indices were examined (Hair *et al.*, 2010), namely, the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Standardized Root Mean Square Residual (SRMR), and Root Mean Square Error of Approximation (RMSEA). Model 1 was the hypothesized four-factor model, with separate scales for WFC, work-family guilt, emotional exhaustion, and perceived supervisor support. Model 2 was a three-factor model, combining WFC and work-family guilt into a single factor, with the other two factors corresponding to emotional exhaustion and perceived supervisor support. Model 3 was a two-

factor model, grouping WFC, work-family guilt, and emotional exhaustion into one factor, with the second factor representing perceived supervisor support. Lastly, Model 4 was A single-factor solution, where all items loaded onto one common factor.

As shown in Table 1, the four-factor model (Model 1) demonstrated the best fit to the data ( $\chi^2/df = 2.78$ ,  $p < 0.001$ ,  $CFI = 0.93$ ,  $TLI = 0.91$ ,  $SRMR = 0.05$ ,  $RMSEA = 0.08$ , 95% CI [0.06, 0.10]), while all alternative models showed poorer fit. These results, together with the Cronbach's alpha reliability coefficients for all measurement scales, confirmed the study's discriminant and convergent validity. Consequently, hypothesis testing proceeded.

--Table 1--

## Results

### Descriptive statistics

Table 2 presents descriptive statistics, and bivariate correlations across the three waves of data collection.

--Table 2--

### Hypotheses testing

WFC was positively related to emotional exhaustion ( $B = 0.67$ ; 95% CI [0.54; 0.79]), confirming H1. However, H2 which hypothesized that WFC would influence emotional exhaustion through work-family guilt was not supported ( $B = -0.06$ ; 95% CI [-0.15; 0.02]). Further, there was a significant interaction effect between work-family guilt and perceived supervisor support ( $B = -0.20$ ;  $SE = 0.09$ ; 95% CI [-0.35; -0.05]), supporting H3 ( $\Delta R^2 = 0.02$ ;  $F_{(1, 380)} = 5.26$ ;  $p < 0.05$ ). Plus, the moderation of the indirect effect was significant ( $\beta = -0.08$ ;  $SE = 0.03$ ; 95% CI [-0.14; -0.02]). The model explained 45% of the variance in emotional exhaustion ( $R^2 = 0.45$ ;  $p < 0.01$ ;  $\Delta R^2 = 0.03$ ;  $F_{(1, 379)} = 26.23$ ;  $p < 0.01$ ) (Table 3).

--Table 3--

The significant interaction indicated that the indirect effect varied depending on the levels of the moderator variable. Following Dawson and Richter's (2006) approach, it was observed that the indirect effect was significant and stronger when supervisor support was low (-1 SD:  $B = -0.11$ ;  $SE = 0.04$ ;  $p < 0.01$ ; 95% CI [-0.19; -0.02]). However, the indirect effect was no longer significant when supervisor support was high (+1 SD:  $B = 0.05$ ;  $SE = 0.04$ ;  $p > 0.05$ ; 95% CI [-0.03; 0.15]) or at the mean level ( $M: B = -0.03$ ;  $SE = 0.03$ ;  $p > 0.05$ ; 95% CI [-0.10; 0.05]) (Figure 2). Thus, H4 was supported by the data.

--Figure 2 --

## Discussion

In today's work environment, where WFC and the accompanying feelings of guilt have become increasingly prevalent concerns for employees, this study offers a timely and relevant contribution (Kogan et al., 2022; Korabik, 2017). It examines the relationship between WFC and emotional exhaustion, highlighting the mediating role of work–family guilt and the moderating effect of perceived supervisor support. Specifically, it explores both how WFC contributes to emotional exhaustion and under what conditions this relationship can be buffered by social support within the workplace.

The findings reveal that higher levels of WFC are associated with increased emotional exhaustion, reinforcing the idea that the strain generated by incompatible work and family demands can erode employees' emotional resources over time (Azpíroz-Dorronsoro *et al.*, 2024). However, the indirect effect of WFC on emotional exhaustion through WFG was significant only when employees perceived low levels of supervisor support, suggesting that supervisor support functions as a crucial boundary condition in this relationship. In other words, when employees lack adequate supervisory support, guilt arising from WFC is more likely to translate into emotional exhaustion. Conversely, when supervisor support is high, this emotional strain is attenuated.

These findings are consistent with Work–Family Border Theory (Clark, 2000) and Boundary Theory (Ashforth, Kreiner, & Fugate, 2000), both of which posit that difficulties in managing boundaries between work and family domains can result in emotional depletion. When the boundaries between roles are poorly managed, individuals experience continuous role interference that undermines recovery and fosters exhaustion. Similarly, Conservation of Resources Theory (Hobfoll, 1989) provides a complementary explanation: work–family conflict depletes valuable emotional and cognitive resources (Hobfoll *et al.*, 2018), leading to exhaustion (Dodanwala & Shrestha, 2021), whereas social support from supervisors serves as a key external resource that mitigates this loss (Siddiqi *et al.*, 2024).

The results also align with prior empirical evidence demonstrating that WFC negatively affects employees' psychological well-being and contributes to burnout symptoms (Gull *et al.*, 2022; Junça-Silva, 2025). Importantly, the current study extends this literature by highlighting the emotional mechanism of guilt (Kogan *et al.*, 2022). For many employees, WFC induces guilt because they perceive themselves as failing to meet family expectations (Korabik, 2015, 2017). This self-conscious emotion not only heightens emotional strain but also exacerbates feelings of inadequacy and self-blame, which can culminate in emotional exhaustion (Aarntzen *et al.*, 2023).

Yet, our findings show that this process is not universal. When employees perceive supportive supervisors—those who acknowledge family responsibilities and provide flexibility—guilt may be reinterpreted as a temporary emotional signal rather than a source of chronic distress (Siddiqi *et al.*, 2024). Supportive supervisors thus play a pivotal role in reframing guilt and helping employees restore psychological balance (Zhang *et al.*, 2020). Overall, these findings underscore the importance of considering contextual and interpersonal factors in understanding how WFC influences employee emotional exhaustion. By showing that the emotional toll of guilt depends on perceived supervisor support, this study contributes

to a more nuanced understanding of the affective processes linking work–family experiences to exhaustion.

### **Theoretical implications**

From a theoretical perspective, this study primarily contributes to contemporary research by examining how WFC leads to emotional exhaustion. While the effects of WFC on well-being indicators have been widely explored (Junça-Silva, 2025), this study advances the existing literature by assessing its impact on emotional exhaustion, considering work-family guilt as a potential underlying mechanism and perceived supervisor support as a boundary condition that may mitigate this relationship. Consistent with previous research on the topic, the findings indicate that WFC is a significant predictor of emotional exhaustion (Gull *et al.*, 2022). Specifically, higher levels of WFC are associated with greater emotional exhaustion. This result underscores the negative consequences of WFC, as employees who experience work interference with family life are more likely to suffer from emotional exhaustion (Dodanwala and Shrestha, 2021). These findings align with prior literature indicating that WFC has severe implications for employees' physical and mental health (Azpíroz-Dorronsoro *et al.*, 2024), including emotional exhaustion (Vem *et al.*, 2017).

This relationship can be explained through the lens of the COR theory (Hobfoll, 1989), which posits that work-related conflicts deplete personal resources, ultimately reducing individuals' capacity to cope with adversities such as WFC (Hobfoll *et al.*, 2018). In other words, WFC drains essential mental and physical resources, such as time and energy, thereby increasing stress and exhaustion, which in turn contributes to emotional exhaustion (Bande *et al.*, 2019; Bianchi *et al.*, 2018).

Beyond the direct relationship between WFC and emotional exhaustion (Azpíroz-Dorronsoro *et al.*, 2024), this study examined an underlying affective mechanism—work–family guilt. While previous research has consistently demonstrated that WFC predicts

emotional exhaustion (Zhang *et al.*, 2019), fewer studies have explored the specific emotional processes through which this relationship occurs (Gull *et al.*, 2023). Contrary to expectations, the mediating role of work–family guilt was not supported. This finding suggests that although WFC triggers both guilt (Kogan *et al.*, 2022) and emotional exhaustion (Vem *et al.*, 2017), guilt may not function as the primary explanatory mechanism linking the two.

One possible explanation is that work–family guilt may represent a short-lived affective response rather than a sustained emotional state capable of producing exhaustion (Korabi, 2017). In other words, while individuals may momentarily feel guilty for neglecting family due to work demands, this emotion might not persist long enough to translate into chronic depletion or burnout (Aarntzen *et al.*, 2023). Instead, guilt could motivate compensatory behaviors—such as increased family involvement—that momentarily restore emotional equilibrium rather than exacerbate exhaustion (see Greenhaus & Powell, 2006; Livingston & Judge, 2008).

Another explanation may relate to contextual buffering effects. The results revealed that the indirect effect became significant only when supervisor support was included as a moderating variable, highlighting that guilt’s influence depends on the broader social context. Supportive supervisors may help employees reframe or mitigate guilt by validating work demands or facilitating flexible arrangements (Siddiqi *et al.*, 2024), thereby weakening its detrimental emotional impact (Geraldes *et al.*, 2024). Conversely, when supervisor support is low, guilt may intensify employees’ emotional strain. This aligns with social support and conservation of resources theories (Hobfoll, 1989), suggesting that the availability of resources can offset emotional losses associated with WFC (Hobfoll *et al.*, 2018).

Furthermore, the subjective nature of guilt (Kogan *et al.*, 2022) and sample characteristics might have attenuated the mediation. Guilt is highly individual and contingent on personal values (Aarntzen *et al.*, 2023), family roles (Chen *et al.*, 2024), and social

expectations (Lewis, 1993). The relatively young sample (mean age = 31 years) likely included many participants without dependent children—an important group difference, as parental status, especially among mothers, is a well-documented predictor of work–family guilt (Dodanwala & Shrestha, 2021; Kish *et al.*, 2020). This may have reduced variability in guilt experiences (Gull *et al.*, 2023), weakening its mediating role.

Although these findings diverge from studies that identified guilt as a significant mediator (e.g., Kogan *et al.*, 2022; Zhang *et al.*, 2019), they align with others that found limited or inconsistent mediation effects (Korabik, 2017). The present results thus contribute to clarifying boundary conditions under which guilt operates in the WFC–well-being relationship. They underscore the importance of examining contextual moderators such as supervisor support and of considering individual differences that shape emotional responses to WFC.

Thus, these findings align with prior research (Gull *et al.*, 2023; Yucel *et al.*, 2021), which highlights supervisor support as a crucial mitigating factor for WFC (Byron, 2005; Michel *et al.*, 2011) and a key driver of employee well-being (Geraldes *et al.*, 2024), contributing to improved mental health (Kossek *et al.*, 2011) and reduced emotional exhaustion. Employees who lack resources to balance work and personal life are more likely to experience work-family guilt (Kramer and Kramer, 2020). However, those who perceive strong supervisor support tend to experience lower levels of negative emotions, including guilt (Barnett *et al.*, 2019). According to Ekici *et al.* (2017), the absence of supervisor support and excessive workload account for 48% of WFC cases. Thus, supervisor support plays a pivotal role in organizational functioning (Zhang *et al.*, 2019). Accordingly, this study underscores the importance of supervisor support as a mitigating factor in how employees experience WFC and its subsequent emotional consequences (i.e., guilt and emotional exhaustion).

In summary, individuals experiencing high levels of WFC tend to report greater work-family guilt, which, in turn, contributes to increased emotional exhaustion. This relationship is particularly pronounced among employees with low perceived supervisor support, reinforcing the critical role of supportive leadership in reducing the negative effects of WFC on employees' emotional exhaustion.

### **Practical Implications**

From a practical standpoint, the findings of this study highlight the central role of supervisory support in mitigating the emotional costs of WFC. Organizations should therefore raise awareness among supervisors about the importance of providing consistent, empathetic, and family-supportive leadership. Specifically, supervisors can be trained to recognize signs of work-family strain, validate employees' family-related needs, and foster open communication regarding boundary management. Research suggests that targeted supervisor training programs—for instance, those focusing on family-supportive supervisory behaviors, active listening, and perspective taking—can significantly reduce employees' work-family stress and improve well-being (Barnett *et al.*, 2019; Gonzalez-Morales *et al.*, 2016). Such programs may include modules on emotional intelligence, constructive feedback, recognition, and workload management to help supervisors better respond to employees' needs and model healthy work-family integration.

Beyond supervisory interventions, organizations can complement these efforts with employee-oriented initiatives that promote effective work-family management. Examples include workshops on time and stress management, communication skills, and strategies for managing caregiving responsibilities. These initiatives empower employees to navigate competing role demands more effectively and reduce guilt associated with work-family imbalance (Chirico *et al.*, 2020).

In addition, implementing flexible work arrangements—such as flexible scheduling, remote work options, or compressed workweeks—can help employees regain control over their time and facilitate better work–family integration (Carlson *et al.*, 2021). However, flexibility alone is not sufficient; organizations must also foster a culture that normalizes its use and prevents stigma against employees who take advantage of such policies. Clear communication of policy intent, visible endorsement by top management, and regular evaluation of employee satisfaction with flexibility practices are key to ensuring their effectiveness (Barnett *et al.*, 2019). By adopting these recommended practices, achieving a better work-family balance is expected to become more feasible, thereby reducing the guilt associated with this dynamic and mitigating emotional exhaustion.

### **Limitations and Suggestions for Future Research**

Despite its strengths, this study has several limitations. Firstly, the gender imbalance among participants—77.6% of whom were female—limit the generalizability of the findings. Additionally, the use of a convenience sample further restricts the applicability of the results to broader populations. Another limitation is that the data collection process relied exclusively on online surveys, potentially limiting sample diversity, as participation required internet access. Additionally, the study may have been subject to self-selection bias, as there was no control over participants’ environments when they completed the questionnaire.

Lastly, the relatively high attrition rate between waves may have introduced some degree of selective bias, even though attrition analyses and Little’s MCAR test suggested that data were missing at random. This limitation may affect the generalizability and statistical power of the findings. Future studies should aim to minimize attrition through shorter intervals between data collections or enhanced participant engagement strategies. Additionally, longitudinal designs with larger and more diverse samples would help validate

the robustness of the proposed model and clarify the long-term dynamics among work–family conflict, guilt, and emotional exhaustion.

Finally, for future studies, it would be beneficial to expand the scope beyond family life and consider employees' broader personal lives. Some employees may live alone, making the current work–family guilt questions less applicable to them. Future research should also explore additional variables, such as job satisfaction and occupational stress, that may contribute to similar outcomes.

### **Conclusion**

This study concludes that fostering supportive supervisory relationships is a key organizational strategy to promote employee well-being and reduce the detrimental effects of work–family conflict. By showing that work–family conflict increases feelings of guilt and emotional exhaustion, while perceived supervisor support buffers these effects, the study advances understanding of the affective mechanisms and boundary conditions underlying the work–family interface. These findings contribute to the literature by integrating Boundary Theory and Conservation of Resources Theory to explain when and why work–family conflict leads to strain. They also highlight the crucial role of supervisors as frontline resources capable of protecting employees from emotional depletion. From a broader perspective, the results emphasize that cultivating a supportive leadership culture is not only essential for enhancing individual well-being but also for sustaining organizational health.

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**Table 1.***CFA results.*

Models	$\chi^2/df$	CFI	TLI	RMSEA	SRMR
Model 1	2.78	0.93	0.91	0.08	0.05
Model 2	2.87	0.92	0.90	0.09	0.07
Model 3	4.27	0.86	0.83	0.12	0.08
Model 4	10.27	0.59	0.50	0.21	0.13

*Note.* Author's own work.

**Table 2.***Descriptive Statistics.*

Variables	M	SD	CR	AVE	MSV	1	2	3	4	5	$\alpha$
1. WFC <sup>1</sup>	2.67	0.84	0.88	0.60	0.38	(0.77)					0.83
2. Guilt <sup>1</sup>	2.28	0.60	0.88	0.54	0.10	0.57**	(0.73)				0.73
3. EE <sup>1</sup>	3.28	0.95	0.89	0.74	0.38	0.62**	0.32**	(0.86)			0.84
4. PSS <sup>1</sup>	3.33	1.10	0.93	0.82	0.08	-0.20**	-0.28**	-0.27**	(0.90)		0.90
5. Age	32	11	-	-	-	-0.05	0.20**	-0.08	-0.05	-	-
6. Sex <sup>2</sup>	-	-	-	-	-	0.09	0.02	-0.18*	-0.01	-	0.05

Note: N= 396; \*p &lt; 0.05 \*\*p &lt; 0.001.

<sup>1</sup>Scale 1 to 5.<sup>2</sup>Sex: 1- female; 2- male.

WFC = Work-family conflict. EE = Emotional exhaustion; PSS = Perceived supervisor support.

The square roots of the Average Variance Extracted (AVE) are presented in parentheses. M = Mean; SD = Standard Deviation; AVE = Average Variance Extracted; MSV = Maximum Shared Variance; CR = Composite Reliability. Source: Authors' own work.

**Table 3.***Results of the moderated mediation model.*

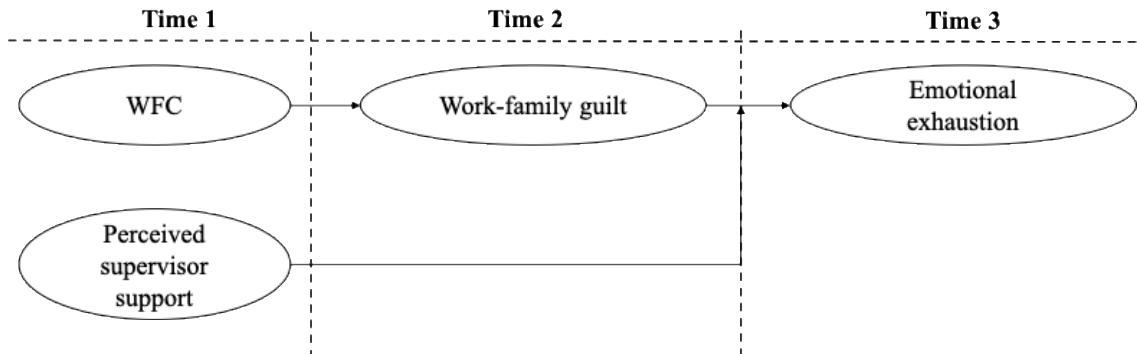
	Guilt		Emotional exhaustion	
	<i>B</i>	<i>LLCI;</i> <i>ULCI</i>	<i>B</i>	<i>LLCI;</i> <i>ULCI</i>
Intercept	2.49***	1.71, 3.27	2.187	1.51; 2.85
WFC	.72***	.57 .87	0.66	.53; .78
Guilt	-	-	-.16***	-.37; .05
PSS	-	-	-.12*	-.21; -.03
Guilt*PSS	-	-	-.20*	-.35; -.05
<i>R</i> <sup>2</sup> = .37***		<i>R</i> <sup>2</sup> = .46		
<i>F</i> (4,341) = 26.930, <i>p</i> < .001		<i>F</i> (1,339) = 29.079, <i>p</i> < .001		
<i>Indirect effect</i>				
WFC → Guilt → Emotional exhaustion		<i>B</i> = -.060; 95% <i>CI</i> = -.146; .020		
<i>Conditional indirect Effect</i>		<i>B</i> = - 0.08** 95% <i>CI</i> -0.14, -0.02		

Note: \*\*\* *p* < 0.001; \*\* *p* < 0.01; \* *p* ≤ 0.05;

Source. Author's own work.

**Figure 1.**

*The hypothesized moderated mediation model linking WFC to emotional exhaustion.*

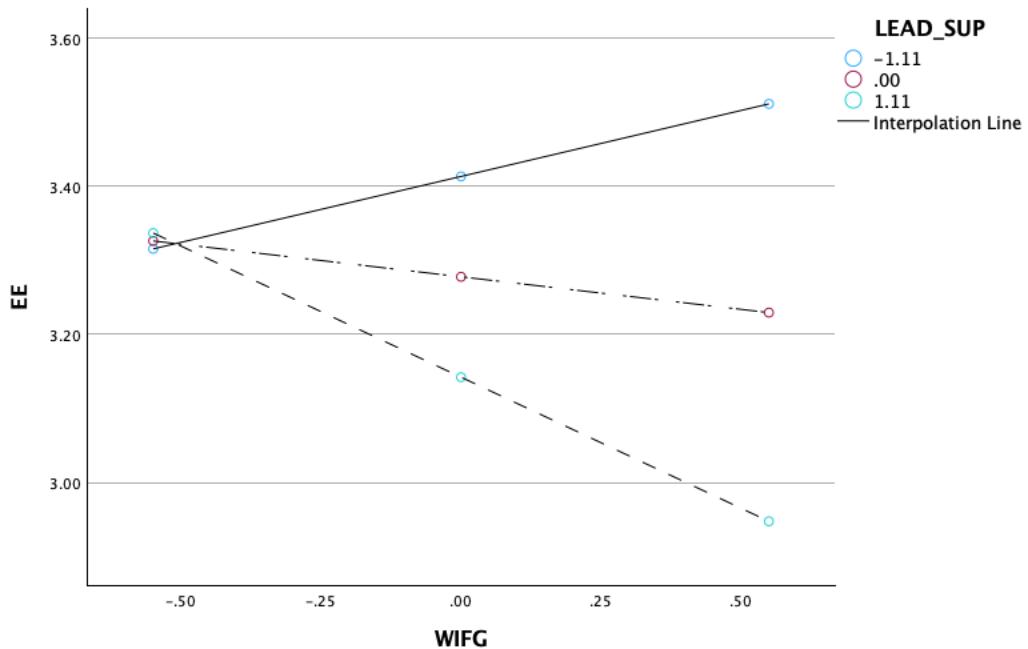


*Note.* WFC = Work-family conflict.

Source: Author's own work.

**Figure 2.**

*The interaction effect between work-family guilt and perceived supervisor support predicting emotional exhaustion.*



Source: Author's own work.

