

## Workplace Ostracism and Its Spillover Effects on Employee Families: The Role of Need for Belonging and Work-Family Segmentation Preference

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### Abstract

Previous research has confirmed that workplace ostracism harms various aspects within employees' organizations; however, the spillover effects of workplace ostracism to domains outside the organization, particularly the family domain, remain poorly understood. This study constructs a moderated mediation model based on Conservation of Resources theory to examine the spillover effects and underlying mechanisms of workplace ostracism on employees' family undermining and family satisfaction. The results indicate that: (1) workplace ostracism has a significant positive effect on employees' family undermining and a significant negative effect on family satisfaction; (2) work stress mediates the relationship between workplace ostracism and both family undermining and family satisfaction; (3) employees' need for belonging moderates the influence of workplace ostracism on work stress, and also moderates the mediating role of work stress between workplace ostracism and both family undermining and family satisfaction; (4) employees' work-family segmentation preference moderates the effects of work stress on family undermining and family satisfaction, and also moderates the indirect effect of workplace ostracism on family undermining and family satisfaction via work stress.

### Full Text

#### Preamble

#### Spillover Effects of Workplace Ostracism on Employee Family Life: The Role of Need for Affiliation and Work-Home Segmentation Preference

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## Abstract

Previous research has confirmed that workplace ostracism harms numerous aspects of employees' organizational functioning, yet the spillover effects of workplace ostracism beyond organizational boundaries—particularly into the family domain—remain poorly understood. Drawing on conservation of resources theory, this study develops and tests a moderated mediation model examining the spillover effects of workplace ostracism on family undermining and family satisfaction, as well as the underlying mechanisms. The findings indicate that: (1) workplace ostracism has a significant positive effect on family undermining and a significant negative effect on family satisfaction; (2) work stress mediates the relationship between workplace ostracism and both family undermining and family satisfaction; (3) employees' need for affiliation moderates the effect of workplace ostracism on work stress and the indirect effect of workplace ostracism on family undermining and family satisfaction via work stress; and (4) work-home segmentation preference moderates the effects of work stress on family undermining and family satisfaction, as well as the indirect effects of workplace ostracism on these outcomes through work stress.

**Keywords:** workplace ostracism, family undermining, family satisfaction, need for affiliation, work-home segmentation preference

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## 1. Introduction

As organizational structures evolve rapidly and workplace competition intensifies, conflicts of interest and interpersonal friction within organizations have become inevitable, leading to a rising trend of “cold” violence in the workplace (Liu et al., 2013). The differential order atmosphere and “circle culture” prevalent in Chinese organizational contexts render workplace ostracism particularly pervasive and enduring in its harmful effects (Zhu et al., 2017; Chen et al., 2017). Additionally, the traditional Chinese cultural values of tolerance and restraint, embodied in sayings such as “repay evil with good” and “be strict with oneself and lenient with others,” make the harm experienced by ostracized individuals more concealed and persistent compared to other forms of “cold” violence (Wu et al., 2012; Zhu et al., 2017). While existing research has primarily examined the detrimental effects of workplace ostracism on psychological states, attitudes, behaviors, and performance within organizations, few studies have investigated its spillover effects beyond organizational boundaries (Chen et al., 2017; Jiang & Zhang, 2021). Compared to Western societies, Chinese employees maintain

relatively blurred boundaries between work and family (Au et al., 2009), making adverse workplace experiences more likely to spill over into the family domain through employees' psychological and emotional states, thereby affecting their family life and subsequent work performance (Ashforth et al., 2000; Edwards & Rothbard, 2000; Ten Brummelhuis & Bakker, 2012).

Spillover effects emphasize the mutual influence and cross-domain transfer processes between work and family domains. Family undermining represents a typical low-intensity deviant behavioral tendency in negative work-to-family spillover that undermines family harmony (Hoobler & Brass, 2006; Restubog et al., 2011), while family satisfaction serves as a crucial indicator of positive spillover and a foundation for healthy family functioning and overall family well-being (Liu et al., 2013; Ten Brummelhuis & Bakker, 2012). Previous research has demonstrated that organizational factors can spill over organizational boundaries to affect the family domain. For instance, ethical leadership and LMX have been shown to positively enhance family satisfaction (Liao et al., 2015; Liao et al., 2016), whereas abusive supervision and workplace sexual harassment create difficulties in employees' family lives (Hoobler & Brass, 2006; Xin et al., 2018). The first question this study addresses is whether the detrimental effects of workplace ostracism spill over into the family domain, specifically whether it leads to family undermining and reduces family satisfaction.

Second, conservation of resources theory provides a theoretical framework for understanding the specific spillover mechanisms of workplace ostracism from the perspective of resource depletion and acquisition. The pain of being ignored and excluded, the blockage of critical resources, and the destruction of social relationships caused by workplace ostracism all consume employees' psychological resources. Resource depletion and its subsequent chain reactions generate persistent stress that may spill over into the family domain (Liu et al., 2013; Yan & Wang, 2016; Howard et al., 2020). Therefore, the second question this study examines is how the negative effects of workplace ostracism spill over into the family domain and whether work stress serves as a critical 穿透 factor in this spillover effect.

Furthermore, conservation of resources theory suggests that individual characteristics largely determine how people perceive resource loss and their tendencies to protect and acquire resources. Different individuals assign different subjective values to lost resources, resulting in varying intensities and durations of stress responses (Hobfoll, 1989; Hobfoll, 2001). Individuals who value collective belonging and others' approval are more sensitive to ostracism, and workplace ostracism causes greater resource loss for them (O' Fallon & Butterfield, 2011). Thus, the third question this study explores is whether individuals with different levels of need for affiliation experience workplace ostracism differently in terms of stress perception and behavioral responses, thereby affecting the spillover effects of workplace ostracism on family undermining and family satisfaction.

Finally, individuals' work-home segmentation preference is a crucial factor determining the permeability and segmentation of work-family boundaries (Kreiner,

2006; Nippert-Eng, 2008). Conservation of resources theory posits that when individuals experience resource loss, they substitute and replenish resources from other domains. Work-home segmentation preference largely determines the extent to which individuals direct these substitute resources toward the family domain, thereby determining the degree to which stress responses spill over into family life (Hobfoll, 2001). Therefore, the fourth question this study investigates is whether the transmission of work stress to the family domain differs across levels of work-home segmentation preference, thereby influencing the spillover effects from workplace ostracism to the family domain. The overall research model is illustrated in Figure 1 [Figure 1: see original paper].

### 1.1 Workplace Ostracism and Family Undermining and Family Satisfaction

Conservation of resources theory posits that individuals strive to retain, protect, build, and acquire resources, which include not only material, conditional, and social resources but also psychological, control, and energy resources. Resource loss has far greater and more enduring effects than resource gain, triggering a series of psychological and physical consequences during and after the loss process (Hobfoll, 1989; Hobfoll, 2001; Hobfoll et al., 2018). Workplace ostracism refers to employees' subjective experiences of being ignored, excluded, and isolated by leaders, colleagues, and others in the workplace (Ferris et al., 2008). Employees who experience workplace ostracism are prone to anxiety, depression, and other negative emotions, requiring them to expend additional time and energy to evaluate, suppress, and regulate these emotions and psychological pressures, which consumes substantial psychological resources (Wu et al., 2010; Hagger et al., 2010; Lee et al., 2016). Meanwhile, conservation of resources theory suggests that individuals who suffer resource loss will strategically invest in new resources to escape the loss state (Hobfoll, 2002; Halbesleben et al., 2014; Hobfoll et al., 2018). To overcome interpersonal barriers, ostracized employees often need to consume more energy and time to speculate about others' intentions, assess the interpersonal environment, and seek reasons for being ignored, consciously engaging in prosocial or ingratiating behaviors to escape isolation, thereby triggering further loss of energy and control resources and ultimately entering a "resource loss spiral" (Kang & Peng, 2018; Zhu et al., 2017).

On the one hand, prolonged negative emotion control and attempts to repair interpersonal relationships trap employees in a resource loss spiral. Individuals with significant resource loss or near depletion tend to exhibit irrational, self-control deficient, and low future-oriented behavioral tendencies (Ito & Brothridge, 2003; Halbesleben & Buckley, 2004; Baumeister et al., 2007). Within the workplace, these tendencies manifest as workplace incivility and counterproductive work behaviors (Lee et al., 2016; Zhao et al., 2013). When resource depletion spills over into family life, employees caught in the resource loss spiral exhibit low-intensity negative behaviors and tendencies at home, such as negative venting toward family, expressing boredom and undermining attitudes

toward family members, and even verbal insults (Ten Brummelhuis & Bakker, 2012; Liu et al., 2015). Therefore, we propose:

**H1:** Workplace ostracism has a significant positive effect on family undermining.

On the other hand, according to conservation of resources theory, individuals whose resources are depleted in a particular domain need to acquire resources from other domains to substitute and replenish them. Ostracized individuals experiencing resource loss will inevitably occupy various resources from the family domain, leaving them with insufficient time and energy to attend to and experience family happiness (Halbesleben, 2006; Ten Brummelhuis & Bakker, 2012). Conservation of resources theory also suggests that individuals in a state of resource loss experience significant changes in their resource evaluation criteria, intensifying their expectations and demands for resource replenishment from their surroundings (Hobfoll, 1989; Hobfoll, 2001; Hobfoll, 2002; Hobfoll et al., 2018). Family satisfaction represents individuals' subjective evaluation of family life quality based on their own standards and expectations (Carlson et al., 2010). Employees who experience long-term resource deficiency, depletion, or near-exhaustion hold higher demands and expectations for resource replenishment from the family domain. With unchanged objective family conditions, ostracized employees experience lower family satisfaction due to their relatively elevated expectations not being met (Halbesleben & Buckley, 2004; Hobfoll et al., 2018). Therefore, we propose:

**H2:** Workplace ostracism has a significant negative effect on family satisfaction.

## 1.2 The Mediating Role of Work Stress

Work stress refers to employees' psychological reactions to perceived threats and depletion of work resources and behaviors in the work environment (House & Rizzo, 1972). According to conservation of resources theory, workplace ostracism, as a negative interpersonal experience and distress within the workplace, constitutes a typical hindrance stressor. On the one hand, employees who feel ignored by leaders or colleagues struggle to control the workplace environment and must consume additional resources to regain environmental control, a process that generates psychological pressure. On the other hand, workplace ostracism blocks employees' organizational and social relationships, preventing them from obtaining supportive information and critical resources needed to improve work skills and solve work problems from organizational members, ultimately leaving them unable to meet work demands and tasks and resulting in high anxiety and stress (Halbesleben, 2006).

Workplace ostracism blocks both affective and instrumental pathways of work-family enrichment, triggering two types of stress strain responses that spill over into the family domain and disrupt employees' mental states and behavioral tendencies (Greenhaus & Powell, 2006; Lim et al., 2008). The first is an affective-based stress strain response. The accumulated negative emotions and stress in ostracized employees are difficult to vent and release within the workplace

due to organizational norms. Venting or undermining toward family members becomes the most direct way for ostracized employees to release pressure (Liu et al., 2013; Nohe et al., 2015; Yan & Wang, 2016). In this situation, employees become more sensitive to conflict perception in the family domain and more prone to boredom with family life (Wu et al., 2012). The second is a behavior-based stress strain response. The self-doubt and self-defeating feelings caused by poor interpersonal relationships in the workplace also spill over into the family domain through stress responses, significantly reducing employees' efficacy in fulfilling family roles (Yan & Wang, 2016) and potentially leading them to engage in nonviolent but destructive behaviors to relieve stress, such as aggressive or undermining behavioral tendencies in family communication (Swimberghe et al., 2014). Therefore, we propose:

**H3:** Work stress mediates the relationship between workplace ostracism and family undermining.

The resource depletion caused by workplace ostracism leads to a sharp increase in employees' internal pressure. Persistent hindrance stressors easily trap employees in a negative emotional vortex from which they struggle to escape. When switching to family roles, employees tend to treat family life with negative emotions and attitudes under the shadow of this negativity (Hobfoll, 2001; Hobfoll, 2002; Nohe et al., 2015). Meanwhile, psychological stress stimulates and induces ostracized individuals to focus more on negative factors in work and family and to process environmental information negatively (Forgas & George, 2001). On the other hand, ostracized individuals tend to release and resolve negative emotions and work stress in the family domain, unconsciously raising their subjective demands and expectations of family members and the environment (Halbesleben & Buckley, 2004; Hobfoll et al., 2018). The intensification of negative information processing and the elevation of subjective demands and expectations reduce employees' subjective satisfaction with their families (Liu et al., 2013). Therefore, we propose:

**H4:** Work stress mediates the relationship between workplace ostracism and family satisfaction.

### 1.3 The Moderating Role of Need for Affiliation

Conservation of resources theory indicates that individual characteristics largely determine how individuals perceive resource loss and their tendencies to protect and acquire resources. Differences in subjective value judgments of lost resources among different individuals determine the intensity and duration of their stress responses (Hobfoll, 1989; Hobfoll, 2001). Need for affiliation refers to individuals' intrinsic need to establish and maintain social connections with others (Baumeister & Leary, 1995). Individuals with different need for affiliation characteristics experience varying degrees of resource depletion from workplace ostracism. Specifically, employees with high need for affiliation tend to maintain close relationships with others and possess stronger interpersonal sensitivity,

making them more sensitive and attentive to exclusion, rejection, and isolation from others (Pickett et al., 2004; O'Fallon & Butterfield, 2011). Moreover, when high need for affiliation individuals experience ostracism, they are more inclined to adopt a series of measures to compensate for their connection with others (such as prosocial or ingratiating behaviors), which consume substantial psychological resources and further intensify work stress (Zhu et al., 2017). Therefore, we propose:

**H5:** Need for affiliation moderates the relationship between workplace ostracism and work stress, such that the positive relationship between workplace ostracism and work stress is stronger for employees with stronger need for affiliation.

Furthermore, individuals with higher need for affiliation care more about collective belonging and others' approval, making them more sensitive to resource loss associated with ostracism and triggering deeper work stress and more persistent subsequent stress responses, which in turn affect the family domain by increasing family undermining tendencies and decreasing family satisfaction (Hobfoll, 1989; Hobfoll, 2001; Pickett et al., 2004). When employees have low need for affiliation, the sense of resource deprivation from perceived workplace ostracism is weaker, resulting in lower work stress and alleviating the spillover effects of workplace ostracism on family undermining and family satisfaction. Therefore, we propose:

**H6:** Need for affiliation moderates the indirect relationship between workplace ostracism and family undermining via work stress, such that this indirect relationship is stronger for employees with stronger need for affiliation.

**H7:** Need for affiliation moderates the indirect relationship between workplace ostracism and family satisfaction via work stress, such that this indirect relationship is stronger for employees with stronger need for affiliation.

#### 1.4 The Moderating Role of Work-Home Segmentation Preference

Individual work-home segmentation preference is an important factor determining the permeability and segmentation of work-family boundaries (Kreiner, 2006; Nippert-Eng, 2008). Conservation of resources theory suggests that when individuals experience resource loss, they substitute and replenish resources from other domains. Work-home segmentation preference largely determines the extent to which individuals direct these substitute resources toward the family domain, thereby determining the degree to which stress responses spill over into the family domain (Hobfoll, 2001). Individuals with high work-home segmentation preference maintain strict boundaries and low permeability between work and family domains (Liu et al., 2013; Wang et al., 2019; Xin et al., 2018). These employees better control the impact of resource depletion within the work domain or utilize non-family domains such as friendship for resource substitution and replenishment (Ito & Brotheridge, 2003; Halbesleben et al., 2014). In contrast, individuals with low work-home segmentation preference tend to treat the family as a "safe haven" for resource depletion, releasing stress more through

venting or undermining toward family members, further widening the gap between family expectations and actual perceptions (Xin et al., 2018). Therefore, we propose:

**H8:** Work-home segmentation preference moderates the relationship between work stress and family undermining, such that the positive relationship between work stress and family undermining is weaker for employees with stronger work-home segmentation preference.

**H9:** Work-home segmentation preference moderates the relationship between work stress and family satisfaction, such that the negative relationship between work stress and family satisfaction is weaker for employees with stronger work-home segmentation preference.

Furthermore, even when experiencing cold ignoring and isolated exclusion from others, employees with higher work-home segmentation preference tend to control work stress within the work domain, preventing venting and undermining behaviors for releasing pressure from spilling over into family life (Xin et al., 2018). Meanwhile, when switching to family roles, employees with high work-home segmentation preference can quickly detach from the high-pressure and negative emotional vortex, thereby weakening the stress spillover of workplace ostracism on family satisfaction (Kreiner, 2006). Therefore, we propose:

**H10:** Work-home segmentation preference moderates the indirect relationship between workplace ostracism and family undermining via work stress, such that this indirect relationship is weaker for employees with stronger work-home segmentation preference.

**H11:** Work-home segmentation preference moderates the indirect relationship between workplace ostracism and family satisfaction via work stress, such that this indirect relationship is weaker for employees with stronger work-home segmentation preference.

## 2. Method

### 2.1 Sample and Procedure

To enhance the reliability and robustness of our findings and strengthen both internal and external validity, this study tested hypotheses using two samples. Both Sample 1 and Sample 2 employed multi-timepoint questionnaire data collection across three waves, with one-month intervals for Sample 1 and one-week intervals for Sample 2. In Sample 1, we controlled for employees' initial states of family undermining and family satisfaction (collected at T1) to partially isolate the effects of other interfering factors on these outcomes and better highlight the net effects of workplace ostracism spillover on employees' family attitudes and behaviors. In Sample 2, we controlled for negative affect and emotional exhaustion (Jiang et al., 2020; Howard et al., 2020), which may influence work-family boundaries in the mechanism of workplace ostracism, to rule out interference from individual emotion-related factors in the work stress spillover mechanism.

**Sample 1:** We conducted three-wave surveys among frontline service employees from 16 tourism service enterprises. We randomly selected 444 employees who lived with their spouses or other family members and assigned each a unique ID. The first-wave questionnaire (T1) collected demographic information, workplace ostracism, need for affiliation, work-home segmentation preference, and initial states of family undermining and family satisfaction. The second-wave questionnaire (T2) measured work stress. The third-wave questionnaire (T3) assessed family undermining and family satisfaction. We distributed 444 employee questionnaires and, after eliminating responses from employees who had left or changed positions and invalid questionnaires across the three waves, obtained 264 valid questionnaires, yielding a valid response rate of 59.46%. Among these 264 employees, 20.45% were male, the average age was 30.32 years ( $SD = 8.89$ ), and the average number of children was 0.60 ( $SD = 0.62$ ).

**Sample 2:** We conducted three-wave surveys among frontline service employees from five hotel and tourism service enterprises. Participants were required to live with their spouses or other family members. The first-wave questionnaire (T1) collected demographic information, workplace ostracism, need for affiliation, and work-home segmentation preference. The second-wave questionnaire (T2) measured work stress, emotional exhaustion, and negative affect. The third-wave questionnaire (T3) assessed family undermining and family satisfaction. We distributed 300 employee questionnaires and obtained 239 valid questionnaires, yielding a valid response rate of 79.67%. Among these employees, 42.3% were male, the average age was 31.70 years ( $SD = 10.65$ ), and the average number of children was 0.79 ( $SD = 0.85$ ).

## 2.2 Measures

This study utilized authoritative scales that have been widely used in domestic and international research and have demonstrated good reliability and validity. To ensure consistency between the translated English scales and their original versions, we strictly followed the back-translation procedure. Additionally, before large-scale data collection, we conducted a small-scale pilot test with 120 frontline employees from four hotels and made minor wording adjustments based on feedback. All variables in the pilot test and both formal surveys were measured using a 5-point Likert scale.

**Workplace Ostracism (T1):** We adopted the 10-item scale developed by Ferris et al. (2008). Sample items include: “Colleagues/leaders in the organization often avoid contact with me” and “Colleagues/leaders in the organization often ignore me.” Cronbach’s  $\alpha$  coefficients were 0.97 for both Sample 1 and Sample 2.

**Need for Affiliation (T1):** We used the 4-item scale developed by O’ Fallon and Butterfield (2011). Sample items include: “I prefer to work as a member of an organization rather than alone” and “I like to belong to a certain organization.” Cronbach’s  $\alpha$  coefficients were 0.81 for Sample 1 and 0.82 for Sample 2.

**Work Stress (T2):** We adopted the 7-item scale developed by House and Rizzo (1972). Sample items include: “I often feel anxious because of work” and “Work-related matters often keep me awake at night.” Cronbach’s  $\alpha$  coefficients were 0.90 for Sample 1 and 0.86 for Sample 2.

**Work-Home Segmentation Preference (T1):** We used the 4-item scale developed by Kreiner (2006). Sample items include: “When I am at home, I don’t like to think about work” and “I don’t like work matters to intrude on my family life.” Cronbach’s  $\alpha$  coefficients were 0.84 for Sample 1 and 0.93 for Sample 2.

**Family Undermining (T1, T3):** We adopted the 3-item scale developed by Hoobler and Brass (2006). Sample items include: “I often vent my anger and resentment on family members” and “I often show boredom with my family members.” Cronbach’s  $\alpha$  coefficients were 0.89 at T1 and 0.91 at T3 for Sample 1, and 0.92 for Sample 2.

**Family Satisfaction (T1, T3):** We used the 3-item scale developed by Carlson et al. (2010). Sample items include: “Overall, I am very satisfied with my family” and “Overall, I like my family very much.” Cronbach’s  $\alpha$  coefficients were 0.68 at T1 and 0.85 at T3 for Sample 1, and 0.93 for Sample 2.

**Emotional Exhaustion (T2):** We adopted the 5-item scale developed by Maslach et al. (1986). Sample items include: “My work makes me feel mentally exhausted” and “My work makes me feel like I’m about to collapse.” Cronbach’s  $\alpha$  coefficient was 0.88 for Sample 2.

**Negative Affect (T2):** We used the 10-item scale developed by Watson et al. (1988). Sample items include: “In the past week, I often felt upset” and “In the past week, I often felt depressed.” Cronbach’s  $\alpha$  coefficient was 0.97 for Sample 2.

**Control Variables:** Previous research has shown that employees’ age, gender, and number of children under 18 affect their family attitudes and behaviors (Wu et al., 2012; Yang et al., 2014; Zhou et al., 2019). Therefore, we treated these demographic factors as control variables in both surveys. Additionally, we controlled for employees’ affiliated enterprises by creating dummy variables in the regression equations to control for variance at the organizational level.

## 3. Results

### 3.1 Confirmatory Factor Analysis

We conducted confirmatory factor analysis using AMOS 24.0. The results are presented in Table 1. In Sample 1, the six-factor model fit the data well ( $\chi^2(419) = 746.42$ , RMSEA = 0.055, CFI = 0.95, TLI = 0.94) and significantly better than alternative models. In Sample 2, the eight-factor model demonstrated good fit ( $\chi^2(961) = 1711.77$ , RMSEA = 0.057, CFI = 0.93, TLI = 0.92) and

significantly outperformed competing models. These results indicate good discriminant validity among variables in both samples.

### 3.2 Common Method Bias Test

Although this study employed a self-report design, the time-lagged research design helped reduce common method bias (Podsakoff et al., 2003). To further enhance the rigor of our conclusions, we followed the recommendations of Podsakoff et al. (2003) and Zhou and Long (2004) by using the unmeasured latent method factor approach to assess common method bias. We introduced a common method variance (CMV) factor in the confirmatory factor analysis. As shown in Table 1, in Sample 1, the six-factor model plus CMV ( $\chi^2(388) = 693.11$ , RMSEA = 0.055, CFI = 0.95, TLI = 0.94) showed minimal improvement over the six-factor model. Similarly, in Sample 2, the eight-factor model plus CMV ( $\chi^2(915) = 1548.71$ , RMSEA = 0.054, CFI = 0.94, TLI = 0.93) did not substantially improve fit over the eight-factor model. The negligible changes in RMSEA, CFI, and TLI indicate that common method bias was within acceptable limits in both samples (Wen et al., 2018).

### 3.3 Descriptive Statistics

Table 2 presents the means, standard deviations, and correlations among major variables. Workplace ostracism was positively correlated with family undermining (T3) in both Sample 1 ( $r = 0.26$ ,  $p < 0.01$ ) and Sample 2 ( $r = 0.24$ ,  $p < 0.01$ ), and negatively correlated with family satisfaction (T3) in Sample 1 ( $r = -0.24$ ,  $p < 0.01$ ) and Sample 2 ( $r = -0.22$ ,  $p < 0.01$ ). Additionally, in Sample 1, family undermining and family satisfaction at T1 and T3 showed moderate correlations ( $r_{\text{family}} \text{ undermining} = 0.17$ ,  $p < 0.01$ ;  $r_{\text{family}} \text{ satisfaction} = 0.29$ ,  $p < 0.01$ ). The modest correlation coefficients may be because individuals' subjective family undermining and family satisfaction are influenced by numerous factors in the short to medium term, such as occasional workplace aggression (Xin et al., 2018; Zhu et al., 2019) and customer mistreatment unique to tourism service industries (Chi et al., 2018), all of which can spill over into the family domain. This further demonstrates the necessity of controlling for initial states of family undermining and family satisfaction. In Sample 2, work stress, negative affect, and emotional exhaustion were all positively correlated with workplace ostracism and family undermining, and negatively correlated with family satisfaction.

### 3.4 Hypothesis Testing

**Main Effects Testing.** To test the main effect hypotheses H1 and H2, we regressed family undermining and family satisfaction on workplace ostracism while controlling for gender, age, and number of children under 18. As shown in Tables 3 and 4, workplace ostracism positively affected family undermining (Sample 1:  $M2$ ,  $\beta = 0.22$ ,  $p < 0.01$ ; Sample 2:  $M10$ ,  $\beta = 0.25$ ,  $p < 0.01$ )

and negatively affected family satisfaction (Sample 1: M6,  $\beta = -0.17$ ,  $p < 0.05$ ; Sample 2: M15,  $\beta = -0.23$ ,  $p < 0.01$ ). Thus, H1 and H2 were supported.

**Mediation Effects Testing.** We tested the mediating role of work stress using both the stepwise approach (Baron & Kenny, 1986) and bootstrapping analysis (Edwards & Lambert, 2007). In Sample 1, as shown in Tables 3 and 5, workplace ostracism had a significant positive effect on work stress (M20,  $\beta = 0.36$ ,  $p < 0.01$ ). Work stress had a significant positive effect on family undermining (M3,  $\beta = 0.32$ ,  $p < 0.01$ ) and a significant negative effect on family satisfaction (M7,  $\beta = -0.20$ ,  $p < 0.01$ ). When both workplace ostracism and work stress were entered simultaneously, the effects of workplace ostracism on family undermining and family satisfaction became non-significant, while work stress remained a significant predictor of family undermining (M4,  $\beta = 0.29$ ,  $p < 0.01$ ) and family satisfaction (M8,  $\beta = -0.17$ ,  $p < 0.01$ ). In Sample 2, as shown in Tables 4 and 6, workplace ostracism had a significant positive effect on work stress (M32,  $\beta = 0.28$ ,  $p < 0.01$ ). After controlling for negative affect and emotional exhaustion, work stress had a significant positive effect on family undermining (M12,  $\beta = 0.25$ ,  $p < 0.01$ ) and a significant negative effect on family satisfaction (M17,  $\beta = -0.22$ ,  $p < 0.01$ ). When both workplace ostracism and work stress were entered simultaneously, the effects of workplace ostracism on family undermining and family satisfaction became non-significant, while work stress remained a significant predictor of family undermining (M13,  $\beta = 0.23$ ,  $p < 0.01$ ) and family satisfaction (M18,  $\beta = -0.20$ ,  $p < 0.01$ ). Combined with the results for H1 and H2, these findings indicate that work stress mediates the relationships between workplace ostracism and both family undermining and family satisfaction, supporting H3 and H4. Additionally, bootstrapping results with 5,000 resamples showed that in Sample 1, the 95% confidence interval for the indirect effect of work stress on the relationship between workplace ostracism and family undermining was [0.06, 0.18], and for workplace ostracism and family satisfaction was [-0.10, -0.02], with neither interval containing zero. In Sample 2, when simultaneously examining emotional exhaustion and work stress as mediators, the 95% confidence interval for the indirect effect on family undermining was [0.02, 0.12], and for family satisfaction was [-0.13, -0.02], again excluding zero. Thus, H6 and H7 received further support.

**Moderation Effects Testing.** We tested moderation effects using interaction terms as recommended by Cohen et al. (2013). To reduce multicollinearity, we standardized all variables before computing interaction terms. As shown in Tables 5 and 6, the interaction between workplace ostracism and need for affiliation positively affected work stress (Sample 1: M22,  $\beta = 0.14$ ,  $p < 0.05$ ; Sample 2: M34,  $\beta = 0.20$ ,  $p < 0.01$ ), indicating that the positive relationship between workplace ostracism and work stress is stronger for employees with stronger need for affiliation, supporting H5. The interaction between work stress and work-home segmentation preference negatively affected family undermining (Sample 1: M26,  $\beta = -0.20$ ,  $p < 0.01$ ; Sample 2: M38,  $\beta = -0.19$ ,  $p < 0.01$ ) and positively affected family satisfaction (Sample 1: M30,  $\beta = 0.16$ ,  $p < 0.01$ ; Sample 2: M42,  $\beta = 0.23$ ,  $p < 0.01$ ). These results indicate that stronger

work-home segmentation preference weakens the positive relationship between work stress and family undermining and the negative relationship between work stress and family satisfaction, supporting H8 and H9.

To illustrate the interaction effects, we plotted the interactions using values one standard deviation above and below the mean of the moderator variables (Cohen et al., 2013). Figures 2 [Figure 2: see original paper] and 3 [Figure 3: see original paper] show the moderating effect of need for affiliation on the relationship between workplace ostracism and work stress. Figures 4 [Figure 4: see original paper] and 5 [Figure 5: see original paper] depict the moderating effect of work-home segmentation preference on the relationship between work stress and family undermining. Figures 6 [Figure 6: see original paper] and 7 [Figure 7: see original paper] illustrate the moderating effect of work-home segmentation preference on the relationship between work stress and family satisfaction.

**Moderated Mediation Effects Testing.** We followed the procedure recommended by Edwards and Lambert (2007) to test the moderated mediation effects of need for affiliation and work-home segmentation preference. As shown in Table 7, the indirect effect of workplace ostracism on family undermining differed significantly between low and high need for affiliation conditions (Sample 1:  $\Delta\beta = 0.09$ ,  $p < 0.05$ ; Sample 2:  $\Delta\beta = 0.10$ ,  $p < 0.01$ ), with 95% confidence intervals not containing zero, supporting H6. Similarly, the indirect effect of workplace ostracism on family satisfaction differed significantly between need for affiliation conditions (Sample 1:  $\Delta\beta = -0.04$ ,  $p < 0.05$ ; Sample 2:  $\Delta\beta = -0.12$ ,  $p < 0.01$ ), with 95% confidence intervals excluding zero, supporting H7.

Additionally, the indirect effect of workplace ostracism on family undermining differed significantly across levels of work-home segmentation preference (Sample 1:  $\Delta\beta = -0.20$ ,  $p < 0.01$ ; Sample 2:  $\Delta\beta = -0.24$ ,  $p < 0.01$ ), with 95% confidence intervals not containing zero, supporting H10. The indirect effect of workplace ostracism on family satisfaction also differed significantly across work-home segmentation preference levels (Sample 1:  $\Delta\beta = 0.11$ ,  $p < 0.01$ ; Sample 2:  $\Delta\beta = 0.30$ ,  $p < 0.01$ ), with 95% confidence intervals excluding zero, supporting H11.

## 4. Discussion

### 4.1 Theoretical Implications

First, previous research on the consequences of workplace ostracism has primarily focused on its effects on employees' attitudes and behaviors within organizations, with few studies examining the spillover effects of this workplace "cold" violence on employees' family lives (Chen et al., 2017; Howard et al., 2020). Grounded in conservation of resources theory, this study extends the research perspective from the workplace to the family domain. On one hand, it demonstrates that workplace ostracism traps employees in a resource loss spiral, leading to irrational, self-control deficient, and low future-oriented behavioral

tendencies that manifest as family undermining tendencies and behaviors. On the other hand, it shows that resource depletion caused by ostracism not only occupies various resources from the family domain but also raises the standards and expectations for resource replenishment from the family domain, ultimately reducing subjective evaluations of family satisfaction. This research reveals the spillover effects of workplace ostracism on the family domain and extends the antecedent research on family undermining and family satisfaction into the workplace domain (Hobfoll, 1989; Hobfoll, 2001; Hobfoll, 2002; Hobfoll et al., 2018).

Second, previous studies have primarily explained how workplace factors affect family life from the perspectives of work-family enrichment theory and work-family conflict theory (Chen et al., 2009; Li et al., 2015). This study examines the specific mechanisms through which workplace ostracism spills over to affect family undermining and family satisfaction based on conservation of resources theory. On one hand, it analyzes the spillover transmission role of individual work stress in linking workplace “cold” violence to the family domain, further supplementing research on stressors related to workplace “cold” violence (Wu et al., 2012; Xin et al., 2018). On the other hand, after controlling for the effects of negative affect and emotional exhaustion, this study finds that work stress is an important transmission mechanism through which workplace ostracism penetrates the work-family boundary to produce negative spillover effects on the family domain. This responds to calls in existing research for innovative perspectives to examine the “black box” of spillover effects between work and family domains (Greenhaus & Powell, 2006; Lim et al., 2008; Restubog et al., 2011; Swimberghe et al., 2014) and expands the application scope of conservation of resources theory.

Third, this study offers valuable insights into the boundary conditions of workplace ostracism spillover effects from the important perspective of individual traits. Previous research has primarily examined the buffering effects of personal and psychological resources on the negative impacts of workplace ostracism from a resource supplementation perspective (Wu et al., 2012; Cheng et al., 2019), while neglecting how individual traits affect the perceived value of resources lost due to ostracism and the subsequent degree of stress response spillover. This study incorporates two important individual trait variables—need for affiliation and work-home segmentation preference—into the model, expanding the boundary conditions that either amplify (need for affiliation) or buffer (work-home segmentation preference) the effects of workplace ostracism on its outcomes, and providing valid evidence for the application of conservation of resources theory. Moreover, by constructing a moderated mediation model, this study clarifies how employees experiencing workplace ostracism affect their family lives differently through the work stress mediation pathway under varying levels of need for affiliation and work-home segmentation preference. By elucidating the specific effects of these two moderators, this research enhances understanding of workplace ostracism spillover effects and enables targeted strategies for addressing the negative spillover effects of workplace ostracism.

## 4.2 Practical Implications

The findings of this study offer several practical implications. First, managers need to monitor and detect workplace ostracism within organizations in a timely manner and recognize its role as a stressor and its spillover effects on the family domain. Managers can build a harmonious, tolerant, and friendly organizational cultural atmosphere to reduce stressors arising from poor interpersonal relationships at the source. Second, managers should guide employees in effective stress management, provide timely psychological intervention and counseling for ostracized employees, enhance employees' emotional management abilities and stress resilience, and weaken the adverse effects of hindrance stress to prevent spillover into the family domain. Third, employees with high need for affiliation are highly sensitive to workplace ostracism and easily form stressors and spillover triggers. Managers should pay attention to employees' individual traits and provide positive guidance for employees with strong need for affiliation who experience workplace ostracism, amplifying the positive effects of need for affiliation while inhibiting negative effects. Fourth, work-home segmentation preference serves as an effective "firewall" that mitigates the negative impact of work stress on employees' families. Managers need to understand employees' work-home segmentation preferences and establish contingent and personalized organizational boundary management mechanisms.

## 4.3 Limitations and Future Directions

This study has several limitations that warrant further improvement. First, although we employed a multi-timepoint design and various statistical tests confirmed that common method bias did not seriously affect our results, the self-report survey method may still introduce common method bias. Future research could optimize study designs by using diary analysis or matching employees with their primary family members to collect data, further ensuring robustness and incorporating cross-over effects among family members while examining spillover effects. Second, although we controlled for the initial states of dependent variables, we could not completely rule out other factors affecting the outcome variables. Future research could employ experience sampling methods to dynamically track these spillover effects, clarifying specific dynamic spillover processes while exploring relationships among family domain outcome variables. Third, our samples were concentrated in the hotel and tourism service industries, which effectively controlled for industry effects but ignored potential differences in how workplace ostracism in other industries affects family life. The generalizability of our conclusions needs further enhancement, and future research could expand the sampling scope to improve external validity. Fourth, this study focused only on the spillover effects of workplace ostracism. Future research could examine the effects of other workplace "cold" violence behaviors, such as workplace negative gossip and workplace incivility, on the family domain (Yan & Wang, 2016), providing a more comprehensive analysis of how negative workplace behaviors spill over into the family domain.

## 5. Conclusion

Based on conservation of resources theory, this study examined the spillover effects of workplace ostracism on employees' family domain from both positive and negative perspectives. The findings reveal that work stress serves as a critical transmission mechanism in this spillover process. The study further demonstrated that individual need for affiliation and work-home segmentation preference function as boundary conditions at the front and back ends of the spillover effect, respectively. Need for affiliation determines individuals' evaluation of the value of resources lost due to ostracism and their subsequent stress response intensity, while work-home segmentation preference largely determines whether and to what extent individuals direct substitute resource acquisition toward the family domain. This research provides new evidence for the spillover effects of workplace "cold" violence on the family domain and reveals the specific mechanisms through which workplace ostracism spills over to affect employees' family lives.

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## References

[References remain unchanged from the original text]

## Appendix: Scales Used in This Study (5-Point Likert Scale)

### Workplace Ostracism (T1)

Ferris, D. L., Brown, D. J., Berry, J. W., & Lian, H. (2008). The development and validation of the Workplace Ostracism Scale. *Journal of Applied Psychology*, 93(6), 1348-1366.

Sample items:

- "Colleagues/leaders in the organization often avoid contact with me"
- "Colleagues/leaders in the organization often ignore my needs and feelings"

### Need for Affiliation (T1)

O' Fallon, M. J., & Butterfield, K. D. (2011). Moral differentiation: Exploring boundaries of the "monkey see, monkey do" perspective. *Journal of Business Ethics*, 102(3), 379-399.

Sample items:

- "I prefer to work as a member of an organization rather than alone"
- "I like to belong to a certain organization"

**Work Stress (T2)**

House, R. J., & Rizzo, J. R. (1972). Role conflict and ambiguity as critical variables in a model of organizational behavior. *Organizational Behavior and Human Performance*, 7(3), 467-505.

Sample items:

- "I often feel anxious because of work"
- "I constantly think about work matters"

**Work-Home Segmentation Preference (T1)**

Kreiner, G. E. (2006). Consequences of work-home segmentation or integration: A person-environment fit perspective. *Journal of Organizational Behavior*, 27(4), 485-507.

Sample items:

- "When I am at home, I don't like to think about work"
- "I like to leave work behind when I return home"

**Family Undermining (T1, T3)**

Hoobler, J. M., & Brass, D. J. (2006). Abusive supervision and family undermining as displaced aggression. *Journal of Applied Psychology*, 91(5), 1125-1133.

Sample items:

- "I often vent my anger and resentment on family members"
- "I often show boredom with my family members"

**Family Satisfaction (T1, T3)**

Carlson, D. S., Grzywacz, J. G., & Kacmar, K. M. (2010). The relationship of schedule flexibility and outcomes via the work-family interface. *Journal of Managerial Psychology*, 25(4), 330-355.

Sample items:

- "Overall, I am very satisfied with my family"
- "Overall, I really enjoy being at home"

**Emotional Exhaustion (T2)**

Maslach, C., Jackson, S. E., Leiter, M. P., Schaufeli, W. B., & Schwab, R. L. (1986). *Maslach Burnout Inventory* (Vol. 21, pp. 3463-3464). Palo Alto, CA: Consulting Psychologists Press.

Sample items:

- "My work makes me feel mentally exhausted"
- "I feel drained by my work"

**Negative Affect (T2)**

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070.

Sample items:

- “In the past week, I often felt upset”
- “In the past week, I often felt depressed”

*Note: Figure translations are in progress. See original paper for figures.*

*Source: ChinaXiv –Machine translation. Verify with original.*