

## RESEARCH ARTICLE

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# **The Impact of Workplace Ostracism on Work-Related Ruminations: The Moderating Role of Micro-Breaks among Military Service Personnel**

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MARIA IOANA TELECAN

*Department of Psychology, Babeș-Bolyai University, Cluj-Napoca, Romania*

CRISTIAN OPARIUC-DAN

*Department of Psychology, University of Bucharest, Bucharest, Romania*

*Department of Law and Administration Sciences, Ovidius University, Constanța, Romania*

PATRICIA ALBULESCU\*

*Department of Psychology, West University of Timișoara, Timișoara, Romania*

DANA RAD

*Center of Research Development and Innovation in Psychology, Aurel Vlaicu University of Arad, Arad, Romania*

ALEXANDRA COBZEANU

*Alexandru Ioan Cuza University, Faculty of Psychology and Education Sciences, Department of Education Sciences, Iasi, Romania*

## **Abstract**

Previous literature investigated several aspects of workplace ostracism (WO). However, no prior research has explored the link between WO, work-related rumination, and the buffering role of (workplace) micro-breaks in a military context. Evidence regarding the moderating role of micro-breaks in this link is scarce, especially concerning work-related rumination. Building on the Conservation of Resources Theory and the Effort-Recovery Model, this study examined the relations between WO, work-related ruminations, and the potential moderating effect of micro-breaks among non-flight and flight crew personnel within the Romanian Air Force. A cross-sectional survey involving 210 military personnel revealed that WO is related to work-related ruminations. Micro-breaks (related to work and unrelated to work) moderated this relationship. These results' implications, theoretically and practically, are discussed along with suggestions for future research directions.

## **Keywords**

workplace ostracism; work-related ruminations; micro-breaks; military organizations.

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\* Correspondence concerning this article should be addressed dr. Patricia Albulescu, West University of Timisoara, Department of Psychology, 4 Vasile Pärvan Blvd., Timișoara, 300223, România; Phone: +40 761 142 475, email: [patricia.albulescu@e-uvt.ro](mailto:patricia.albulescu@e-uvt.ro)

## **Conflict of interest**

The authors declare that they have no known competing financial interests or personal relationships that could have influenced the work reported in this paper. The authors declare no financial interests/personal relationships which may be considered potential competing interests.

**Data statement:** The datasets generated during and/or analyzed during the current study are available from the corresponding author upon reasonable request.

## Introduction

Workplace ostracism (WO) is a common form of mistreatment that threatens a healthy organizational climate (Dhanani et al., 2021; Al-Atwi et al., 2024) and a prevalent phenomenon encountered in military settings (Wesselmann et al., 2018). Generally, WO is considered "*the extent to which an individual perceives that he or she is ignored or excluded by others*" (Ferris et al., 2008, p. 1348). In the military context, WO can take many forms. For instance, military personnel may feel ostracized when they do not receive attention from supervisors and co-workers (Hsiao et al., 2024), when they are avoided eye contact (Wesselmann et al., 2012), excluded from conversations, not invited to work-related meetings (He et al., 2020; Sanderson, 2017), or ignored during operational activities (Jahanzeb et al., 2018).

In military settings, maintaining social interactions represents a unique relational aspect and an important resource for military personnel (Du Preez et al., 2012; Telecan et al., 2024). Maintaining positive social interactions can support employees and buffer military operational demands' negative mental health consequences (Du Preez et al., 2012; Telecan et al., 2024). As military personnel perform their tasks in socially isolated or stressful work settings, these can weaken social connections and deteriorate their basic needs, ultimately leading to exclusion (Wesselmann et al., 2018).

While the outcomes related to WO are well recognized in professional and civilian contexts (e.g., Srivastava et al., 2024; Zhang et al., 2017), the military settings provide a particularly unique context for exploring WO and the related outcomes (Bedi, 2021; Howard et al., 2020; Wesselmann et al., 2018). Although previous literature has identified various psychological buffers that can alleviate the impact of social exclusion (Bedi, 2021; Howard et al., 2020), the strategies aimed to mitigate this form of mistreatment (e.g., WO; Kim et al., 2017) remain surprisingly underexplored, particularly in military settings. In this regard, we focused on a specific type of behavioral resource – micro-breaks and their potential role in helping

military personnel cope with the negative experience of WO.

To our knowledge, only one study (Al-Atwi et al., 2024) that included a sample of civilian employees has previously explored the causes and consequences of non-purposeful group ostracism in the workplace and the conditions under which it intensifies. Drawing on the Job Demands-Resources Theory (JDR; Bakker & Demerouti, 2018), the study hypothesized and found that recovery opportunities (micro-breaks) and a supportive social feedback climate mitigated the effects of group time pressure and cognitive diversity on non-purposeful group ostracism. Accordingly, our study answers the constant call for research (Al-Atwi et al., 2024; Wesselmann et al., 2018) by exploring the mechanisms linking WO to behavioral resources (e.g., micro-breaks). Thus, it is even more important to identify how WO, conceptualized in the present study as a unique interpersonal stressor at work, drains military employees' resources (Bedi, 2021; Howard et al., 2020; Wang et al., 2023) and how these resources can be replenished at work – for instance, during micro-breaks (e.g., work-related and unrelated to work).

Further, the literature examining how military personnel appraise WO and how this appraisal can lead to work-related rumination is scarce. As military personnel reflect on ostracism experiences, they are more likely to focus on their work's negative rather than positive aspects (He et al., 2020). The literature on the relationship between micro-breaks and work-related ruminations among military personnel is also limited. As a result, the current study aimed to address these gaps by expanding existing knowledge and adding data on the potential moderating role of micro-breaks in the link between WO and work-related ruminations. Considering the tenets of the Conservation of Resources Theory (COR; Hobfoll, 1989) and the Effort-Recovery Model (Meijman & Mulder, 1998), our study examined the impact of WO and work-related ruminations through micro-breaks.

From a practical perspective, military organizations can establish policies and regulations, or military supervisors can signal employees that ostracizing a co-worker is

unacceptable. This approach may effectively reduce intentional ostracism (Al-Atwi et al., 2024; Mlika et al., 2017). Investigating behavioral resources (micro-breaks) is essential to effectively understand and manage WO and interpersonal dynamics in military settings.

### **Workplace ostracism and work-related rumination**

Work-related rumination refers to the "*thought or thoughts directed to issues relating to work, that is/are repetitive in nature*" (Cropley & Zijlstra, 2011, p. 490). Previous studies highlighted that work-related rumination is identified as an antecedent that depletes the mental resources necessary for self-regulation and cognitive functioning after working hours (Jiang & Poon, 2021). When military personnel face exclusion by co-workers and supervisors, work-related ruminations may lead them to reflect on their experience of being ostracized. In other words, work-related rumination may cause the ostracized military personnel to become caught up in the negative experience while attempting to engage socially and connect with others (He et al., 2020).

Furthermore, Zhang et al. (2017) suggested that ruminating about work (at home) was positively related to work-family conflict (WFC), especially for employees who feel neglected, excluded, or ignored in the workplace. The empirical literature suggests that work-related rumination at home can create pressures that prevent employees from fully engaging in their family roles and being available during interactions with family members (He et al., 2020; Junker et al., 2021). Additionally, dealing with negative emotions triggered by persistent work-related thoughts or reflecting on work conditions (e.g., WO) while at home can escalate and extend adverse emotional reactions (Junker et al., 2021).

From the Conservation of Resources Theory (COR; Hobfoll, 1989) perspective, positive interactions between co-workers and supervisors provide military personnel with valuable social resources (Telecan et al., 2024). However, negative experiences like WO can lead to isolation and discrepancies between their desired goals (e.g., sustained

connection) and reality (WO). Such dysfunctional events may deplete essential resources (e.g., time, effort, energy) and trigger work-related rumination (Hobfoll, 1989; Hobfoll et al., 2018), impairing focus and the efficient allocation of resources toward operational tasks, ultimately hindering the fulfillment of professional roles. Considering the previous arguments, we hypothesized that WO would positively relate to work-related rumination (H1).

### **The moderating role of micro-breaks (related to work and unrelated to work) in the relationship between WO and work-related rumination**

One potential job resource that helps buffer against WO is recovery (Meijman & Mulder, 1998). Micro-breaks are recovery opportunities, as short breaks lasting up to 10 minutes, taken from work in the course of a workday, unstructured and informal, during which employees temporarily shift their attention away from work tasks (Bosch et al., 2018; Hunter & Wu, 2016). In military settings, we identify two types of recovery opportunities: unrelated to work and work-related micro-breaks (Albuлесcu et al., 2022; Kim et al., 2022). For example, unrelated activities may include stretching, daydreaming, snacking, or making personal calls. Work-related micro-breaks might involve briefly reviewing mission objectives, organizing equipment, or jotting notes for upcoming tasks (Fritz et al., 2011; Zacher et al., 2014).

Emerging evidence suggests that recovery opportunities can significantly reduce strain and enhance well-being, particularly depending on their use. In one experimental study, police officers engaging in movement-based micro-breaks showed a reduction in work-related stress (Mainsbridge et al., 2020). A recent daily diary study investigated how work demands and micro-breaks relate to end-of-day well-being. Findings showed that micro-breaks were linked to reduced fatigue and increased vigor, with outcomes varying depending on whether the activity during the micro-break was work-related or unrelated

(Albulescu et al., 2025). For military personnel, lunch breaks are often “working lunches” taken at their desks instead of in the dining hall, limiting their opportunities for recovery during the workday and restricting chances for interaction with co-workers. In contrast, if military personnel had more control over their recovery opportunities, a lunch break could become a chance to replenish personal resources and develop interpersonal relationships with other co-workers.

When military personnel were allowed to ruminate on the WO experience, they reported higher levels of distress than those distracted, suggesting less engagement in recovery opportunities (Wesselmann et al., 2018). Providing military personnel recovery opportunities, such as micro-breaks (work-related or unrelated to work), during which they do not think about negative events at the workplace (e.g., WO), can be an optimum strategy for promoting recovery and engagement in positive interpersonal interactions at work.

The Effort-Recovery Model (Meijman & Mulder, 1998) complements the COR theory (Hobfoll, 1989) by emphasizing the importance of recovery processes in mitigating the effects of resource depletion caused by dysfunctional work interactions (WO). According to the E-R Model, employees’ engagement in work-related activities involves an effort that places physiological and psychological strain on them, requiring adequate recovery periods to prevent cumulative stress and resource depletion. When military personnel experience WO, their opportunities to recover resources during working hours may be reduced (Sonnentag & Fritz, 2015). Based on the above arguments, we predicted that micro-breaks (related to work and unrelated to work) would moderate the relationship between WO and work-related ruminations ( $H2$ ).

## Method

### Participants and procedure

This study's protocol was designed in accordance with ethical requirements specific

to the Scientific Council of Babeş-Bolyai University. All participants voluntarily participated in the study and gave written informed consent following the Declaration of Helsinki and Romanian national laws regarding ethical conduct in scientific research, technological development, and innovation.

Our final convenience sample consisted of 210 participants from the Romanian Air Force. Participants ranged from 18 to 65 ( $M = 34.12$ ;  $SD = 9.39$ ). Most participants were males ( $N = 162$ , 77.14%), usually representing the primary workforce in the military settings. The inclusion criterion was related to age ( $> 18$  years). The average job tenure was 101.88 months ( $AS = 8.49$  years). Participation in this study was voluntary, with no incentives related to filling in the survey; answers were collected anonymously, and participants could withdraw at any time. After we were granted permission from the military organization to collect data, each participant answered anonymously to the instruments included in the brochure after signing the informed consent that describes the purpose of the study and ensures the confidentiality of their answers. To respect the anonymity of the participants, each participant generated a separate code according to the instructions provided by the researchers. Military participants were asked to fill in a paper-and-pencil survey. After filling out the survey, each participant handed over the instruments to one of the authors of this study. Our study used a cross-sectional design; data was collected in October 2023.

## Measures

**Workplace ostracism.** We used the 8-item Workplace Ostracism Scale proposed by Ferris et al. (2008). Military personnel answered the items using a 5-point Likert scale ranging from 1 (never) to 5 (every day), with higher scores indicating higher WO. Example items included “Others left the area when you entered” and “Others ignored you at work”. Reliability analysis resulted in a Cronbach's  $\alpha$  value of  $\alpha = .93$  (95% CI [.90; .93]). Ferris et al. (2008) previously demonstrated the scale's validity. In the present study, a CFA was

performed using our data, resulting in an acceptable fitted model ( $\chi^2 = 77.80$ ,  $df = 35$ ,  $p < .001$ ,  $CFI = 1$ ,  $TLI = 1$ ,  $SRMR = .03$ ,  $RMSEA = .08$ ,  $p = .03$ , 90% CI [.05, .10]).

**Work-related rumination.** We used the 10-item scale from The Work-Related Rumination Questionnaire (WRRQ) proposed by Cropley et al. (2012). Military participants answered on a 5-point Likert scale ranging from 1 (very seldom) to 5 (very often). This questionnaire consists of three subscales, each with 5 items: affective rumination, problem-solving pondering, and detachment. In this study, we included only two subscales, *affective rumination* (e.g., "Do you become tense when you think about work-related issues during your free time?",  $\alpha = .89$ , 95% CI [.87; .91]) and *problem-solving pondering* (e.g., "I find solutions to work-related problems in my free time",  $\alpha = .90$ , 95% CI [.88; .92]). The overall Cronbach's alpha for this scale was  $\alpha = .87$  (95% CI [.84; .89]), and a CFA was performed, resulting in a very good-fitted model under the oblique assumption ( $\chi^2 = 55.22$ ,  $df = 34$ ,  $p = .012$ ,  $CFI = 1$ ,  $TLI = 1$ ,  $SRMR = .05$ ,  $RMSEA = .05$ ,  $p = .36$ , 90% CI [.03, .08]).

**Micro-breaks.** The activities performed during micro-breaks were assessed with a formative measure developed by Kim et al. (2017; 2018) and Parker et al. (2017), adapted originally from Fritz et al. (2011). The instrument consists of 17 items, 10 items measuring *non-work-related micro-break*

*activities* ( $\alpha = .88$ , 95% CI [.85, .90]), and 7 measuring work-related micro-break activities ( $\alpha = .92$ , 95% CI [.91, .94]). A 6-point Likert scale was used for collecting responses to all 17 questions, ranging from 0 (not possible at my current job) to 5 (frequently). Besides the behavioral strategies collected, we also enquired about their frequency with 1 item (e.g., "How often do you take these short breaks?") as well as their duration with 1 item (e.g., "Please specify the average duration of such activity carried out"). A CFA was performed, resulting in an acceptable fitted model under the oblique assumption ( $\chi^2 = 506.61$ ,  $df = 118$ ,  $p < .001$ ,  $CFI = .99$ ,  $TLI = .98$ ,  $SRMR = .08$ ,  $RMSEA = .13$ ,  $p < .001$ , 90% CI [0.11, 0.14]).

## Results

We used R (Version 4.3.2; R Core Team, 2023b) and the R-packages *dplyr* (Version 1.1.4; Wickham et al., 2023), *foreign* (Version 0.8.86; R Core Team, 2023a), *kableExtra* (Version 1.3.4.9000; Zhu, 2023), *papaja* (Version 0.1.2; Aust & Barth, 2023), and *tinylab* (Version 0.2.4; Barth, 2023) for all our analyses. Descriptive statistics of the main variables are detailed in Table 1, and some high outliers were observed on variables "Ostracism" (scores over 33), "Micro-breaks - Unrelated to work" (score 100), and "Rumination" (scores over 36), without extreme values.

Table 1. Descriptive statistics

Variables	Mean	SD	Median	Min	Max	Skew (SE)	Kurt (SE)
Workplace Ostracism	18.10	7.36	18	10	42	1.06 (0.17)	0.89 (0.33)
Micro-breaks - Unrelated	42.06	20.07	44	0	100	-0.04 (0.17)	-0.56 (0.33)
Micro-breaks - Related	35.14	16.27	37	0	70	-0.17 (0.17)	-0.69 (0.33)
Rumination	19.37	6.45	18	10	40	0.83 (0.17)	0.08 (0.33)

The failure to meet the assumptions of univariate normality for some variables led to the use of Spearman's  $\rho$  correlation matrix. Most of Spearman's  $\rho$  correlations were statistically significant, with values between .09 and .70.

Results (see Table 2) suggested a positive association between ostracism, micro-breaks, unrelated to work ( $\rho = .16, p = .017$ ), and rumination ( $\rho = .22, p = .001$ ), and no

association between ostracism and micro-breaks related to work ( $\rho = .09, p = .189$ ). Micro-breaks - unrelated to work were positively associated with micro-breaks - related to work ( $\rho = .70, p < .001$ ) and rumination ( $\rho = .28, p < .001$ ), and micro-breaks - related to work were positively associated with rumination ( $\rho = .32, p < .001$ ).

Table 2. Spearman zero-order correlation matrix

	1	2	3	4
(1) Ostracism	.92			
(2) Micro-breaks - Unrelated	.16*	.88		
(3) Micro-breaks - Related	.09	.70***	.92	
(4) Rumination	.22**	.28***	.32***	.87
Means	18.10	42.06	35.14	19.37
Standard deviations	7.36	20.07	16.27	6.45

Note. \*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$  Cronbach's Alpha on main diagonal

We further use a moderated linear regression with residual centering (Lance, 1988) to predict rumination by ostracism, micro-breaks-unrelated to work, micro-breaks-related to work, and the interaction terms between WO and the two micro-break components. The multicollinearity was assessed, and the results indicated no correlation with other predictors on ostracism ( $VIF = 1.03, Tol = 0.97$ ) the interaction term ostracism x micro-breaks - related to work ( $VIF = 1.55, Tol = 0.64$ ) and the interaction term ostracism x micro-breaks - unrelated to work ( $VIF = 1.56, Tol = 0.64$ ), and moderated correlations between micro-breaks - related to work ( $VIF = 2.12, Tol = 0.47$ ) and other predictors and between micro-breaks - unrelated to work ( $VIF = 2.17, Tol = 0.46$ ) and other predictors. Rumination was statistically significantly estimated by predictors ( $F(5, 204) = 15.80, p < .001$ ), and the explained variance of the outcome was 26.20% ( $R^2 = .28, R^2_{adj} = .26$ ).

Rumination was statistically significant and positively associated with ostracism ( $B = 0.32, t = 6.06, p < .001, \beta = .37$ ) and

micro-breaks - related to work ( $B = 0.12, t = 3.38, p < .001, \beta = .29$ ) and not associated with micro-breaks - unrelated to work ( $B = 0.01, t = 0.32, p = .75, \beta = .03$ ). High scores on ostracism and micro-breaks - related to work were associated with high scores on rumination, and the relation between ostracism and rumination was positively, statistically significantly moderated by micro-breaks - related to work ( $B = 0, t = 0.52, p = .6, \beta = .04$ ; see Figure 1).

The range of observed values of rumination was between 10 and 40. When micro-breaks related to work scores were outside the predicted interval [-741.47, 20.63], the slope of ostracism was statistically significant (Figure 1). The nature of this relation is graphically displayed in Figure 2.

The simple slope at the higher levels of micro-breaks - related to work (+1 SD) was 0.44,  $t_{(206)} = 5.76, p < .001$ ; therefore, at the high levels of micro-breaks - related to work, the high levels of micro-breaks - related to work, increases statistically significant the influence of WO on rumination, and the same conclusion was observed at the medium levels

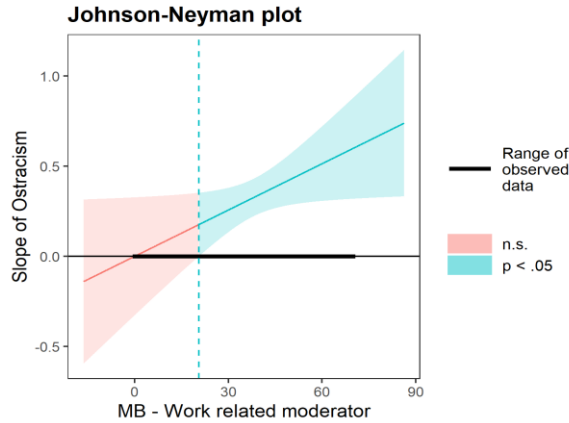


Figure 1. Ostracism slope for micro-breaks - related to work

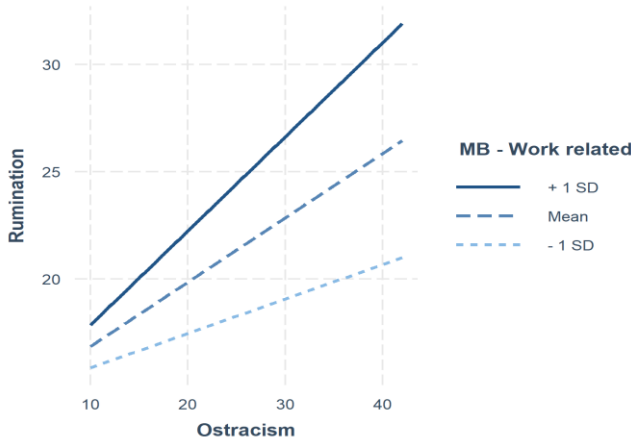


Figure 2. Relationship between rumination and ostracism for micro-breaks - related to work

of *micro-breaks - related to work* (0 SD) (*simple slope* = 0.30,  $t_{(206)} = 5.56, p < .001$ ). However, at the lower levels of *micro-breaks - related to work* (-1 SD) (*simple slope* = 0.16,  $t_{(206)} = 1.69, p = .09$ ), the moderation effect was not statistically significant (Figure 1).

A marginally significant moderation effect by micro-breaks, unrelated to work, was also found in the relation between WO and rumination ( $B = 0.01, t = 1.90, p = .06,$

$\beta = .14$ ). The range of observed values of rumination was the same, between 10 and 40. When *micro-breaks - unrelated to the work* score - were outside the predicted interval [-184.19, 24.72], the slope of WO was statistically significant (Figure 3), and the nature of this relation is graphically displayed in Figure 4.

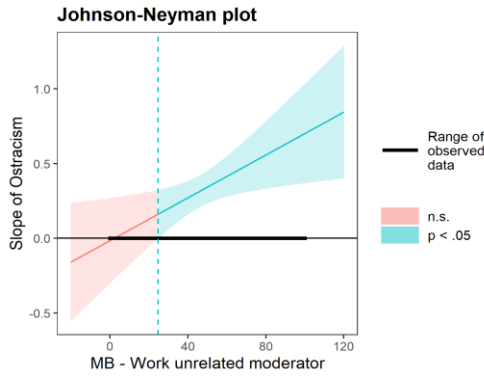


Figure 3. Ostracism slope for micro-breaks - unrelated to work

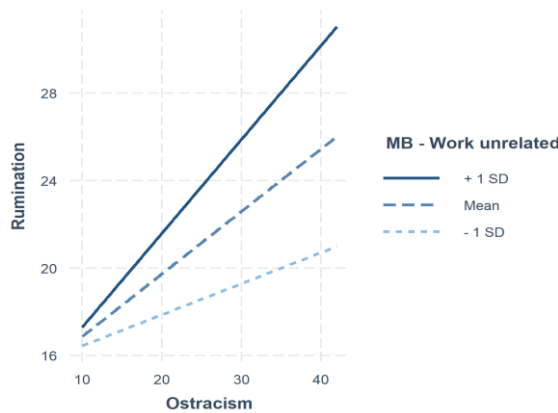


Figure 4. Relationship between rumination and ostracism for micro-breaks - unrelated to work

The simple slope at the *higher levels of micro-breaks - unrelated to work (+1 SD)* was  $0.43$ ,  $t_{(206)}=5.92$ ,  $p < .001$ ; therefore, at the high levels of *micro-breaks - unrelated to work*, the high levels of *micro-breaks - unrelated to work*, increases statistically significant the influence of *WO* on *rumination*, and the same conclusion was observed at the *medium levels of micro-breaks - unrelated to work (0 SD)* (*simple slope* =  $0.29$ ,  $t_{(206)}= 5.17$ ,  $p < .001$ ). At the lower levels of *micro-breaks - unrelated to work (-1 SD)* (*simple slope* =  $0.14$ ,  $t_{(206)}= 1.61$ ,  $p = .11$ ), no statistically significant moderation effect was observed (see Figure 3). Figure 5 presents the overall moderated model, which investigates how both work-related and non-work-related micro—breaks interact with *WO*, which in turn predicts work-related rumination. The model explores potential moderation effects, highlighting how the indirect pathway from

*WO* to work-related rumination may vary depending on the type and frequency of micro-break engagement.

### Discussions

This study investigated the extent to which micro-breaks moderate *WO* and work-related ruminations at work among military personnel. In our investigation endeavor, we used the tenets of *COR* (Hobfoll, 1989) and the *Effort-Recovery Model* (Meijman & Mulder, 1998).

Our data empirically support the positive relationship between *WO* and work-related ruminations ( $H_1$ ), which is consistent with previous empirical studies (He et al., 2020; Jiang & Poon, 2021; Srivastava et al., 2024) that used employee samples from civilian jobs. Empirical research has shown that *WO* amplifies employees' tendency to ruminate

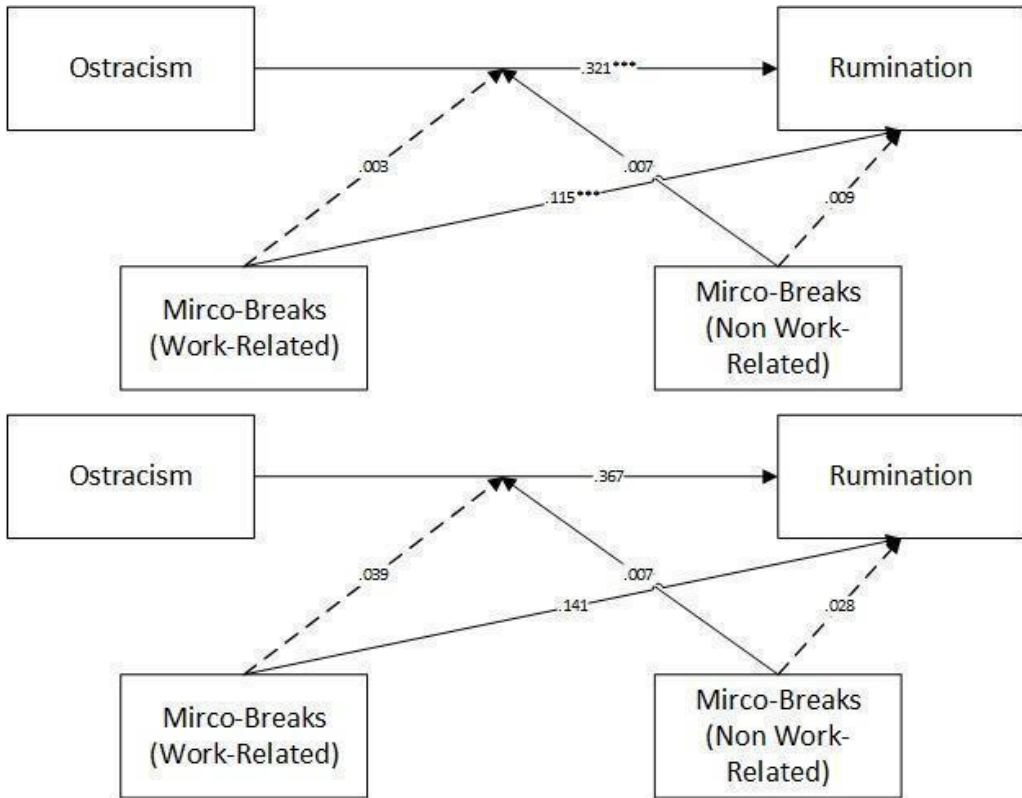


Figure 5. The overall moderated model

and dwell on negative work-related experiences and feelings (Wesselmann et al., 2013). This suggests that when military personnel perceive themselves as being ignored or excluded from operational activities, they are more likely to engage in repetitive and negative thoughts about the events of their workday while at home.

The moderating models in our study were empirically supported ( $H_2$ ). We found that the micro-breaks moderated the relationship between WO and work-related ruminations. Our results show that micro-breaks related to work significantly moderated the relationship between WO and work-related rumination. In contrast, micro-breaks unrelated to work did not show a significant moderation effect. This highlights that the type of activities undertaken during micro-breaks, particularly those related to work, has a more pronounced impact on the association between WO and work-related rumination.

Military personnel who experience WO in the military context may be more likely to engage in rumination as a way of coping with the negative emotions (e.g., depression and anxiety; Yasinski et al., 2020) elicited by the ostracism experience (He et al., 2020). Military personnel may deeply introspect and frequently worry about past negative experiences (e.g., a co-worker's rude comment or exclusion from group activities) in their work settings. Micro-breaks related to work could temporarily distract from these negative emotions, providing military personnel with a brief respite from rumination (Wesselmann et al., 2013). Moreover, offering military personnel the chance to take short breaks may enable them to pay attention to interpersonal interactions and potentially clarify ambiguous social information that contributes to the growth of WO (Al-Atwi et al., 2024). Military personnel may engage in work-related micro-breaks to seek validation or reaffirm their self-worth within the group setting (Maner et al.,

2007). When ostracized, individuals may use interactions with co-workers during micro-breaks to seek acknowledgment or validation of their contributions, which could temporarily alleviate feelings of exclusion and diminish rumination. In addition, engaging in work-related activities during micro-breaks could also enhance military personnel's sense of control over their work settings, particularly in situations where they feel ostracized and powerless. The empirical literature suggests that WO is related to the experience of a significantly lowered sense of control (Warburton et al., 2006; Wesselmann et al., 2015). This perceived control may act as only a momentary buffer against the harmful effects of WO, reducing rumination by instilling a sense of agency and autonomy.

### **Theoretical implications**

Our study is one of the first empirical attempts to show that micro-breaks can be a psychological mechanism underlying the relationship between WO and work-related rumination. In line with COR theory (Hobfoll, 1989), ruminations concerning issues relating to work (i.e., WO) may deplete considerable resources (e.g., time, effort, energy) needed for military personnel. We also test the moderating effects of micro-break activities on the relationship between stressors and strain (WO), thus investigating the main assumption of the effort-recovery model (Meijman & Mulder, 1998), which highlights that the recovery process refers to recuperation from the negative reactions to employees' work settings.

Military personnel who experience WO may suppress positive thoughts that typically serve as a protective factor against resource loss (Hobfoll, 1989). It is relatively novel to demonstrate that WO is positively related to work-related ruminations. Furthermore, the present study supported the relationship between micro-breaks moderated WO and work-related ruminations. According to Effort-Recovery Model (Meijman & Mulder, 1998) WO are a stressful situation for military personnel, can drain their vital resources for achieving work-related objectives (Wesselmann et al., 2018; Wang et al., 2023).

Engagement in short breaks during the workday can provide military personnel opportunities to recover efficiently from the threat of resource loss caused by WO.

Contrary to our expectations, the current findings of the present study did not capture the protective role of micro-breaks. Our results showed that when military personnel are more ostracized, they tend to take more work-related breaks and then ruminate more in the evening about unpleasant situations. These results are also in line with the underlying ideas of the recovery paradox (Meijman & Mulder, 1998), according to which interpersonal stressors (e.g., WO) at the workplace are linked to impaired recovery processes (Sonnetag, 2018). We wanted to highlight that micro-breaks can be used to recover lost resources in the face of WO and work-related rumination. Supportive social settings help military personnel maintain and acquire resources, while negative social contexts (e.g., WO) lead to resource depletion (Hobfoll et al., 2018).

### **Practical implications**

Our study offers several practical implications for military organizations and supervisors. First, by better understanding how WO predicts work-related rumination, military organizations can implement psychological counseling programs for military personnel to improve awareness of the negative consequences of WO (He et al., 2020). Once WO is identified, military organizations should implement supportive measures (such as encouraging a positive climate within military groups and companies). In this context, supervisors should clarify appropriate interpersonal behavior norms through the organization's internal policies and regulations. Supervisors should also encourage the development of a strong social feedback-seeking setting, motivating group members with diverse perspectives to seek optimal information about their social relationships. According to Yang and Treadway (2018), promoting effective communication through employee assistance programs should be a priority for supervisors. These programs play a key role in developing

employees' social skills, such as using appropriate body language and adopting various perspectives during communication, ultimately reducing the risk of misunderstandings (Al-Atwi et al., 2024).

Military supervisors can provide their subordinates with psycho-education sessions regarding interpersonal stressors (e.g., WO) and interpersonal dynamics relationships in military settings (Telecan et al., 2024). The findings of this study could help military practitioners develop and implement evidence-based strategies that can lessen the adverse effects of WO by investigating a possible behavioral strategy to mitigate these effects, namely micro-breaks. These operational procedures can prove compelling, and military personnel will know how to engage in micro-breaks when they feel ostracized at the workplace (WO), thereby reducing rumination.

WO can also be a transient experience that follows life events that reduce an employee's social circle (Buecker et al., 2021), such as changing positions (Büttner et al., 2024). Supervisors should be aware that changing from one position to another can disrupt previous social connections (Buecker et al., 2021), and the fear of ostracism often accompanies the challenge of revealing oneself to new co-workers. We hope tailored interventions can help military personnel navigate such life events by enhancing social integration, promoting a sense of belonging, and preventing the negative impact of WO and work-related rumination.

Given that work-related micro-breaks are associated with increased rumination following experiences of WO, military organizations should critically evaluate how these breaks are structured and encouraged. Specifically, efforts should be made to diversify the nature of breaks offered, promoting work-related micro-breaks that facilitate psychological detachment from unpleasant events within the military settings. This approach could support the recovery process impaired by interpersonal stressors like ostracism, and help to reduce the risk of persistent negative thinking after working hours.

Last, interventions targeting WO should create supportive and inclusive work settings

where military personnel feel valued and respected. Thus, military supervisors may consistently promote open communication and transparency to encourage employees to express their ideas and clarify difficulties with tasks and work-related objectives (Srivastava et al., 2024). In this manner, military organizations should consider both the causes of organizational errors and social mistakes, such as WO, as these can have significant consequences for military personnel. These social mistakes can have consequences as severe as other types of human errors. Just as military organizations implement policies and programs to prevent workplace accidents, they should also establish behavioral norms and procedures to prevent unintended social errors, such as the unintentional ostracism of employees (WO).

### **Limitations and future directions**

Our study has some limitations that open up potential future research directions. First, we used a convenience sample of participants, which denoted an imbalance regarding their self-reported gender (77.14% were men). The military personnel participating in our study were derived from two military organizations. The generalization of our findings is limited because they were not representative of the larger population of the Romanian Air Force. As our sample limits the generalizability of the findings, future studies might manage this issue by examining the proposed relationship in extended, more heterogeneous samples and including more female soldiers.

Second, we adopted a cross-sectional research design with a single point in time in data collection, limiting the possibility of establishing the causality and dynamics between variables. Future research employing a longitudinal research approach in which data is collected in multiple data points throughout the workday, with antecedents (e.g., job demands) and outcomes (e.g., in-role performance and micro-breaks engagement) having separate time points would be invaluable in unraveling the directionality of relationships and identifying more substantial evidence of causality. Also, future research could provide a more comprehensive understanding of how variables evolve,

allowing for the analysis of control loops or bidirectional causal relationships between them.

Third, all the instruments were self-reported, which might have raised some issues regarding desirability. Respondents are aware that their answers are being recorded, which can influence their responses due to perceived expectations—this makes such measurements reactive (Shaughnessy et al., 2012). To address this limitation, it is advisable to incorporate implicit assessment methods that can capture psychological constructs more accurately and are generally less prone to biases related to social desirability (Donaldson & Grant-Vallone, 2002).

Furthermore, other factors that might have interfered with WO were not accounted for, such as counterproductive work behaviors (CWB), incivility, positive and negative affect, and affective empathy, all of which can affect the micro-breaks. Future studies should expand the research to include other facets of WO (e.g., supervisor ostracism) and additional mediators/moderators (e.g., psychological safety and leader's humor; Hsiao et al., 2024). Disagreeableness or relationship conflicts (Telecan et al., 2023) can influence WO (Hales et al., 2016) and can be observed at the team level. Other team-level variables (e.g., task conflicts and team climate; Telecan et al., 2023) can also intensify WO. Therefore, we suggest considering these variables when testing similar hypotheses.

## Conclusions

Our study highlights that WO was positively related to work-related rumination among military personnel. Furthermore, micro-breaks emerged as a unique moderator in the relationship between WO and work-related rumination. Our results show that micro-breaks related to work significantly moderated the relationship between WO and work-related rumination. These findings are valuable for military organizations, supervisors, and employees, offering insights into the effectiveness of managing WO by engaging in behavioral strategies at the workplace, such as taking micro-breaks, and

mitigating its related consequences, namely work-related ruminations.

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