

# THE IMPACT OF CYBER OSTRACISM ON WORK ENGAGEMENT: THE MEDIATING ROLE OF RUMINATION

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**Abstract:** As digital transformation reshapes the modern workplace, online communication platforms have become integral to organizational life. However, their widespread use has also introduced new forms of workplace exclusion, particularly cyber ostracism, where employees feel ignored or excluded in digital interactions. Although interest in this phenomenon has grown, limited research has examined how cyber ostracism influences work engagement and the psychological mechanisms underlying this relationship. Moreover, most existing evidence comes from Western contexts, leaving its applicability to collectivistic cultures such as Vietnam unclear. Vietnamese employees tend to value interpersonal harmony and group belonging while responding to interpersonal difficulties with greater restraint and work-oriented coping, suggesting that cultural context shapes reactions to cyber ostracism. This study examines the relationship between cyber ostracism and work engagement, with rumination as a mediating mechanism, among Vietnamese employees. The findings show that cyber ostracism increases rumination, which subsequently reduces work engagement, confirming rumination's mediating role. At the same time, cyber ostracism has a significant positive direct effect on work engagement, whereas its indirect effect through rumination is negative, indicating a competitive mediation mechanism. These findings suggest that cyber ostracism can simultaneously undermine work engagement through negative cognitive processes while motivating employees to invest greater effort in their work as a compensatory response. By providing evidence from a collectivistic emerging economy, this study extends the cyber ostracism literature, clarifies the contextual boundary conditions of existing theories, and offers practical implications for promoting healthier digital communication and sustaining employee engagement.

**Keywords:** *Cyber ostracism, digital transformation, rumination, Vietnam, work engagement*

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## 1. Introduction

Digital transformation has made enterprise social media and online communication platforms central to organizational communication, coordination, and knowledge sharing (Kaplan & Haenlein, 2010; Leonardi, 2015). The expansion of remote and hybrid work has further increased employees' dependence on digitally mediated interaction (Ip & Wagner, 2008; Leonardi, 2015). Alongside these benefits, however, digital communication creates new psychosocial risks. One increasingly salient risk is cyber ostracism, defined as the experience of being ignored, excluded, or denied acknowledgment in online interactions (Williams, 2007).

Research on workplace ostracism has generally shown that exclusion threatens employees' sense of belonging, consumes psychological resources, and is associated with unfavorable work outcomes (Baumeister & Leary, 1995; Ferris et al., 2008). Nevertheless, three gaps remain. First, much of the existing literature examines face-to-face workplace ostracism rather than exclusion embedded in digital communication. Second, relatively little is known about how cyber ostracism influences work engagement, a motivational outcome that is central to employee effectiveness. Third, the cognitive mechanism connecting cyber ostracism to work engagement remains underdeveloped. Rumination is a theoretically relevant mechanism because ambiguous exclusionary cues may prompt employees to repeatedly analyze why they were ignored, thereby diverting attention and psychological resources away from work (Nolen-Hoeksema, 1991; Williams, 2007).

Against this background, the present study investigates the relationship between cyber ostracism and work engagement by examining rumination as the underlying cognitive mechanism among Vietnamese employees. Rather than assuming that cyber ostracism produces only detrimental outcomes, this study addresses the unresolved question of whether employees may simultaneously experience cognitive resource depletion while maintaining or even increasing observable work engagement.

This study contributes to the literature in three ways. First, it extends workplace ostracism research to digitally mediated interactions by focusing specifically on cyber ostracism in organizational communication. Second, it addresses an important theoretical gap by integrating Belongingness Theory, the temporal need-threat model, Response Styles Theory, and Conservation of Resources Theory into a unified framework that explains both the cognitive process (rumination) and the behavioral outcome (work engagement). Third, by simultaneously testing the direct and indirect effects of cyber ostracism, the study reveals whether competing psychological mechanisms coexist, thereby providing new evidence

on the complex consequences of cyber ostracism in a collectivistic emerging economy.

## 2. Theoretical framework

### 2.1. Theoretical foundation

Four theoretical perspectives collectively underpin the conceptual model proposed in this study.

Amid the rapid pace of digital transformation, social media and online communication platforms are now used extensively within organizations to facilitate communication, coordination, and connection among employees (Kaplan & Haenlein, 2010; Leonardi, 2015). The expansion of remote and hybrid work arrangements in the aftermath of the Covid-19 pandemic has further entrenched digital interaction as a core feature of organizational life (Ip & Wagner, 2008; Leonardi, 2015).

However, alongside the benefits of enhanced communication and collaboration, the digital workplace has also introduced new psychosocial risks, among which cyber ostracism (CO) has drawn increasing scholarly attention (Cao et al., 2019). Cyber ostracism refers to the experience of being ignored, excluded, or denied a response in online interactions (Williams, 2007). Such experiences have been shown to intensify rumination and, in turn, to affect employees' engagement with their work (Amin & Wang, 2024).

While a substantial body of research has examined ostracism in the workplace more broadly, studies addressing the mechanism through which cyber ostracism affects work engagement via rumination remain scarce, particularly within the increasingly digitalized work environment of Vietnam (Yang et al., 2022). Motivated by this gap, the present study examines the effect of cyber ostracism on work engagement through the mediating role of rumination, and offers managerial implications for organizations navigating the challenges of digital transformation.

### 2.2. Cyber ostracism and rumination

Cyber ostracism (CO) is defined as the extent to which social media users feel excluded, overlooked, or unrecognized during digital communication, such as receiving no reply to a message or being disregarded in online discussion channels (Amin & Wang, 2024). Within today's digitally mediated workforce, CO occurring on internal social platforms disrupts the fundamental need to belong described by Baumeister and Leary (1995), giving rise to rumination, a repetitive thought process centered on negative experiences and characterized by persistent focus on distressing emotions and their causes (Nolen-Hoeksema, 1991). Taken together, these foundational perspectives underscore that CO constitutes not merely a form of digital stress but a substantial risk factor for employees' psychological well-being (Williams, 2007).

A consistent body of research affirms a positive

relationship between CO and rumination, as reflected in Hypothesis 1: “Cyber ostracism is positively associated with rumination” (Amin & Wang, 2024; Wagers et al., 2017). Among the most notable consequences of CO are the depletion of psychological resources and prolonged states of anxiety, with no evidence found for a relationship in the opposite direction (Williams, 2007). To mitigate these risks, organizations are encouraged to cultivate a positive culture of communication on internal digital platforms and to provide emotional intelligence training as a means of protecting employee well-being (Amin & Wang, 2024; Goleman, 1995).

Beyond the direct emotional discomfort caused by cyber ostracism, employees often engage in cognitive efforts to interpret the reasons behind their exclusion. According to the temporal need-threat model of ostracism proposed by Williams (2009), experiences of being ignored or excluded threaten fundamental psychological needs, including belongingness, self-esteem, control, and meaningful existence. As employees attempt to make sense of these experiences, they may repeatedly revisit the exclusion event, question their social value, and speculate about potential mistakes or interpersonal conflicts. This repetitive cognitive processing consumes substantial psychological resources and increases the likelihood of rumination. Consequently, the more frequently employees experience cyber ostracism in workplace digital interactions, the more likely they are to develop persistent patterns of negative and repetitive thinking.

Building on the discussion above, cyber ostracism can be understood as a factor capable of intensifying rumination among employees by activating repetitive thinking about experiences of exclusion, neglect, or lack of recognition within the digital environment. When such negative experiences persist, employees tend to focus increasingly on negative emotions and unfavorable self-interpretations, which in turn undermines their psychological well-being at work. Based on this reasoning, the following hypothesis is proposed:

*H1: Cyber ostracism has a significant positive effect on employees' rumination.*

### **2.3. Cyber ostracism and work engagement**

Work engagement reflects employees' sustained investment of vigor, dedication, and attention in their work. In digitally connected workplaces, online platforms support task coordination, social recognition, information access, and opportunities to demonstrate competence. Exclusion from these interactions may therefore threaten employees' social standing and perceived value within the work group.

Although ostracism research generally emphasizes withdrawal and resource loss, employees' direct responses to exclusion may not always be negative. In the present model, the harmful pathway operates

through rumination, whereby cyber ostracism stimulates repetitive negative thought that subsequently reduces work engagement. At the same time, employees may compensate for threatened self-worth and control by investing more strongly in a domain they can influence: their work.

Self-Affirmation Theory supports this compensatory mechanism (Steele, 1988). When employees' social acceptance is threatened, greater effort, persistence, and concentration may help them demonstrate competence, reaffirm personal value, and regain recognition. This response may be particularly salient in Vietnam's collectivistic workplace context, where interpersonal harmony and group membership are strongly valued (Hofstede, 2001). Rather than directly confronting colleagues or openly expressing dissatisfaction, employees may work more proactively and demonstrate stronger commitment to collective goals.

Thus, cyber ostracism may simultaneously produce a positive direct effect on work engagement and a negative indirect effect through rumination, resulting in the competitive mediation pattern proposed in this study. Accordingly:

*H2: Cyber ostracism has a significant positive direct effect on employees' work engagement.*

### **2.4. Rumination and work engagement**

Rumination is defined as a spontaneous and repetitive thought process that typically arises following negative experiences or exposure to stress, and which tends to intensify and prolong negative emotions (Guo & Wu, 2011).

First, according to the Response Styles Theory (RST) (Nolen-Hoeksema, 1991), rumination represents a maladaptive coping strategy in which individuals repeatedly dwell on their distress and its causes and consequences, rather than directing attention toward practical problem-solving. This repetitive cycle intensifies and prolongs negative thinking. From the perspective of the Conservation of Resources Theory (COR) (Hobfoll, 1989), this same process simultaneously depletes individuals' psychological resources and mental energy. When the mind becomes trapped in unproductive thought loops, employees lose the resilience and energy required to invest in their work, thereby weakening their enthusiasm for current tasks (Shao et al., 2025).

*H3: Rumination has a significant negative effect on employees' work engagement.*

### **2.5. The mediating role of rumination**

According to Conservation of Resources (COR) theory, experiencing cyber ostracism threatens employees' valuable psychological resources, particularly their sense of belonging and recognition within the organization. In response to this resource threat, individuals are likely to engage in rumination, a

repetitive cognitive process in which they continually reflect on and reinterpret experiences of exclusion. This persistent rumination further depletes cognitive and emotional resources, reducing employees' capacity to maintain energy, focus, and investment in their work.

Although previous studies have established associations between rumination and various negative outcomes, such as poorer psychological well-being, increased social anxiety, and emotional distress in the context of cyber ostracism, most have focused on student populations or mental health outcomes. Comparatively little research has examined rumination as the underlying mechanism through which cyber ostracism influences work-related outcomes, particularly work engagement, in organizational settings. Drawing on COR theory and this research gap, the present study proposes that

rumination mediates the relationship between cyber ostracism and work engagement. Accordingly, the following indirect-effect hypothesis is proposed:

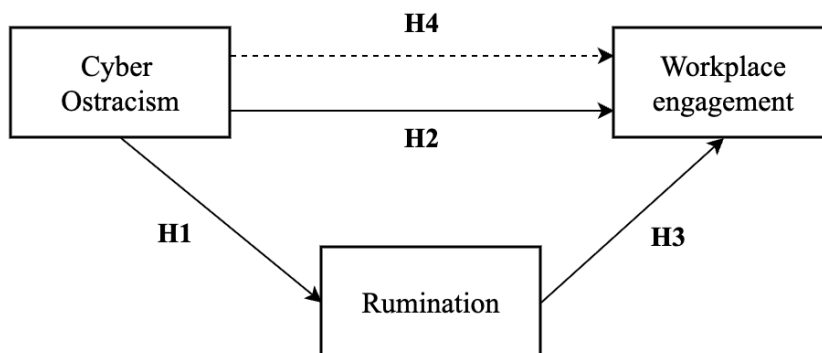
*H4: Rumination mediates the relationship between cyber ostracism and work engagement.*

### 3. Research methodology

#### 3.1. Measurement scales

Based on the aforementioned hypotheses, the research team proposes the conceptual model illustrated in Figure 1, in which CO serves as the independent variable, RM as the mediating variable, WE as the dependent variable, and control variables including gender, age, educational attainment, tenure at the current organization, current job position, industry sector, geographic region of the employing organization, and current firm size.

**Figure 1.** Proposed research model



*Source: Proposed by the research team*

Regarding the measurement instruments, the research team adopted and adapted well-validated scales that have demonstrated strong applicability and have been widely employed across numerous studies on individual psychology and behavior among diverse populations, particularly young adults and employees. Specifically, the CO scale comprising 14 items was drawn from Xu et al. (2022); the RM scale consisting of 19 items was derived from Sukhodolsky et al. (2001); and the WE scale encompassing 9 items was adapted from Vallières et al. (2017).

Although the measurement scales were originally developed in prior international research, the authors conducted forward translation into Vietnamese and subsequently applied a back-translation procedure from Vietnamese into the source language to ensure semantic equivalence and contextual appropriateness for the target respondents, namely, employees working in Vietnam. The survey instrument was constructed using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

#### 3.2. Data collection

The study employed a non-probability convenience sampling technique, deemed appropriate for reaching a large and accessible population of working individuals. Data were collected via a hybrid approach, combining online surveys through Google Forms, distributed across professional networking groups and employment forums, with face-to-face paper surveys administered at business offices and commercial areas. Target respondents included individuals residing, working, or studying primarily in Northern Vietnam who had current or prior employment experience. The data collection was conducted over four weeks, from April to May 2026.

To ensure analytical reliability, the minimum sample size was determined in accordance with the criterion proposed by Hock and Ringle (2006), which stipulates that the minimum sample size should be at least five times the total number of observed variables ( $N = 5 \times m$ ). Applying this criterion, a minimum of 210 valid responses was required. Ultimately, the

research team collected 367 valid questionnaires, comprising 69 paper-based responses and 298 online responses, all of which were retained for subsequent data analysis.

### 3.3. Data analysis

The authors employed SPSS software to perform descriptive statistics and frequency analysis, and SmartPLS software to evaluate both the measurement model and the structural model. Accordingly, the study conducted assessments of reliability, convergent validity, discriminant validity, and multicollinearity, as well as hypothesis testing for the proposed research model.

## 4. Results and discussion

### 4.1. Descriptive statistics

Among the 367 valid respondents, 70.8% were female, 94.6% held a bachelor's degree or higher, 69.8% were staff-level employees, and 82.8% worked in the service sector. In addition, 56.4% were employed by non-state-owned enterprises, while 92.1% worked in firms with more than 10 employees. This sample profile provides a relevant context for examining digitally mediated workplace behaviors, particularly among highly educated employees who may be sensitive to organizational communication and engagement dynamics.

### 4.2. Measurement model evaluation

#### 4.2.1. Outer loadings

Hair et al. (2017) recommend an outer loading of at least 0.7 for strong indicator reliability. Most indicators met this criterion, except RM17, RM18, and WE9.

#### 4.2.2. Cronbach's alpha and convergent validity (AVE)

Following the criteria proposed by Hair et al. (2006), a Cronbach's Alpha value between 0.8 and 0.95 indicates strong reliability. The results show that all constructs in this study exceeded a Cronbach's Alpha of 0.9, confirming the reliability of the measurement instruments.

Average Variance Extracted (AVE) was used to assess the convergent validity of the latent constructs. Hair et al. (2017) recommend retaining indicators with an outer loading of 0.7 or above; for indicators with loadings between 0.4 and 0.7, retention decisions should be based on composite reliability (CR) and AVE. The results indicate that all constructs achieved strong reliability, with composite reliability ( $\rho_c$ ) exceeding 0.7 and AVE exceeding 0.5, confirming both reliability and convergent validity (Hair et al., 2019). Although CR and AVE already met the required thresholds, the authors nonetheless removed indicators RM17, RM18, and WE9 to further enhance the model's fit and statistical robustness.

**Table 1.** Convergent validity results

| Construct | Cronbach's Alpha | $\rho_a$ | $\rho_c$ | AVE   |
|-----------|------------------|----------|----------|-------|
| RM        | 0.971            | 0.980    | 0.973    | 0.680 |
| CO        | 0.971            | 0.972    | 0.974    | 0.725 |
| WE        | 0.929            | 0.986    | 0.938    | 0.656 |

Source: Authors' calculations

#### 4.2.3. Discriminant validity

According to Henseler et al. (2015), discriminant validity is considered violated when the Heterotrait-Monotrait (HTMT) ratio between two constructs exceeds 0.9, whereas values below 0.85 indicate that discriminant validity is well established. In this study, HTMT values ranged from 0.098 to 0.403, all below 0.85, confirming that the constructs satisfy the requirement for discriminant validity.

**Table 2.** Discriminant validity results

| Construct | RM    | CO    | WE |
|-----------|-------|-------|----|
| RM        |       |       |    |
| CO        | 0.403 |       |    |
| WE        | 0.098 | 0.235 |    |

Source: Authors' calculations

The hypotheses were tested using bootstrapping with 5,000 resamples at a 5% significance level. The adjusted  $R^2$  values were 0.172 for RM and 0.074 for WE,

indicating that CO explained 17.2% of the variance in RM, while CO and RM jointly explained 7.4% of the variance in WE.

CO had a significant positive effect on RM ( $\beta = 0.417$ ,  $p < 0.001$ ), indicating that exclusion in digital communication intensifies repetitive negative thinking. RM, in turn, had a significant negative effect on WE ( $\beta = -0.131$ ,  $p = 0.049$ ), suggesting that persistent cognitive preoccupation depletes the emotional and cognitive resources needed to remain energetic, dedicated, and absorbed at work.

CO also had a significant positive direct effect on WE ( $\beta = 0.309$ ,  $p < 0.001$ ). This unexpected relationship may reflect a compensatory response in which excluded employees increase their task investment to demonstrate competence, reaffirm their organizational value, and regain recognition.

The indirect effect of CO on WE through RM was negative and significant ( $\beta = -0.055$ ,  $p = 0.043$ ). Thus, CO simultaneously activates two opposing processes:

a positive direct pathway through compensatory work investment and a negative indirect pathway through

resource-depleting RM. Hypotheses H1, H2, H3, and H4 were therefore supported.

**Table 3.** Hypothesis testing results

| Hypothesis | Path         | Path coefficient | P-value | Type     | Conclusion |
|------------|--------------|------------------|---------|----------|------------|
| H1         | CO → RM      | 0.417            | 0.000   | Direct   | Supported  |
| H2         | CO → WE      | 0.309            | 0.000   | Direct   | Supported  |
| H3         | RM → WE      | -0.131           | 0.049   | Direct   | Supported  |
| H4         | CO → RM → WE | -0.055           | 0.043   | Indirect | Supported  |

Source: Authors' calculations

The bootstrapping results based on 5,000 resamples (Table 4) show that the indirect effect of CO on WE through the mediator RM is  $\beta = -0.055$  ( $p = 0.043 < 0.05$ ), with a 95% bootstrap confidence interval excluding zero  $[-0.108; -0.001]$ , confirming that the mediating role of RM is statistically significant. At the same time, the direct effect of CO on WE within the mediation model remains strongly

significant, with  $\beta = 0.309$  ( $p = 0.000 < 0.05$ ) and a 95% bootstrap confidence interval of  $[0.223; 0.406]$ . Because the direct effect is positive while the indirect effect is negative, the two pathways partially offset one another, placing the model in a state of competitive (inconsistent) mediation, as classified by Zhao et al. (2010), rather than conventional partial mediation.

**Table 4.** Mediation analysis results for RM

| Path                             | Coefficient ( $\beta$ ) | P-value | 95% CI         | Conclusion             |
|----------------------------------|-------------------------|---------|----------------|------------------------|
| Direct effect:<br>CO → WE        | 0.309                   | 0.000   | 0.223; 0.406   | Significant (positive) |
| Indirect effect:<br>CO → RM → WE | -0.055                  | 0.043   | -0.108; -0.001 | Significant (negative) |
| Total effect:<br>CO → WE         | 0.254                   | 0.000   | 0.149; 0.356   | Significant (positive) |

Source: Authors' calculations

#### 4.4. Discussion

Drawing on Conservation of Resources Theory (COR) (Hobfoll, 1989) and prior research on digital organizational behavior, this study examines the effects of CO on RM and WE, with RM serving as a mediating mechanism.

First, CO had a significant positive effect on RM ( $\beta = 0.417$ ), supporting H1. Employees who feel ignored or excluded in digital interactions are more likely to engage in repetitive negative thinking. This finding is consistent with previous research showing that online exclusion can increase rumination, reduce self-evaluation, and heighten psychological strain. Because digital platforms provide both communication and social recognition, being overlooked may intensify feelings of devaluation and detachment, thereby increasing RM.

Second, CO had a significant positive direct effect on WE ( $\beta = 0.309$ ). This finding contrasts with the dominant ostracism literature, which associates exclusion with threatened belongingness, resource depletion, and withdrawal from work (Ferris et al., 2008; Yang et al., 2022). However, it should not be interpreted as evidence that CO is beneficial. Instead, the positive

relationship may reflect a compensatory response in which employees redirect their energy toward work when their social standing is threatened.

Self-Affirmation Theory provides a possible explanation for this response (Steele, 1988). When an important aspect of self-worth is threatened, individuals may invest in another controllable domain to restore a positive self-view. Employees with limited control over colleagues' responses may therefore increase their dedication, concentration, and persistence at work to demonstrate competence and regain recognition. This explanation extends prior research by suggesting that exclusion does not always produce immediate withdrawal and may initially encourage greater task investment under certain conditions.

The Vietnamese context may strengthen this compensatory pathway. In collectivistic settings, social belonging, relational harmony, and group approval are highly valued (Hofstede, 2001). Employees experiencing CO may therefore avoid direct confrontation or visible withdrawal and instead increase their dedication to work as an indirect way of reaffirming their value within the group. However, this interpretation remains tentative

because the study did not directly measure cultural orientation, self-affirmation, or compensatory motives. Future research should test whether collectivism strengthens the positive direct relationship between CO and WE.

Importantly, the positive direct effect of CO on WE coexists with a negative indirect effect through RM. CO increases RM, which subsequently reduces WE, indicating competitive mediation (Zhao et al., 2010). Employees may therefore increase their work investment as a compensatory response while simultaneously experiencing repetitive negative thoughts that deplete cognitive and emotional resources. This dual-pathway pattern helps reconcile the present findings with earlier studies reporting the harmful effects of workplace ostracism. Although compensatory engagement may emerge in the short term, RM-related psychological strain may gradually undermine employees' ability to sustain it.

Because the data were collected through a cross-sectional design, the study cannot determine whether the positive direct association reflects a temporary compensatory reaction or a stable increase in work engagement. Longitudinal research is needed to examine whether employees initially intensify their work investment following cyber ostracism but subsequently experience declining engagement as rumination and resource depletion accumulate. Accordingly, managers should not regard greater visible dedication among excluded employees as evidence that they are coping effectively. Increased work engagement may conceal unresolved psychological strain and should not reduce the need to address exclusionary digital communication practices.

Third, the results indicate that rumination has an effect on work engagement, with a standardized path coefficient of -0.131. Hypothesis H3 is therefore supported, indicating that as rumination increases, work engagement tends to decline.

This result is consistent with prior studies suggesting that prolonged negative thinking depletes mental energy, reduces concentration, and undermines individual motivation. Employees who repeatedly dwell on negative experiences encountered on social media find it difficult to sustain a positive disposition at work, which in turn diminishes their engagement with the organization. Within the context of constant digital connectivity, rumination emerges as a critical psychological factor shaping employee well-being.

Fourth, the mediation analysis shows that rumination mediates the relationship between cyber ostracism and work engagement, with an indirect effect coefficient of -0.055, thereby supporting Hypothesis H4.

Specifically, when employees experience exclusion on social media, they tend to develop prolonged

negative thinking, which in turn diminishes their engagement at work. Cyber ostracism therefore affects work engagement not only directly but also indirectly through rumination. This finding helps clarify the mechanism through which the digital work environment shapes employee well-being amid ongoing digital transformation.

The model yields an adjusted  $R^2$  of 0.074 for WE, indicating that CO and RM jointly explain only 7.4% of its variance. This modest explanatory power does not invalidate the significant path coefficients but suggests that important predictors of WE were excluded. Work engagement is shaped by multiple job, organizational, individual, and digital factors, including autonomy, job resources, leadership support, organizational culture, resilience, self-efficacy, digital literacy, and boundary management.

The low  $R^2$  may also reflect the competitive mediation pattern. CO has a positive direct effect on WE but a negative indirect effect through RM, suggesting heterogeneous coping responses. Some employees may increase their work effort to regain recognition, whereas others experience resource depletion through repetitive negative thinking. Because the model captures only these limited pathways, it explains only a small proportion of WE.

Future research should examine moderators such as psychological safety, leader and peer support, team cohesion, resilience, trait rumination, self-efficacy, work meaningfulness, cultural orientation, job autonomy, digital literacy, and boundary management. These effects may be tested through interaction terms, multi-group analysis, or hierarchical models. Longitudinal and experience-sampling designs could further distinguish short-term compensatory engagement from longer-term declines associated with accumulated RM. Using a broader measure of RM and including relevant controls, such as workload and burnout, may also improve the model's explanatory power.

Practically, the low  $R^2$  implies that organizations should not infer that cyber ostracism is unimportant simply because the model explains a limited share of engagement variance. CO still exerts meaningful direct and indirect effects. Instead, interventions should be multifaceted: strengthen leadership and peer support, foster psychological safety in digital interactions, build employee resilience and digital boundary-management skills, and improve job resources and work design. Such comprehensive approaches will be more effective than single-focus interventions in protecting employee well-being and sustaining work engagement in digital environments.

Overall, the findings indicate that cyber ostracism is a psychosocial factor with a substantial impact on employees in the digital era. Exclusion on social media

not only intensifies rumination but also undermines work engagement. Organizations should therefore prioritize cultivating positive digital communication environments, strengthening internal connectivity, and paying closer attention to employee mental health in order to enhance well-being and engagement within the workforce.

This study has several limitations. First, the convenience sample skews toward female, highly educated, service-sector employees in Northern Vietnam, limiting generalizability to other worker groups and regions. Second, rumination was measured using the Anger Rumination Scale (Sukhodolsky et al., 2001), which captures anger-related rumination specifically rather than rumination in a broader sense. Using the Anger Rumination Scale specifically captures thoughts focused on anger and grievance rather than broader forms of rumination (such as sadness or anxiety). This narrow scope may explain the modest indirect effect observed, as cyber ostracism could trigger other cognitive-emotional responses not fully captured by an anger-centric instrument. Third, the cross-sectional, self-reported design raises the possibility of common method bias and limits causal inference; longitudinal designs would strengthen confidence in the observed relationships. Finally, future research could examine moderating factors, such as individual resilience or cultural orientation, that may explain why employees respond to cyber ostracism with withdrawal in some cases and compensatory effort in others.

Although the structural relationships are statistically significant, the model has limited explanatory power for work engagement. The adjusted  $R^2$  of 0.074 indicates that cyber ostracism and rumination jointly explain only 7.4% of its variance, while the effect of rumination is very small ( $f^2 = 0.015$ ). These findings suggest that neither variable should be regarded as a primary determinant of work engagement.

The low explained variance may reflect the multifaceted nature of work engagement, which is shaped by numerous job, organizational, and individual factors, including leadership support, psychological safety, job autonomy, meaningful work, workload, recognition, organizational support, and resilience. Because the present model was intentionally parsimonious, these broader determinants were not included.

The competitive mediation pattern may further limit explanatory power. Cyber ostracism has a positive direct association with work engagement but a negative indirect association through rumination, causing the two pathways to partially offset each other. Employees may temporarily increase their work investment while simultaneously experiencing repetitive negative thoughts that deplete cognitive and emotional resources.

Cyber ostracism may also be episodic and

context-dependent. Its influence may vary according to the frequency, duration, source, and perceived intentionality of exclusion, as well as available resources. Supportive leadership and psychological safety may weaken its negative effects, whereas high workload or low organizational support may intensify them.

Accordingly, the low  $R^2$  and small effect size limit the model's explanatory and predictive scope. Future studies should incorporate additional job demands and resources and examine moderators such as psychological safety, leader support, organizational support, resilience, and cultural orientation to clarify when cyber ostracism and rumination become more influential.

## **5. Conclusion and policy implications**

### **5.1. Conclusion**

This study examines the effect of cyber ostracism on work engagement through the mediating role of rumination. The results show that cyber ostracism increases rumination, while rumination in turn reduces work engagement. This suggests that when employees feel ignored or excluded in online interactions, they tend to engage in repeated negative thinking, which subsequently affects their level of engagement at work.

Furthermore, the study finds that cyber ostracism exerts a positive direct effect on work engagement, while its indirect effect through rumination is negative. This pattern reflects a competitive mediation mechanism, indicating that cyber ostracism does not solely produce adverse psychological consequences; in certain circumstances, it may also prompt employees to increase their work effort as a compensatory response.

More importantly, the findings reveal a positive direct effect of cyber ostracism on work engagement, while its indirect effect through rumination is negative. This pattern indicates a competitive mediation mechanism and suggests that cyber ostracism does not lead to a uniform psychological response. In other words, exclusion in digital interactions may simultaneously generate psychological strain and stimulate compensatory effort. Some employees may respond to being ignored or marginalized by investing more energy in their work in order to reaffirm their competence, restore their self-worth, or regain recognition within the organization.

This unexpected positive relationship also has important academic implications. First, it challenges the assumption, widely supported in ostracism research, that exclusion necessarily weakens positive work attitudes in a linear and universally negative manner. Instead, the present findings suggest that cyber ostracism can trigger mixed responses depending on the psychological and contextual conditions under which employees interpret and cope with exclusion. Second, the result highlights the importance of distinguishing between immediate emotional reactions and behavioral compensation.

Employees may appear highly engaged at work even while experiencing underlying distress and rumination, meaning that visible effort does not necessarily reflect psychological well-being. Third, the finding suggests that work engagement in digital contexts may function not only as a positive motivational state but also as a compensatory strategy used to defend self-concept under threat.

Overall, this study contributes to a clearer understanding of the effects of cyber ostracism within the digital workplace, while highlighting the role of rumination as a key mechanism explaining the relationship between exclusionary experiences and work engagement.

### 5.2. Policy implications

Based on the findings, several managerial implications can be proposed to help organizations mitigate the negative consequences of cyber ostracism and maintain employee work engagement in increasingly digitalized workplaces.

First, organizations should establish clear norms and expectations regarding online communication. Guidelines concerning response times, information sharing, and participation in digital discussions can help reduce ambiguity in virtual interactions and minimize situations in which employees perceive themselves as being ignored or excluded. Such measures are particularly important in remote and hybrid work environments where digital communication serves as the primary channel for collaboration.

Second, organizations should provide training programs that enhance employees' awareness of digital communication etiquette and inclusive online behaviors. Employees may unintentionally engage in actions such as overlooking messages, excluding colleagues from discussions, or failing to acknowledge contributions, all of which can contribute to perceptions of cyber ostracism. Training initiatives can help employees

recognize these behaviors and develop more supportive communication practices.

Third, managers should actively monitor team interactions and pay particular attention to employees who participate less frequently in online discussions or appear disconnected from communication networks. Early identification of potential exclusion experiences enables managers to provide timely support, encourage participation, and strengthen employees' sense of belonging within the team.

Fourth, organizations should invest in psychological support mechanisms, including counseling services, coaching programs, and stress-management workshops. Given that cyber ostracism can trigger rumination and prolonged negative thinking, providing employees with effective coping strategies may help reduce psychological distress and protect their well-being.

In addition, organizations should regularly assess the quality of digital communication and employees' perceptions of inclusion. Surveys, feedback systems, and periodic check-ins can help identify communication issues before they escalate into more serious psychological and performance-related problems. Leaders also play a critical role in fostering an inclusive communication climate by acknowledging employees' contributions, encouraging open dialogue, and ensuring that all team members have opportunities to express their opinions.

Finally, organizations should strive to cultivate a respectful, supportive, and inclusive digital work environment. By promoting positive online interactions, strengthening communication practices, and providing adequate psychological resources, organizations can reduce the harmful effects of cyber ostracism, limit employees' tendency to ruminate on negative experiences, and ultimately sustain higher levels of work engagement and long-term organizational effectiveness.

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## REFERENCES

- Amin, M., & Wang, Y. (2024). Cyber ostracism and employee well-being in digital workplaces. *Journal of Organizational Behavior Studies*.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497-529.
- Cao, X., Khan, A. N., Zaigham, G. H. K., & Khan, N. A. (2019). The stimulators of social media fatigue among students: Role of moral disengagement. *Journal of Educational Computing Research*, 57(5), 1083-1107.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
- 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.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.
- Guo, M., & Wu, L. (2011). Rumination as a cognitive risk factor for stress-related outcomes. *Journal of Psychological Studies*.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2006). *Multivariate data analysis* (6th ed.). Pearson Prentice Hall.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). SAGE Publications.

- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-524.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). SAGE Publications.
- Höck, M., & Ringle, C. M. (2006). *Strategic networks in the software industry: An empirical analysis of the value continuum*. IFSAM VIIIth World Congress.
- Ip, R. K. F., & Wagner, C. (2008). *Weblogging: A study of social computing and its impact on organizations*. *Decision Support Systems*, 45(2), 242-250.
- Kaplan, A. M., & Haenlein, M. (2010). *Users of the world, unite! The challenges and opportunities of social media*. *Business Horizons*, 53(1), 59-68.
- Leonardi, P. M. (2015). Ambient awareness and knowledge acquisition: Using social media to learn 'who knows what' and 'who knows whom'. *MIS Quarterly*, 39(4), 747-762.
- Martin, L. L., & Tesser, A. (1996). Some ruminative thoughts. In R. S. Wyer Jr. (Ed.), *Advances in social cognition* (Vol. 9, pp. 1-47). Lawrence Erlbaum Associates.
- Nolen-Hoeksema, S. (1991). Responses to depression and their effects on the duration of depressive episodes. *Journal of Abnormal Psychology*, 100(4), 569-582.
- Shao, B., Li, Y., & Zhang, X. (2025). Rumination and resource depletion: Implications for employee engagement. *Journal of Workplace Psychology*.
- Steele, C. M. (1988). *The psychology of self-affirmation: Sustaining the integrity of the self*. *Advances in Experimental Social Psychology*, 21, 261-302.
- Sukhodolsky, D. G., Golub, A., & Cromwell, E. N. (2001). Development and validation of the Anger Rumination Scale. *Personality and Individual Differences*, 31(5), 689-700.
- Wagers, T. P., Kiely, B. T., & Suh, J. (2017). Exclusion in digital contexts: Antecedents and outcomes of cyber ostracism. *Computers in Human Behavior*, 73, 235-245.
- Williams, K. D. (2007). Ostracism. *Annual Review of Psychology*, 58, 425-452.
- Williams, K. D., Cheung, C. K. T., & Choi, W. (2000). Cyberostracism: Effects of being ignored over the Internet. *Journal of Personality and Social Psychology*, 79(5), 748-762.
- Xu, S., Wang, Y., & Liu, D. (2022). Development and validation of the Cyber Ostracism Scale for organizational settings. *International Journal of Human-Computer Interaction*.
- Yang, J., Liu, H., & Chen, S. (2022). Cyber ostracism in remote work: Effects on employee engagement and well-being. *Journal of Business Research*.
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37(2), 197-206.