

Article

Psychological safety and affective commitment: A dual-pathway model of job satisfaction and rumination

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Abstract: This study examines how psychological safety fosters employee affective commitment by examining the serial mediating roles of job satisfaction and rumination, and the moderating influence of abusive supervision. Grounded in Job Demands–Resources (JD-R) theory and enriched by Conservation of Resources (COR) theory, the study conceptualize psychological safety as a foundational job resource that initiates a resource gain process, enhancing job satisfaction and enabling adaptive cognitive regulation. Abusive supervision, in contrast, functions as a resource-depleting demand that alters these dynamics. Data from a two-wave, time-lagged survey of U.S. employees support the proposed model. Psychological safety significantly increases job satisfaction, which subsequently reduces rumination and strengthens affective commitment. Notably, the findings suggest that rumination may function differently depending on employees’ resource conditions; when preceded by higher job satisfaction, it may reflect more adaptive, reflective processing that reinforces emotional attachment to the organization. Contrary to expectations, abusive supervision strengthens, rather than weakens, the positive effect of psychological safety on job satisfaction and its indirect effect on affective commitment, indicating a compensatory or buffering dynamic under high-demand conditions. These findings advance JD-R theory by integrating cognitive-affective mechanisms and applying COR principles to explain dynamic resource trajectories. the study highlight how the interplay of leadership behavior and psychological safety shapes employee commitment and offer actionable insights for building resilient, high-commitment workplaces.

Keywords: psychological safety; job satisfaction; affective commitment; rumination; abusive supervision; job demands-resources (JD-R) theory; conservation of resources (COR) theory

1. Introduction

In the current competitive and fast-changing business environment, organizations face high pressure to create work environments that not only drive performance but also prioritize employee well-being and sustained engagement. Global leaders like Microsoft, Ferrari, and Samsung have set benchmarks for fostering psychological safety, inclusion, and growth, signaling a shift in organizational priorities (Peachman, 2023). These companies demonstrate that environments where employees feel secure to express their ideas, voice concerns, and challenge conventional norms can significantly enhance learning, innovation, and organizational performance (Kyambade et al., 2024). Despite growing recognition of psychological safety in the workplace, the underlying mechanisms through which it influences critical employee outcomes, such as affective commitment, remain underexplored.

Kahn (1990) defined psychological safety as a mental state in which employees feel confident enough to express their true selves and take interpersonal risks without fear of consequences to their status, reputation, or career. While prior research has recognized the positive association between psychological safety and affective commitment, defined as employees' emotional attachment to and identification with the organization (Chughtai, 2022), there is limited understanding of the underlying processes in this relationship. Affective commitment plays a crucial role in shaping employee behavior, retention, and performance, making it a key target for organizations seeking to cultivate a highly motivated and dedicated workforce (Alqudah et al., 2022). However, existing literature has not fully addressed how psychological safety interacts with other psychological and environmental factors to influence commitment, leaving an important gap in both theory and practice.

This study aims to fill this gap by investigating the serial mediating roles of job satisfaction and rumination in the relationship between psychological safety and affective commitment. Job satisfaction, widely regarded as a critical determinant of organizational performance and employee engagement (Jimoh, 2025), is expected to flourish in environments that promote psychological safety (Kahn, 1990). However, the role of rumination, which is traditionally defined as a repetitive pattern of negative thought (Martin & Tesser, 1996), introduces complexity to this relationship. While a psychologically safe work environment might reduce stressors that contribute to rumination (Knipfer & Kump, 2022), individuals prone to ruminative thinking may struggle to benefit from such safe environments fully (Song et al., 2025).

Psychological safety, job satisfaction, rumination, and affective commitment are conceptually linked through a serial resource-based process grounded in Job Demands–Resources (JD-R) and Conservation of Resources (COR) theories. Psychological safety functions as a foundational contextual resource that reduces interpersonal risk and uncertainty, thereby fostering positive affective evaluations of work, reflected in higher job satisfaction. Job satisfaction, in turn, shapes employees' cognitive processing of work experiences. Nevertheless, satisfied employees are less susceptible to rumination following stressful events (Li et al., 2024). Therefore, job satisfaction plays a key role in mitigating rumination by enabling employees to focus on positive and constructive thoughts, rather than being trapped in cycles of negative reflection. This cognitive shift is critical because rumination represents the mechanism through which employees mentally process and interpret their work experiences over time. Thus, the study explores the possibility that the impact of job satisfaction on rumination appears to stem from its capacity to redirect cognitive focus toward more adaptive and solution-oriented thinking. In such cases, employees may cognitively reflect on their roles and challenges in ways that reinforce meaning and alignment with organizational goals. Finally, these affective and cognitive processes jointly contribute to affective commitment, as employees who feel satisfied and constructively reflect on their work are more likely to internalize organizational values and develop emotional attachment. Thus, the proposed model captures a coherent progression from contextual resource (psychological safety) to affective state (job satisfaction), to cognitive processing (rumination), and ultimately to attitudinal outcome (affective commitment).

While the study does not formally distinguish between “positive” and “negative” rumination in our measurement, our conceptual model acknowledges that the *function* of rumination may differ depending on the psychological context in which it occurs. By incorporating this dynamic into the broader understanding of psychological safety, this study aims to clarify how these cognitive processes affect the link between psychological safety and affective commitment, thereby offering a more nuanced understanding of this relationship.

In addition to exploring these mediators, this study examines the moderating effect of abusive supervision (**Figure 1**), a destructive leadership style characterized by sustained hostility and aggression (Tepper, 2000). Abusive supervision has been shown to erode trust, reduce job satisfaction, and weaken organizational commitment (Srikanth et al., 2022). Despite the known negative effects of abusive supervision, its role in weakening the benefits of psychological safety remains largely unexamined. Understanding how harmful supervisory behaviors interact with psychological safety is critical for organizations seeking to foster resilient work environments, especially in the presence of toxic leadership.

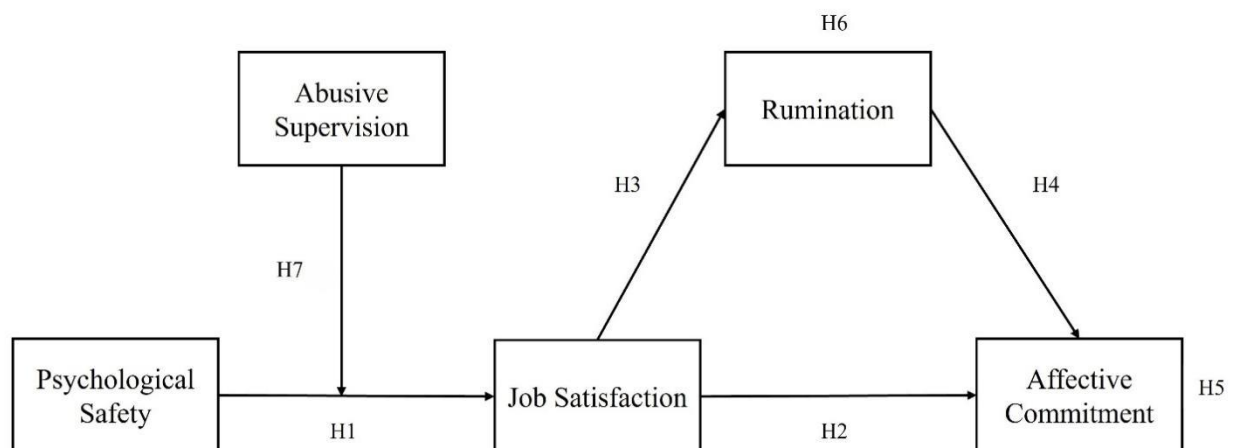


Figure 1. Theoretical Framework.

Responding to Bakker and Demerouti’s (2017) call for further exploration of leadership behaviors’ impact on job demands, resources, and employee well-being, this study addresses key gaps in the organizational behavior literature. Drawing on the integration of Job Demands–Resources (JD-R) theory (Bakker & Demerouti, 2017) with Conservation of Resources (COR) theory (Hobfoll, 1989), the study develops a more comprehensive framework. Job Demand-Resource theory posits that job resources, such as psychological safety, foster motivation and well-being by helping employees meet work goals and buffer the effects of job demands. COR theory complements this view by explaining how individuals strive to acquire, protect, and accumulate resources, and how resource loss or gain shapes psychological functioning. Together, these perspectives highlight how psychological safety may initiate a *resource gain spiral*, first enhancing job satisfaction, then reducing negative cognitive processes like rumination, ultimately culminating in greater affective commitment.

By doing so, the current study develops and tests a moderated serial mediation model that advances our understanding of how psychological resources, such as

psychological safety and job satisfaction, interact with cognitive processes like rumination and external factors, such as abusive supervision, to shape key employee outcomes. This multi-faceted approach not only deepens theoretical insights that emphasize the importance of protecting and accumulating psychological resources but also offers actionable strategies for practitioners aiming to enhance employee commitment and organizational performance. The findings provide valuable guidance on creating work environments that promote employee well-being, even in the face of adverse leadership behaviors. Providing a more detailed analysis of these dynamics, the current study lays the groundwork for future research and offers important implications for organizational practice in fostering more supportive, resilient workplaces.

2. Hypothesis development

2.1. Psychological safety and job satisfaction

Psychological safety, defined as a shared belief that the work environment permits interpersonal risk-taking without fear of negative consequences (Edmondson, 1999), is widely recognized as a critical contextual resource in the workplace that significantly enhances employee well-being and performance (Parker & du Plooy, 2021), as employees feel supported and secure in their roles (Edmondson, 1999; Eslamdoust & Mahmoudinazlou, 2023). In such environments, workers are more likely to take risks, voice opinions, and engage openly, which fosters greater commitment and job satisfaction (Kyambade et al., 2024).

JD-R theory posits that workplace resources help employees manage job demands while promoting well-being (Bakker & Demerouti, 2017). Psychological safety, as a fundamental resource, provides a sense of security that encourages open communication, collaboration, and constructive risk-taking (Edmondson, 1999). By fostering such an environment, psychological safety allows employees to express ideas and concerns without fear of negative consequences, thereby enhancing job satisfaction. Moreover, psychological safety acts as a buffer against job demands, enabling employees to develop effective coping strategies in response to workplace stressors (Bakker, 2011; Lee et al., 2025). Employees who feel safe to voice concerns, seek help, and offer feedback are better equipped to handle job demands and challenges (Chughtai, 2022). This ability to cope effectively with stressors contributes to a greater sense of control and mastery, which in turn leads to increased job satisfaction.

Complementing this, the Conservation of Resources (COR) theory (Hobfoll, 2002) suggests that psychological safety facilitates a resource gain process, whereby employees conserve energy and are better positioned to invest in meaningful work. By reducing the emotional cost of self-expression and risk-taking, psychological safety preserves key psychological resources and allows for positive affective appraisals of work. Together, JD-R and COR predict that psychological safety should foster job satisfaction by both enabling employees to manage their roles effectively and reducing perceived threats to their well-being. Based on this rationale, the study proposes the following hypothesis:

Hypothesis 1: Psychological safety is positively associated with job satisfaction.

2.2. Job satisfaction and affective commitment

Job satisfaction represents the physical, mental, and emotional fulfillment employees derive from their work environment (Spector, 1997). It reflects the extent to which individuals perceive their work environment as rewarding, meaningful, and aligned with their personal values and needs (Lin & Huang, 2021). High levels of job satisfaction contribute to a strong sense of organizational identification, where employees align their success and well-being with the success of the organization (Vandenberghe et al., 2017). This alignment not only strengthens affective commitment toward their organization (Gao-Urhahn et al., 2016) but also contributes to greater organizational loyalty and performance.

Affective commitment reflects an individual's desire to remain with an organization due to shared values and a sense of belonging (Meyer & Allen, 1991). Employees with strong affective commitment are motivated by their belief in the organization's mission and their identification with its objectives, not because they need to (Alqudah et al., 2022). Drawing on JD-R theory, when employees' needs for recognition, autonomy, fair compensation, and positive relationships are met, they experience higher levels of psychological well-being, which enhances their ability to cope with stress and job demands (Breevaart et al., 2016). This contributes to a positive and supportive work environment (Bakker, 2011), which strengthens employees' emotional connection to the organization and reinforces affective commitment.

Further, Conservation of Resources (COR) theory (Hobfoll, 2002) suggests that when employees experience job satisfaction, they are more likely to enter a resource gain spiral, in which positive affect and motivation lead to further investment in the organization. Satisfied employees tend to align their own success with the success of the organization, deepening their emotional bond and long-term dedication (Gao-Urhahn et al., 2016; Eslamdoust et al., 2025). In contrast, unmet needs or chronic dissatisfaction may trigger resource loss and disengagement. Thus, consistent with both JD-R and COR frameworks, job satisfaction serves as a key motivational resource that promotes deeper emotional attachment to the organization.

Hypothesis 2: Job satisfaction is positively associated with affective commitment.

2.3. Job satisfaction and rumination

Modern work environments frequently expose employees to persistent stressors that can extend beyond their workplace, hindering their recovery and prolonging psycho-physiological stress reactions (Knipfer & Kump, 2022). One common manifestation of such prolonged stress is work-related rumination. Work-related rumination refers to the unintentional and repetitive thoughts about job stressors that can occur outside of work hours (Michailidis et al., 2025), often resulting from the mismatch between personal resources and job demands (Martin & Tesser, 1996). Prolonged exposure to job demands without sufficient recovery leads to the accumulation of stress reactions (Knipfer & Kump, 2022), which, over time, can have detrimental effects on both mental and physical well-being.

Job satisfaction acts as a key resource that can buffer the negative effects of excessive job demands. Employees who experience high job satisfaction typically perceive a favorable balance between job demands and available resources, which

lowers stress levels and reduces the likelihood of rumination (Bakker & Demerouti, 2017). When employees are satisfied with their work, they are less prone to ruminate on unresolved stressors, thereby breaking the cycle of negative thought patterns that exacerbate work-related stress (Bakker, 2011). Instead, they are more likely to focus on positive aspects of both their professional and personal lives, breaking the cycle of negative thought patterns. Further, the Conservation of Resources (COR) theory (Hobfoll, 2002) suggests that satisfied employees are more likely to preserve and accumulate resources that protect against psychological strain. In contrast, dissatisfaction represents a threat to valued resources, prompting cognitive preoccupation with unmet demands and fueling negative thought spirals. Therefore, by promoting positive affect and psychological detachment from work, job satisfaction serves as a protective factor that reduces the likelihood of engaging in maladaptive rumination and even encourages constructive rumination

Hypothesis 3: Job satisfaction is negatively associated with rumination.

2.4. Rumination and affective commitment

Job demands require sustained effort, which can lead to stress and other psychological and physiological effects; rumination often prolongs these stress reactions by mentally replaying stressors even after they have passed (Wei et al., 2025). Prolonged rumination is often associated with extended cognitive demand that drains mental resources, intensifies stress, and extends job pressures into non-working hours, often disrupting recovery and sleep (Martin & Tesser, 1996).

Although rumination has traditionally been conceptualized as a maladaptive cognitive process, recent perspectives suggest that not all forms of rumination are detrimental, and its functional consequences may be context-dependent. In resource-rich environments, rumination can also serve a reflective function that helps individuals make sense of their experiences. Rather than being purely detrimental, rumination can foster a deeper understanding of one's role, encouraging problem-solving and alignment with organizational goals (Qian et al., 2024). When employees reflect on their work experiences, this sense-making process can increase their emotional bond with the organization (Eslamdoust et al., 2025). By increasing employees' awareness of issues within their work environment, these rumination can motivate them to engage in problem-solving and finding solutions to work-related issues and enhance their sense of ownership and investment in the organization's success (Martin & Tesser, 1996). When employees use reflection to evaluate their work experiences, align their values with organizational goals, or identify solutions to challenges, this process can reinforce their sense of meaning and psychological investment in the organization (Qian et al., 2024). In this way, rumination becomes a job resource (Cohen & Ferrari, 2010), reinforcing their emotional attachment to the organization as they perceive their role as integral to its success (Ciarocco et al., 2010). Importantly, the present study does not directly distinguish between maladaptive and constructive forms of rumination at the measurement level. Rather, it adopts an exploratory perspective, examining whether rumination, *conceptualized broadly*, may exhibit differential associations with affective commitment depending on the surrounding resource context. This approach allows us to assess whether rumination

may, under certain conditions, operate not solely as a cognitive strain reaction but also as a mechanism of psychological engagement.

From a Conservation of Resources (COR) theory perspective (Hobfoll, 2002), rumination may represent an adaptive cognitive strategy that helps employees restore or gain psychological resources by reappraising challenges, finding purpose, and reaffirming their role within the organization. This sense-making process can strengthen affective commitment (Alqudah et al., 2022). Thus, although rumination is often viewed as a cognitive burden, when framed constructively, it can serve as a resource-building process that enhances employees' emotional connection to their work and organization.

Hypothesis 4: Rumination is positively associated with affective commitment.

2.5. The mediating role of job satisfaction and rumination

Building on the preceding arguments, this study further explores how job satisfaction and rumination jointly explain the mechanism through which psychological safety enhances affective commitment. Psychological safety, as a critical job resource within the Job Demands–Resources (JD-R) framework (Bakker & Demerouti, 2017), satisfies fundamental psychological needs such as autonomy, competence, and relatedness (Ahmad & Umrani, 2019). When employees feel safe to voice concerns and take interpersonal risks, they are more likely to experience positive affective states, including higher job satisfaction (Chughtai, 2022). According to the Conservation of Resources (COR) theory (Hobfoll, 2002), this psychological safety creates a resource-rich environment, enabling employees to preserve energy and invest it in meaningful workplace engagement. In turn, job satisfaction reinforces employees' emotional alignment with organizational values, strengthening their affective commitment (Meyer & Allen, 1991; Vandenberghe et al., 2017).

Hypothesis 5: Job satisfaction mediates the relationship between psychological safety and affective commitment.

Beyond its direct role, job satisfaction may also shape cognitive responses to workplace stressors, particularly through its impact on rumination (Bakker et al., 2023). Employees who are satisfied with their jobs are less likely to engage in maladaptive rumination and more likely to engage in constructive reflection, which is a form of rumination aimed at learning, improvement, and meaning-making (Ciarocco et al., 2010). In the context of JD-R theory, this shift reflects a resource-driven reappraisal of work experiences, wherein job satisfaction enables employees to cognitively reinterpret challenges and align their efforts with organizational goals (Bakker & Demerouti, 2017). From a COR perspective, this transition from cognitive depletion to constructive processing represents a gain spiral, where satisfaction fuels adaptive cognition, which in turn supports sustained emotional connection to the organization (Hamesch et al., 2014; Hobfoll, 2002).

Accordingly, this study posits a serial mediation mechanism: psychological safety enhances job satisfaction, which reduces rumination and facilitates constructive reflection, ultimately deepening affective commitment. This pathway highlights the interplay between emotional and cognitive resources in shaping employees' attachment to their organizations.

Hypothesis 6: *Job satisfaction and rumination serially mediate the relationship between psychological safety and affective commitment.*

2.6. The moderating effect of abusive supervision

Supervisory behavior plays a critical role in shaping employee satisfaction and organizational commitment. When supervisors fail to foster a positive environment, employees' potential is diminished (Breevaart et al., 2016). While well-designed jobs and supportive working conditions can boost motivation and mitigate stress (Eslamdoust et al., 2026), the detrimental effects of negative supervisory behavior can undermine these benefits (Tepper, 2000).

Negative supervisory behaviors are a significant job demand that depletes employees' psychological resources and increases stress (Bakker & Demerouti, 2017). Abusive supervision, defined as a sustained hostile behavior such as public humiliation, verbal abuse, and undermining of work, imposes a substantial psychological demand on employees (Tepper, 2000). It creates a toxic environment where essential resources like social support and autonomy are lacking, preventing employees from fulfilling their psychological needs (Xiao et al., 2023). By creating heightened demands, unrealistic expectations, and disrespectful treatment, abusive supervision drains employees' mental energy, limiting their ability to focus effectively on tasks and fostering negative self-perceptions (Bhattacharjee & Sarkar, 2024). This decline in self-efficacy decreases motivation and engagement (Tepper et al., 2017). Chronic exposure to abusive supervision may also lead to maladaptive coping mechanisms such as avoidance or substance abuse, further deteriorating emotional well-being and commitment to the organization (Liu et al., 2025). As employees experience ongoing mistreatment, they increasingly dissociate from the organization's values and goals. This loss of organizational identification diminishes loyalty, engagement, and the willingness to go above and beyond in their roles, directly impacting their affective commitment.

According to Job Demands–Resources (JD-R) theory, abusive supervision introduces a resource-draining condition that elevates psychological strain, weakens the buffering effect of job resources, and impairs goal-directed behavior (Bakker & Demerouti, 2017). From a Conservation of Resources (COR) theory perspective (Hobfoll, 2002), abusive supervision signals a threat to core resources such as self-esteem, autonomy, and social support, triggering resource loss cycles that erode employees' capacity to invest in their roles.

In this context, even when the broader work environment offers psychological safety, abusive supervisors may disrupt employees' ability to experience and benefit from that safety. Fear of retaliation, humiliation, or manipulation can erode employees' trust, reduce their willingness to voice concerns, and suppress engagement, thereby weakening the positive impact of psychological safety on job satisfaction (Wang et al., 2021). This dynamic distorts the gain spiral predicted by JD-R and COR, replacing it with a strain-based feedback loop.

Moreover, abusive supervision may alter the cognitive consequences of job satisfaction. While under typical conditions, job satisfaction promotes supportive reflections of rumination (Qian et al., 2024), in the presence of abusive supervision,

employees may shift their focus toward maladaptive rumination. Employees subjected to abusive behavior are more likely to dwell on distressing experiences, inhibiting constructive reflection and weakening their emotional bond with the organization (Martin & Tesser, 1996; Hamesch et al., 2014). As rumination takes hold, employees' affective commitment diminishes, weakening the positive effects of psychological safety and job satisfaction.

Taken together, these perspectives suggest that abusive supervision weakens the indirect effect of psychological safety on affective commitment by interfering with both emotional (job satisfaction) and cognitive (rumination) processes.

Hypothesis 7: *Abusive supervision moderates the indirect relationship between psychological safety and affective commitment, such that the serial mediation through job satisfaction and rumination is weaker under high levels of abusive supervision.*

3. Method

To ensure methodological rigor and reduce the risk of common method bias (Podsakoff et al., 2003), the study employed a two-wave, time-lagged survey design. This approach allowed for the temporal separation of key variables, strengthening the interpretability of relationships among constructs. The temporal ordering follows JD-R and COR logic, with contextual conditions (psychological safety, abusive supervision) preceding more proximal affective (job satisfaction), cognitive (rumination), and attitudinal (affective commitment) responses. Data were collected via Amazon Mechanical Turk (MTurk), a widely used crowdsourcing platform that enables targeted participant recruitment based on demographic and occupational criteria. This platform allowed us to access a diverse, working adult population while maintaining control over eligibility criteria and ensuring a contextually appropriate sample. The study focused on full-time employees in the U.S. to ensure data quality. The study implemented multiple attention checks and screening procedures, including minimum approval ratings, IP duplication prevention, and exclusion of overly fast responses.

3.1. Participants and procedure

At Time 1, a total of 800 full-time employees completed the initial survey, which assessed the independent variable (psychological safety), the moderator (abusive supervision), and relevant control variables. To ensure data quality and sample relevance, the study excluded participants who failed attention checks or did not meet the inclusion criterion of having worked under their current supervisor for at least six months ($n = 69$). This resulted in a valid Time 1 sample of 731 participants. Two weeks later, the study distributed the Time 2 survey to these individuals. The second wave assessed the mediators (job satisfaction and rumination) and the dependent variable (affective commitment). Of the 667 participants who could be re-contacted, 642 completed the Time 2 survey and passed all data quality checks, including attention checks and completion time thresholds. This yielded a final matched sample of 642 respondents across both time points.

3.2. Measures

3.2.1. Psychological safety (T1)

Psychological safety was assessed using a five-item scale developed by Liang et al. (2012). Participants responded to each item on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). A sample item is “In my work unit, I can freely express my thoughts.” (Alpha = 0.88).

3.2.2. Job satisfaction (T2)

Job satisfaction was evaluated using a three-item scale developed by Cammann et al. (1979). Participants indicated their responses on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). An example item from the scale is “Generally speaking, I am very satisfied with my job.” (alpha = 0.88).

3.2.3. Affective commitment (T2)

The affective commitment was measured using the original eight-item scale by Allen and Meyer (1990). Participants rated each item on a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree). A sample item includes “I feel a strong sense of belonging to my organization.” (Alpha = 0.95).

3.2.4. Rumination (T2)

Rumination was assessed using the original 12-item scale developed by Trapnell and Campbell (1999). Participants provided ratings for each item on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). An example item from the scale is “I waste time rethinking things that are over and done with.” The scale exhibited strong reliability (Alpha = 0.97).

3.2.5. Abusive supervision (T1)

Abusive supervision was measured using a 15-item scale developed by Tepper (2000). Participants responded on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). A sample item is “My supervisor expresses anger at me when he/she is mad for another reason.” (Alpha = 0.97)

3.2.6. Control variables (T1)

To address potential biases in our results, the study accounted for various demographic factors, including age, sex, employees’ education level, and tenure with the supervisor.

4. Results

Table 1 shows the means, standard deviations, and intercorrelations of the variables for the study.

Before testing the hypotheses, the study conducted confirmatory factor analysis (CFA) to assess the goodness-of-fit of the hypothesized measurement model and verify the distinctiveness and validity of the measured variables. The CFA results indicated a good model fit, as indicated by the following fit indices: [Chi-Square = 2439.733, CFI = 0.947, TLI = 0.943, RMSEA = 0.054] all surpassing the recommended threshold (Barrett, 2007). These results suggest that the measurement model is a good fit for the data.

Table 1. Means, Standard Deviations, and Correlations.

	M	SD	1	2	3	4	5	6	7	8
1. Gender	1.52	0.49								
2. Age	39.66	12.49	0.01							
3. Tenure with Supervisor	2.77	1.16	−0.09*	−0.18***						
4. Education Level	3.01	1.11	−0.01	−0.09*	−0.11**					
5. Psychological Safety	3.74	0.90	−0.07	−0.01	0.10*	0.04				
6. Job Satisfaction	3.96	0.89	0.07	−0.09*	0.03	−0.04	0.55***			
7. Affective Commitment	4.71	1.40	−0.08*	0.04	0.13***	0.08*	0.48***	0.65***		
8. Rumination	3.31	1.10	−0.01	−0.13***	0.15***	0.05	−0.16***	−0.17***	0.06	
9. Abusive Supervision	2.08	1.17	−0.18***	0.03	0.32***	0.22***	−0.18***	−0.24***	0.13***	0.38***

Note. $N = 642$. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

For convergent validity, the study computed the average variance extracted (AVE), with all variables exceeding the 0.5 value (Fornell & Larcker, 1981), and composite reliability (CR) values were greater than 0.7 (Hair et al., 1998), indicating acceptable convergent validity. To assess discriminant validity, the study followed the approach recommended by Fornell and Larcker (1981), which confirmed that the AVE for each construct exceeded the shared variance with other constructs, thereby validating the discriminant validity of the measures.

The study conducted analyses using PROCESS MACRO models 6 and 83 to test the serial mediation and moderated mediation hypotheses. Model 6 was employed to examine serial mediation, which evaluates whether the effects of an independent variable on a dependent variable are transmitted serially through multiple mediators. Model 83 was used to test moderated mediation within the serial mediation process, assessing whether the strength of the indirect effects varies depending on the level of a moderator. These models utilize bootstrapping techniques to generate confidence intervals, ensuring robust estimates of indirect and conditional indirect effects. This approach allowed us to rigorously examine the proposed relationships while accounting for the complexity of the hypothesized mechanisms.

Hypothesis 1 proposed a positive relationship between psychological safety and job satisfaction. This hypothesis was supported by a significant regression coefficient ($\beta = 0.52$, $p < 0.001$). Similarly, Hypothesis 2, which posited a positive relationship between job satisfaction and an individual's affective commitment, was also strongly supported ($B = 0.93$, $p < 0.001$). Additionally, Hypothesis 3, which posited a negative relationship between job satisfaction and rumination, was supported with a significant regression coefficient ($B = -0.12$, $p < 0.05$). Hypothesis 4, indicating a positive relationship between rumination and employees' affective commitment, also received support ($B = 0.21$, $p < 0.001$). See **Table 2** for more information.

Table 2. Regression Coefficients.

	Job satisfaction model 1	Rumination model 2	Affective commitment model 3
1. Control variables			
Gender	0.17**	−0.01	−0.29***
Age	0.01**	−0.01*	0.01
Education Level	0.02	0.05	0.16***
Tenure with Supervisor	0.03	0.14***	0.10**
2. Main effects			
Psychological Safety	0.52***	−0.14*	0.25***
Job Satisfaction		−0.12*	0.93***
Rumination			0.21***
3. Moderator			
Abusive supervision	−0.13***		
4. Interaction			
Psychological safety × Abusive supervision	0.12***		
Overall F	52.29***	8.39***	96.13***
R ²	0.37	0.07	0.51
MSE	0.51	10.09	0.95

Note. *N* = 642. Standardized coefficients are presented. **p* < 0.05, ***p* < 0.01, ****p* < 0.001. Bootstrap sample size = 20,000.

We also examined the indirect effects of psychological safety on employees' affective commitment through job satisfaction and rumination (**Table 3**). Job satisfaction significantly mediated the relationship between psychological safety and affective commitment (indirect effect = 0.52, 95% CI [0.42, 0.62]). Hypothesis 6 posited that job satisfaction and rumination serially mediate the relationship between psychological safety and employees' affective commitment. Furthermore, supporting Hypothesis 6, the serial mediation pathway involving both job satisfaction and rumination was statistically significant (indirect effect = −0.01, 95% CI [−0.03, −0.01]). By demonstrating that job satisfaction and rumination jointly mediate the relationship between psychological safety and affective commitment, this study provides empirical evidence for expanding JD–R theory and COR to include serial mechanisms that explain the motivational and health impairment pathways. The statistical significance of the indirect effect in our model is confirmed by the fact that the CI does not include zero (Shrout & Bolger, 2002).

Hypothesis 7 proposed that abusive supervision moderates the indirect impact of psychological safety on affective commitment via job satisfaction and rumination. To examine the moderated mediation effect, first, the study explored whether abusive supervision moderates the relationship between psychological safety and job satisfaction. The analysis, presented in Model 1 of **Table 2**, demonstrated a statistically significant interaction effect ($\beta = 0.12$, $p < 0.001$) in the opposite direction of our hypothesis. Further examination of the conditional effects, as detailed in **Table 4**, indicated that the impact of psychological safety on job satisfaction was statistically significant across varying levels of abusive supervision, ranging from one standard

deviation below to one standard deviation above the mean. To further understand the moderating influence of abusive supervision, the study stratified the variable into low, moderate, and high levels. As illustrated in **Figure 2**, the positive relationship between psychological safety and job satisfaction becomes more pronounced under conditions of high abusive supervision.

Table 3. Indirect/Conditional Indirect Effect of Psychological Safety at Values of Abusive Supervision.

Indirect effect		Effect	BootSE	BootLLCI	BootULCI
Ps→JS→AC		0.52	0.05	0.42	0.62
Ps→RU→AC		−0.03	0.01	−0.06	−0.01
Ps→JS→RU→AC		−0.01	0.01	−0.03	−0.01
Conditional Indirect Effect					
(PS→JS→AC)					
	−2.08	0.37	0.05	0.26	0.48
Abusive supervision	0.000	0.49	0.04	0.40	0.59
	+2.08	0.62	0.06	0.49	0.75
(PS→JS→RU→AC)					
	−2.08	−0.00	0.00	−0.02	−0.00
Abusive supervision	0.000	−0.01	0.01	−0.03	−0.00
	+2.08	−0.02	0.01	−0.04	−0.00

Note. $N = 642$. Bootstrap sample size = 20,000. LLCI = lower limit confidence interval; ULCI = upper limit confidence interval. PS: Psychological Safety, JS: Job Satisfaction, AC: Affective Commitment, RU: Rumination

As shown in **Table 3**, the conditional indirect effect of abusive supervision was statistically significant across all levels, ranging from one standard deviation below to one standard deviation above the mean, for both job satisfaction as a sole mediator and the serial mediation involving job satisfaction and rumination. Specifically, the moderated mediation index for abusive supervision with job satisfaction as a mediator was 0.11, 95% CI [0.07, 0.14], and −0.01, 95% CI [−0.01, −0.001] for the serial mediation pathway. Notably, the confidence intervals for both indices do not encompass zero, confirming the presence of a significant moderated mediation effect. Contrary to expectations, the interaction effect indicates that abusive supervision strengthens rather than weakens the relationship between psychological safety and job satisfaction. Specifically, the positive effect of psychological safety becomes more pronounced under higher levels of abusive supervision.

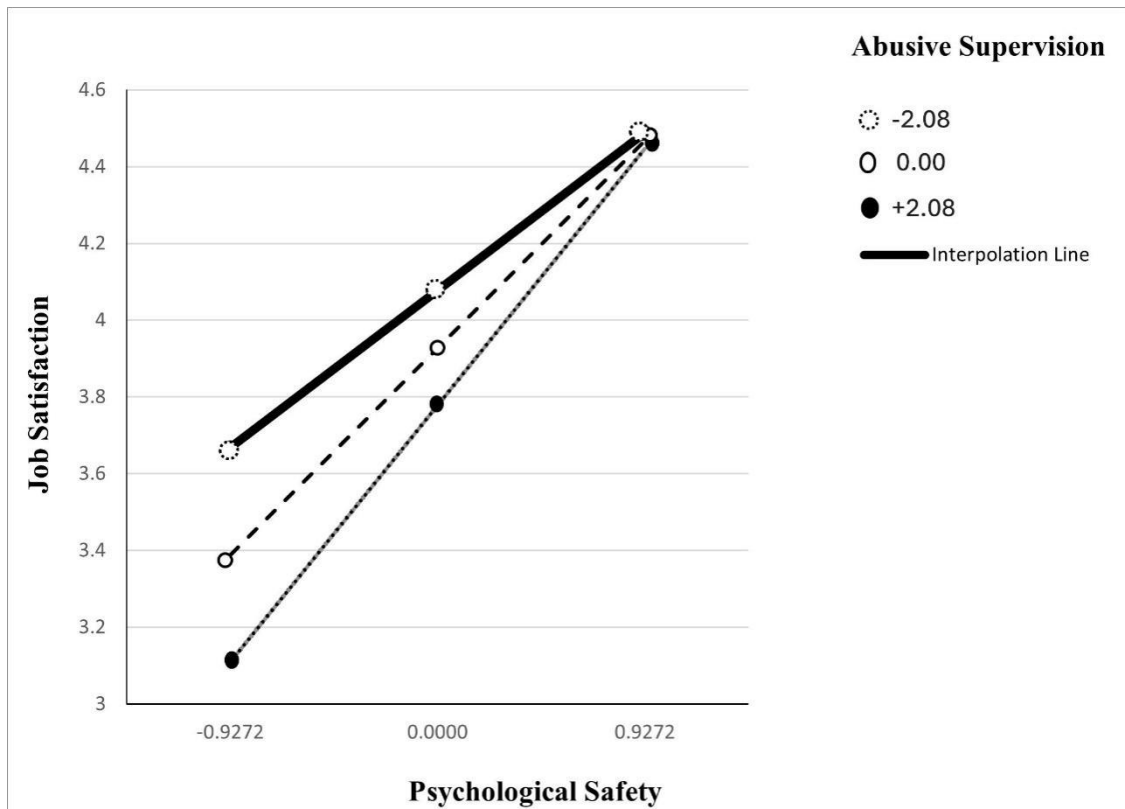


Figure 2. Conditional Effect of Psychological Safety on Job Satisfaction at Values of Abusive Supervision.

Table 4. Conditional Effect of Psychological Safety on Job Satisfaction at Values of Abusive Supervision.

Moderator		Effect	SE	<i>t</i>	LLCI	ULCI
Abusive Supervision	-2.08	0.39	0.04	9.00	0.31	0.48
	0.000	0.52	0.03	16.17	0.46	0.59
	+2.08	0.67	0.04	14.24	0.57	0.75

Note. N = 642. Bootstrap sample size = 20,000. LLCI = lower limit confidence interval; ULCI = upper limit confidence interval.

5. Discussion

The present study advances our understanding of how psychological safety influences affective commitment through emotional and cognitive pathways. Consistent with prior research, our findings confirm that psychological safety is positively associated with job satisfaction, supporting the view that supportive work environments enhance employee well-being and motivation (Ahmad & Umrani, 2019; Chughtai, 2022). This relationship aligns with Job Demands–Resources (JD-R) theory, which posits that job resources, such as psychological safety, foster positive work-related attitudes by helping employees navigate challenges and fulfill core psychological needs (Bakker & Demerouti, 2017).

Our findings also reinforce the well-established link between job satisfaction and affective commitment. Employees who are satisfied with their roles are more likely to develop emotional attachment to their organizations, consistent with theories of motivational investment and value congruence (Vandenberghe et al., 2017). More importantly, this study provides a theoretical explanation for why rumination can

function as a positive mechanism in this context. Drawing on COR and JD-R perspectives, the function of rumination depends on employees' underlying resource levels. Under resource-depleted conditions, rumination tends to be maladaptive, reflecting repetitive negative thinking that reinforces strain. However, when employees experience high job satisfaction, a key affective resource, rumination is more likely to take the form of constructive, reflective processing (Ciarocco et al., 2010; Alqudah et al., 2022). In this resource-rich state, employees cognitively engage with work experiences in ways that facilitate meaning-making, learning, and integration of positive experiences. Thus, rather than eliminating rumination, job satisfaction appears to transform its function, from a resource-draining process into a resource-generating one. This aligns with COR theory's notion of resource gain spirals, whereby existing resources enable individuals to process experiences more adaptively and build additional psychological resources over time. Consequently, rumination operates as a mechanism that translates positive affective states into deeper attitudinal attachment, ultimately strengthening affective commitment (Qian et al., 2024).

In addition, the findings highlight the positive moderating role of abusive supervision. This unexpected pattern suggests a compensatory or buffering dynamic. Under conditions of high abusive supervision, psychological safety may become a more salient and valuable resource, amplifying its impact on job satisfaction. From a Conservation of Resources (COR) perspective, individuals facing resource loss (e.g., abusive supervision) may place greater value on remaining resources, thereby intensifying their effects (Hobfoll, 2002). Similarly, within the JD-R framework, job resources may exhibit stronger motivational effects when job demands are high. Thus, rather than disrupting the resource pathway, abusive supervision may heighten employees' sensitivity to psychological safety, strengthening its downstream effects.

In addition, the findings reveal a positive moderating role of abusive supervision, which contrasts with our initial expectations. Specifically, the results indicate that abusive supervision strengthens rather than weakens the relationship between psychological safety and job satisfaction. This unexpected pattern suggests a compensatory or buffering dynamic, whereby psychological safety becomes a more salient and valuable resource under adverse conditions. From a Conservation of Resources (COR) perspective, individuals experiencing resource loss, such as exposure to abusive supervision, may place greater value on remaining resources, thereby amplifying their impact (Hobfoll, 2002). Similarly, within the Job Demands–Resources (JD-R) framework, job resources are often more strongly associated with positive outcomes when job demands are high (Bakker & Demerouti, 2017). In this context, psychological safety may function as a critical protective resource that offsets the negative effects of supervisory hostility, enhancing its influence on job satisfaction.

At the same time, it is important to recognize that abusive supervision remains a detrimental job demand with well-documented negative consequences for employee well-being and attitudes (Peng et al., 2023). Thus, the present findings should not be interpreted as suggesting beneficial effects of abusive supervision per se. Rather, they indicate that the presence of such adverse conditions may heighten employees' sensitivity to supportive resources, increasing the relative importance and impact of psychological safety (Gupta et al., 2025). Furthermore, the moderated mediation results demonstrate that abusive supervision alters the strength of the indirect effects

linking psychological safety to affective commitment via job satisfaction and rumination, underscoring the context-dependent nature of resource-based processes in organizational settings.

5.1. Theoretical and practical implications

This study makes several important contributions to the organizational behavior literature by extending both Job Demands–Resources (JD-R) theory and Conservation of Resources (COR) theory. First, it reinforces the role of psychological safety as a vital job resource that enhances job satisfaction and reduces cognitive strain, thereby advancing the JD-R model’s explanatory scope beyond purely affective mechanisms (Bakker & Demerouti, 2017). Second, by identifying job satisfaction and rumination as serial mediators, our study introduces a novel dual-pathway model, showing how both emotional and cognitive processes translate psychological safety into affective commitment.

Importantly, this study offers a more nuanced understanding of rumination, which is typically viewed as a maladaptive cognitive demand (Wei et al., 2025). Our findings suggest that in resource-rich contexts, especially when job satisfaction is high, rumination may take on a more constructive, reflective role, reinforcing employees’ psychological connection to their work and organization (Cohen & Ferrari, 2010; Qian et al., 2024). Although the study did not measure distinct subtypes of rumination, the observed effects align with emerging evidence that rumination’s function may shift depending on context and resource states (Qian et al., 2024). This contributes to COR theory by suggesting that cognitive processes like rumination are not static but may become resource-generating when preceded by positive work experiences.

Third, by demonstrating that abusive supervision moderates the indirect effect of psychological safety on affective commitment, our study highlights the importance of negative leadership behaviors as critical contextual conditions shaping resource-based processes. Contrary to the conventional assumption that job demands uniformly weaken the effects of job resources (Breevaart et al., 2016), our findings suggest a more nuanced dynamic. Specifically, abusive supervision appears to amplify the positive impact of psychological safety on job satisfaction, indicating that resources may become more salient and influential under conditions of adversity. This finding extends JD-R theory by suggesting that the effectiveness of job resources is not only contingent on their presence but also on the level of competing demands. In parallel, from a Conservation of Resources (COR) perspective, employees experiencing resource loss may assign greater value to remaining resources, thereby intensifying their motivational and attitudinal effects. Together, these insights call for more context-sensitive models that account for both the depleting and amplifying roles of job demands in shaping employee outcomes.

For practitioners, the findings offer several important implications for enhancing employee well-being and organizational commitment. First, organizations must address abusive supervision as a critical workplace risk factor. Although the results suggest that psychological safety may become more impactful under such conditions, this should not be interpreted as diminishing the harmful effects of abusive leadership. On the contrary, abusive supervision remains a significant source of strain with well-

established negative consequences. Organizations should therefore implement zero-tolerance policies, invest in leadership development programs, and establish confidential reporting mechanisms to mitigate their occurrence and impact.

Second, fostering psychological safety remains a foundational priority. The results indicate that psychological safety is not only beneficial under normal conditions but may become even more critical in high-strain environments. Leaders and HR professionals should cultivate psychologically safe climates by encouraging open communication, supporting employee voice, and modeling respectful and inclusive behaviors. Such environments enhance job satisfaction and may buffer the negative effects of adverse supervisory practices.

Third, enhancing job satisfaction should be treated as a strategic objective, not just an HR outcome. Initiatives such as job enrichment, career growth opportunities, and employee recognition systems can strengthen employees' emotional connection to their roles and reduce psychological strain (Bakker, 2011).

Finally, organizations should recognize that rumination is modifiable and context-dependent. To reduce maladaptive rumination and support constructive reflection, employers should promote work-life balance, offer stress management resources, and ensure access to mental health support. These initiatives can shift rumination from a source of burnout to a tool for engagement and insight. Together, these implications highlight the value of a multi-level resource strategy: building supportive systems from the bottom up (safety, satisfaction, well-being) while eliminating toxic demands from the top down (abusive supervision). Such strategies are essential for cultivating a committed, resilient, and cognitively healthy workforce.

5.2. Limitations and future directions

While this study offers important theoretical and empirical contributions, several limitations should be acknowledged, which also provide promising directions for future research.

First, although the study employed a two-wave, time-separated design to reduce concerns related to common method bias and improve temporal ordering of constructs (Podsakoff et al., 2003), the study remains non-experimental and thus cannot establish causal inference. The two-wave approach represents a methodological strength, as it allows for greater confidence in the directionality of effects, particularly within the proposed serial mediation model. However, future research should build on this by employing longitudinal designs with multiple time points and longer time lags to better capture the dynamic evolution of psychological safety, job satisfaction, and affective commitment (Podsakoff et al., 2003). Additionally, experimental or quasi-experimental studies, such as leadership training interventions or organizational safety climate changes, could offer stronger tests of causality and examine how resource-based processes unfold in real-world settings.

Second, this study relied on self-reported data, which introduces the potential for common method variance and perceptual bias. While the study implemented procedural remedies, including time-lagged measurement and attention checks, the use of a single data source may still inflate observed relationships (Podsakoff et al., 2003). To enhance construct validity and reduce method bias, future research should

incorporate multi-source data, such as peer ratings, supervisor evaluations, or archival performance data. Collecting data from different stakeholders would also allow for a richer, more triangulated understanding of how psychological safety and leadership behavior influence cognitive and affective outcomes.

Additionally, a key limitation concerns the measurement of rumination. Although this study advances a context-dependent interpretation of rumination, suggesting that it may function differently under varying resource conditions, the instrument employed captures general rumination and does not distinguish between potential functional forms of this cognitive process. As a result, the study does not directly assess whether rumination operates as maladaptive or constructive in nature, and the observed positive association with affective commitment should therefore be interpreted with caution. Future research should incorporate multidimensional measures of rumination to more precisely examine how its functions may shift across different resource contexts and to more rigorously test the proposed context-dependent role of cognitive processing within resource-based frameworks.

Third, although the study used Amazon Mechanical Turk (MTurk) to recruit a diverse sample of full-time employees, online crowdsourcing platforms come with inherent limitations. These include limited control over participants' environments and questions of generalizability to broader workplace populations (Aguinis et al., 2021). While MTurk is widely used in organizational behavior research and our sample included stringent quality controls, future research should replicate these findings using multiple recruitment methods, including organizational field studies, in-person surveys, or panel samples, to enhance external validity and capture a broader array of industries, organizational sizes, and supervisory structures.

Moreover, while our study identified abusive supervision as a key moderator in the relationships between psychological safety, job satisfaction, and affective commitment, future research should further explore the nuanced effects of leadership behaviors on these dynamics. Given the growing recognition of leadership's complex role in shaping organizational outcomes (Tepper et al., 2017), examining other leadership styles, such as transformational or ethical leadership, could provide a more comprehensive understanding of how different supervisory approaches interact with psychological safety and affect employee well-being. Moreover, exploring the role of cultural differences in shaping the impact of abusive supervision would add further depth to the literature, as leadership behaviors and employee perceptions can vary significantly across cultural contexts (Zhang et al., 2022).

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Ethics Approval: This study was reviewed and approved by the Institutional Review Board (IRB) of Southern Illinois University (Protocol No. 24040). All procedures involving human participants were conducted in accordance with the ethical standards of the institutional research committee and with the 1964 Declaration of Helsinki and its later amendments. Informed consent was obtained from all participants before they participated in the study.

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