



From Cognitive Distortions to Thriving at Work: A Moderated Mediation Model of Rumination and Gratitude

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Abstract:

This study investigates how cognitive distortions influence employees' thriving at work, testing the mediating role of rumination and the moderating role of gratitude. Integrating Cognitive Behavioral Theory, Conservation of Resources Theory, and Broaden-and-Build Theory, it proposes a moderated mediation model explaining how maladaptive thinking patterns shape employee well-being and thriving in the workplace. A cross-sectional survey was conducted among 365 employees across various industries in Türkiye. Data were analyzed using Structural Equation Modeling in AMOS. Confirmatory factor analysis assessed the reliability and validity of the measurement model, while bootstrapping procedures using Hayes' PROCESS Macro tested the hypothesized mediation and moderation effects. As a result, cognitive distortions had a significant negative effect on thriving at work. Rumination partially mediated this relationship, indicating that repetitive maladaptive thinking is an important mechanism linking distorted cognitions to lower vitality and learning. Gratitude moderated the relationship between rumination and thriving, weakening rumination's detrimental effect among employees reporting higher gratitude. The findings are relevant to organizational behavior, human resource management, and occupational psychology. Organizations can apply these insights by designing cognitive-behavioral interventions, mindfulness training, reflective self-regulation practices, and gratitude-based recognition programs to reduce maladaptive thinking and sustain employee well-being, particularly in emerging-economy workplaces where organizational and financial pressures are pronounced. Regarding the originality and value of the study, it introduces cognitive distortions as a novel cognitive antecedent of thriving at work, identifies rumination as the psychological mechanism linking distorted cognitions to reduced thriving, and establishes gratitude as a personal resource that buffers rumination's negative effects, integrating cognitive and positive psychological perspectives within a single moderated mediation framework.

Keywords: *Cognitive distortions, rumination, thriving at work, gratitude, positive organizational behavior*

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INTRODUCTION

Today's organizations operate under conditions of volatility, uncertainty, and constant knowledge turnover, where success depends not merely on task completion but on employees' ongoing capacity to learn, adapt, and remain psychologically energized. This is not a hypothetical concern: according to [Gallup, Inc. \(2024\)](#) State of the Global Workplace report, 41% of employees worldwide report experiencing significant daily stress, with the resulting loss of well-being and engagement estimated to cost the global economy \$438 billion annually ([Gallup, Inc., 2025](#)). Against this backdrop, understanding what allows employees to thrive has emerged as a central concern in organizational behavior scholarship. While the field has historically emphasized preventing negative outcomes such as burnout, a growing stream of research instead examines the conditions under which people actively flourish at work.

Within this positive-scholarship tradition, thriving at work has become an increasingly central construct. [Spreitzer, Lam, and Fritz \(2010\)](#) conceptualized thriving as the combined experience of vitality and learning, occurring when employees feel simultaneously energized and engaged in ongoing skill and knowledge development. Numerous studies connect thriving with valued outcomes, including task performance, creativity, organizational commitment, psychological well-being, and lower turnover intentions ([C. Porath, Spreitzer, Gibson, & Garnett, 2012](#); [Kleine, Rudolph, & Zacher, 2019](#)). Building on this, [C. L. Porath, Gibson, and Spreitzer \(2022\)](#) contended that sustaining thriving over time requires ongoing attention to the cognitive and affective pathways capable of either nurturing or eroding employees' vitality and learning. Thriving is accordingly viewed with growing frequency as a meaningful indicator of both individual functioning and organizational health.

To date, however, most research has focused on organizational and interpersonal resources — supportive leadership, meaningful work, psychological capital, and positive workplace relationships ([Paterson, Luthans, & Jeung, 2014](#); [Prem, Ohly, Kubicek, & Korunka, 2017](#); [Liu, Zhang, Wang, & Yan, 2021](#); [Goh et al., 2022](#); [Y. Liang, Wu, Zhang, & Wang, 2024](#)) — with far less attention paid to the internal cognitive processes through which employees make sense of their work experiences. This omission is consequential, since workplace events seldom influence employees directly; rather, their effect is largely determined by how employees interpret them.

Even employees exposed to nearly identical organizational circumstances can vary considerably in how much they thrive. The same demanding assignment or blunt feedback might be read by one employee as an opportunity for growth, while another sees it as evidence of personal inadequacy or impending failure. Such divergent reactions cannot be attributed to objective features of the work environment alone; they instead reflect differences in cognitive appraisal. Although maladaptive cognitive processes clearly shape emotional and behavioral responses, they have received scant attention in thriving research, leaving open the question of why employees facing comparable conditions end up with markedly different levels of vitality and learning.

One process that may help account for this variation is cognitive distortion. Drawing on [Beck \(1976\)](#) cognitive theory, cognitive distortions denote systematic errors in information processing that lead individuals to interpret situations in rigid, exaggerated, or unduly negative ways. These recurring patterns color the meaning employees assign to their experiences and, by extension, their emotional and behavioral reactions. An extensive body of literature connects cognitive distortions with depression, anxiety, dysfunctional attitudes, automatic negative thoughts, and reduced psychological well-being ([Özdel et al., 2014](#); [Tecuta, Tomba, Lupetti, & DiGiuseppe, 2019](#); [Yeşilyaprak, Batmaz, Yıldız, Songur, & Akpınar Aslan, 2019](#)); more recent intervention research further demonstrates that reducing these distortions enhances psychological functioning and adaptive coping ([Kürümlüoğlu & Tanrıverdi, 2022](#); [Sağbaş, Korkmaz, & Öyekçin, 2025](#)). What remains largely unexamined in organizational behavior research is whether these same tendencies also erode employees' positive work experiences. Positioning cognitive distortions as an antecedent of thriving moves the literature beyond its customary emphasis on organizational resources, directing attention instead to the cognitive processes underlying how employees actually thrive.

This influence, however, is unlikely to be purely direct. According to cognitive theory, distorted interpretations trigger further cognitive and emotional processes that progressively reshape how individuals function. Identifying the specific mechanism through which these appraisals wear down vitality and learning is thus essential for understanding how distorted thinking ultimately undermines thriving.

One particularly relevant mechanism is rumination, commonly referred to as overthinking. It entails repeatedly dwelling on negative experiences or unresolved concerns without progressing toward resolution ([Nolen-Hoeksema, 1991](#)), which prolongs negative emotion, reinforces maladaptive beliefs, and interferes with adaptive functioning rather than resolving anything. Cognitive distortions and rumination can be viewed as two stages within a single process:

distortions determine how a workplace event is initially interpreted, while rumination sustains and reinforces that interpretation over time. Employees who habitually catastrophize setbacks, personalize events, or overgeneralize from isolated failures are therefore more susceptible to becoming trapped in these repetitive negative-thinking cycles, which constrains their capacity to psychologically recover from everyday work experiences.

Empirical evidence broadly supports this pathway. Cognitive distortions have repeatedly been associated with dysfunctional attitudes, automatic negative thoughts, and ruminative thinking (Yeşilyaprak et al., 2019), and beyond clinical populations, rumination has been connected to lower job satisfaction, elevated occupational stress, work–family conflict, anxiety, sleep disturbance, and procrastination (Jamshaid, Malik, Haider, Jamshed, & Jamshad, 2020; Younus, Gul, & Munawar, 2024; Darathi & Sowmya, 2026). Yet whether rumination itself constitutes the mechanism by which maladaptive cognition erodes employees' capacity to thrive has received little direct examination.

Conservation of Resources (COR) Theory provides a useful framework for addressing this question. It posits that individuals continually work to acquire, protect, and preserve valued personal resources, and that both actual and anticipated loss of these resources generates strain (Hobfoll, 1989). From this vantage point, thriving hinges on possessing sufficient cognitive, emotional, and motivational resources to remain energized while continuing to learn and adapt. Rumination undermines this process: it steadily depletes attentional capacity, emotional energy, and self-regulatory resources that would otherwise fuel learning and constructive adaptation. As these resources diminish, employees struggle increasingly to sustain the vitality and learning central to thriving, which is precisely why COR theory offers a compelling explanation for rumination's mediating role between cognitive distortions and thriving at work.

Not every employee who ruminates, however, experiences the same degree of harm. Some individuals draw on positive psychological resources that interrupt repetitive negative thinking before it inflicts lasting damage, and gratitude appears to function as one such resource. According to Fredrickson (2001) Broaden-and-Build Theory, positive emotions expand individuals' thought–action repertoires while gradually cultivating psychological resources that promote resilience and adaptive functioning. Gratitude in particular directs attention toward the positive aspects of one's experiences, facilitates more constructive reframing of stressful events, and helps maintain psychological balance in the face of adversity. Empirical findings support this reasoning: gratitude has been associated with greater resilience, hope, and psychological well-being, together with lower depression, anxiety, and stress (Cregg & Cheavens, 2021; Diniz et al., 2023; Yılmaz & Ekin, 2023; Kaya & Kaya, 2024; Günsel & Ercan, 2025); more recent work further shows that it supports adaptive coping across cultural contexts by building resilience, social support, and well-being (Choi, Cha, McCullough, Coles, & Oishi, 2025; Yang, Zhang, Li, Jia, & Kong, 2024; Chen, Kuo, Ni, & Hsu, 2024). Employees with higher gratitude should therefore be less susceptible to rumination's harmful effects, given that gratitude redirects attention toward positive experiences, available resources, and opportunities for growth — providing the rationale for expecting gratitude to weaken the link between rumination and thriving at work.

Testing these relationships within a Turkish organizational context also contributes to the wider cross-cultural literature on thriving, which has been built predominantly on North American and East Asian samples. Considerably fewer studies have explored the cognitive processes underlying thriving in other settings. Focusing on Turkish employees therefore both extends the generalizability of existing thriving research and provides evidence from an emerging economy undergoing rapid organizational and technological transformation.

Research Problem/Novel Contribution

Drawing on these theoretical strands, the present study formulates and tests a moderated mediation model whereby cognitive distortions affect thriving at work through rumination, with gratitude moderating the rumination–thriving link. This yields three distinct contributions. First, the study extends the thriving literature by treating cognitive distortions as a previously overlooked cognitive antecedent. Second, it pinpoints rumination as the mechanism through which maladaptive appraisals erode vitality and learning. Third, it demonstrates that gratitude functions as a personal resource that buffers rumination's adverse effects. Integrating Cognitive Behavioral Theory, Conservation of Resources Theory, and Broaden-and-Build Theory within a unified framework yields a more comprehensive account of how maladaptive cognitive processes and positive psychological resources jointly shape employee thriving.

In brief, the proposed model casts rumination as the mediating pathway linking cognitive distortions to thriving at work, with gratitude acting as a boundary condition on the rumination–thriving relationship.

Objectives of the Study

Taken together, these theoretical and empirical threads give rise to five specific research objectives:

1. to examine the relationship between cognitive distortions and rumination among employees.
2. to examine rumination's effect on employees' thriving at work.
3. to examine the direct effect of cognitive distortions on thriving at work.
4. to examine rumination's mediating role between cognitive distortions and thriving at work.
5. to examine gratitude's moderating role in the relationship between rumination and thriving at work.

Correspondingly, these objectives give rise to five research questions.

RQ1. What is the relationship between cognitive distortions and rumination among employees?

RQ2. How does rumination affect employees' thriving at work?

RQ3. Do cognitive distortions have a direct effect on employees' thriving at work?

RQ4. Does rumination mediate the relationship between cognitive distortions and thriving at work?

RQ5. Does gratitude moderate the relationship between rumination and thriving at work?

The section that follows reviews relevant prior literature and builds the hypotheses that underlie the proposed moderated mediation model.

LITERATURE REVIEW

Cognitive Distortions and Rumination

According to Cognitive Behavioral Theory, individuals respond not to events themselves but to the meanings they assign to those events (Beck, 1976), meanings that are filtered through cognitive schemas shaping how people perceive themselves, others, and their surroundings. Cognitive distortions arise when these schemas malfunction, producing systematic errors in information processing that lead individuals to exaggerate threats, discount their own resources, and draw excessively negative conclusions from ordinary events (Yurica & DiTomasso, 2005). Consequently, two employees confronting an identical workplace situation may respond quite differently, simply because each perceives it through a distinct cognitive lens.

The influence of cognitive distortions extends well beyond an employee's initial reaction to a workplace event. Beck's theory proposes that dysfunctional interpretations trigger recurring cognitive processes that continue reinforcing negative beliefs over time; rather than dissipating once the stressful event has passed, these interpretations frequently remain cognitively active and feed into rumination — a repetitive, passive, self-focused pattern of dwelling on negative experiences that yields no constructive resolution (Nolen-Hoeksema, 1991). Put differently, distortions determine how an event is first construed, whereas rumination sustains that construal, trapping employees in a self-perpetuating cycle of maladaptive thinking.

Empirical evidence corroborates this account. Consistent positive associations between cognitive distortions and rumination have been documented across diverse populations (Yeşilyaprak et al., 2019), and rumination has additionally been shown to mediate the link between negatively biased cognitive processing and outcomes such as depression, psychological distress, and maladaptive coping (Wisco, Gilbert, & Marroquín, 2014; Rnic, Dozois, & Martin, 2016; M. Liang, Chen, Liu, & Xiong, 2024; Zou, Gao, Wu, Zhang, & Huo, 2024). While much of this evidence originates from clinical or non-organizational samples, comparable cognitive dynamics likely operate in workplace settings: employees who habitually catastrophize setbacks, personalize feedback, or interpret ambiguous situations pessimistically tend to remain preoccupied with these experiences, thereby increasing their propensity to ruminate.

Theory and evidence thus converge on a common conclusion: maladaptive cognitive distortions foster repetitive negative thinking, such that employees who rely more heavily on distorted appraisals are expected to report elevated levels of rumination.

H1: Cognitive distortions are positively associated with rumination.

Rumination and Thriving at Work

The consequences of rumination extend well beyond the repetitive thinking itself. Conservation of Resources (COR) Theory maintains that individuals strive to acquire, preserve, and protect valuable psychological resources, and that the loss of these resources compromises adaptive functioning (Hobfoll, 1989, 2001). Because rumination continually draws upon attentional, emotional, and self-regulatory resources that could otherwise be channeled toward learning, problem solving, and constructive work behavior, it operates as a resource-depleting process, keeping employees mentally anchored to unresolved concerns rather than facilitating recovery and growth.

This carries direct implications for thriving at work, defined as the combined experience of vitality and learning (Spreitzer et al., 2010). Employees who ruminate frequently tend to channel their cognitive resources toward past failures, anticipated threats, or unresolved interpersonal issues rather than exploration, skill-building, and ongoing improvement, causing the resources required to sustain thriving to progressively diminish.

Empirical findings lend further support to this picture. Work-related rumination has consistently been linked to diminished employee well-being — including lower job satisfaction, heightened occupational stress, greater work–family conflict, burnout, and delayed recovery from work (Blanco-Encomienda, García-Cantero, & Latorre-Medina, 2020; Weigelt, Gierer, & Syrek, 2019; Younus et al., 2024; Darathi & Sowmya, 2026; Khan-Mohammadi et al., 2025). Consistent with a resource-based perspective, Qian, Zhang, and Liu (2024) found that work-related rumination diminished employees' innovative performance by depleting the resources needed for creative engagement, while Shi, Huang, Guo, and Gordon (2024) demonstrated that rumination elevates negative affect across both work and non-work domains, offering additional evidence of its resource-depleting nature. In a related vein, Niessen, Sonnentag, and Sach (2012) found that employees' vitality and learning fluctuate according to the psychological resources available on any given day, and a recent systematic review by Gerçek and Özveren (2024) concluded that work-related rumination undermines employee well-being across a range of occupational contexts, including in Türkiye. Taken together, these findings indicate that rumination progressively depletes the psychological resources employees need to remain energetic, engaged, and development-oriented.

Taken together, theory and evidence converge in identifying rumination as a substantial psychological obstacle to thriving at work.

H2: Rumination is negatively associated with thriving at work.

Cognitive Distortions, Rumination, and Thriving at Work

Cognitive distortions are also expected to influence thriving directly, not solely through rumination. Beck (1976) proposes that dysfunctional cognitive schemas bias the interpretation of everyday experiences, which subsequently shapes emotional, motivational, and behavioral responses. Employees who habitually catastrophize setbacks, over-generalize from failures, or interpret ambiguous situations pessimistically tend to perceive their work environment as threatening rather than developmental — an appraisal pattern capable of diminishing both vitality and learning, the two dimensions that constitute thriving at work (Spreitzer et al., 2010).

Direct empirical tests of the link between cognitive distortions and thriving remain rare, though related organizational research provides indirect support. Tommasi, Sartori, Ceschi, Michailidis, and Dickert (2024) found that cognitive biases meaningfully shaped employees' work engagement, work experiences, and self-rated job performance, indicating that distorted cognitive processing affects how employees evaluate and respond to their work conditions — and, by implication, that cognitive distortions could undermine thriving even in the absence of persistent rumination.

Nevertheless, the effect of cognitive distortions is unlikely to operate in a purely direct fashion. Employees who habitually filter workplace experiences through distorted cognitive schemas tend to gravitate toward repetitive negative thinking rather than constructive problem solving, and rumination — as previously discussed — depletes psychological resources, disrupts recovery, and diminishes employees' capacity for vitality and learning. Cognitive distortions are therefore also expected to reduce thriving indirectly by fueling rumination, consistent with prior work linking maladaptive cognitive processing, work-related rumination, and employee well-being (Blanco-Encomienda et al., 2020; Goh et al., 2022; M. Liang et al., 2024). In sum, cognitive distortions appear capable of diminishing thriving through two distinct paths: directly, by shaping how employees interpret their workplace experiences, and indirectly, by fueling rumination.

H3: Cognitive distortions are negatively associated with thriving at work.

H4: Rumination mediates the relationship between cognitive distortions and thriving at work.

The Moderating Role of Gratitude

Rumination does not deplete every employee's psychological resources to an equal extent. Some individuals draw on positive psychological resources that allow them to preserve vitality and learning despite frequent negative thinking, whereas others experience a steeper decline in thriving more sharply. Gratitude represents one such resource, having attracted increasing scholarly attention as a psychological strength that supports adaptive cognitive and emotional functioning.

Fredrickson (2001) Broaden-and-Build Theory offers a useful explanation for gratitude's moderating role: positive emotions are theorized to expand individuals' thought–action repertoires while gradually building enduring psychological resources. Whereas rumination narrows attention toward perceived failures and unresolved concerns, gratitude operates in largely the opposite direction — prompting people to notice positive experiences, recognize the resources available to them, and reframe stressful situations in a more constructive light. This positive cognitive reappraisal enables employees to step back from repetitive negative thinking and safeguard the psychological resources that thriving depends on.

This proposition finds empirical backing. Gratitude interventions have been shown to lower negative affect while increasing positive affect (Layous, Kumar, Arendtson, & Najera, 2023), and gratitude buffers the adverse psychological consequences of rumination (Kim & Bae, 2019). In an integrative review of organizational gratitude research, Locklear, Sheridan, and Kong (2023) concluded that gratitude functions as both a moral and a wellness-enhancing resource that assists employees in coping with adverse workplace experiences, while Locklear, Taylor, and Ambrose (2021) found that a workplace gratitude intervention reduced employees' experience of mistreatment by replenishing resources depleted through negative interpersonal encounters. Evidence from Türkiye similarly connects gratitude with greater hope, resilience, and psychological well-being, alongside lower depression, anxiety, and stress (Kaya & Kaya, 2024; Yılmaz & Ekinçi, 2023; Günsel & Ercan, 2025). Although much of this evidence originates outside organizational contexts, it consistently indicates that gratitude strengthens individuals' capacity to cope with psychological adversity and preserve valuable personal resources.

On this basis, employees with higher gratitude are expected to be less vulnerable to rumination's negative effects and more likely to sustain vitality and learning at work.

H5: Gratitude moderates the relationship between rumination and thriving at work, such that the negative relationship is weaker among employees reporting higher levels of gratitude.

Integrating these arguments, the present study conceptualizes employee thriving as jointly shaped by workplace conditions, employees' cognitive processes, and their personal psychological resources. Cognitive distortions are hypothesized to increase rumination, which in turn diminishes thriving at work, while gratitude is expected to buffer rumination's negative effect on thriving by safeguarding employees' psychological resources. The resulting framework combines a cognitive vulnerability (cognitive distortions), a resource-depleting mechanism (rumination), and a resource-building personal resource (gratitude) into a single moderated mediation model, depicted in Figure 1.

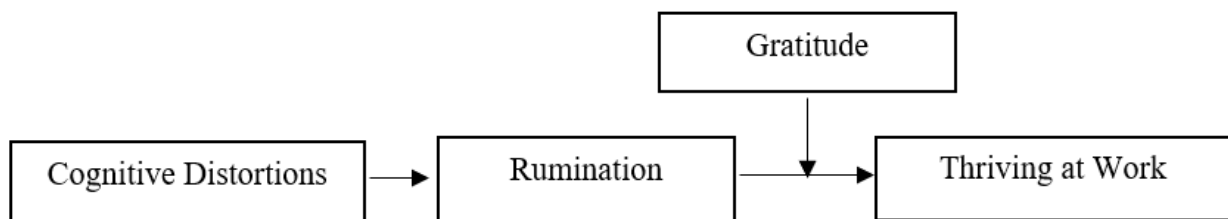


Figure 1 *Proposed Conceptual Model*

Notes:

H1 (+): Cognitive Distortions → Rumination

H2 (-): Rumination → Thriving at Work

H3 (-): Cognitive Distortions → Thriving at Work

H4: Rumination mediates the relationship between Cognitive Distortions and Thriving at Work.

H5: Gratitude moderates the relationship between Rumination and Thriving at Work.

RESEARCH METHODOLOGY

Research Design

A quantitative, cross-sectional survey design was employed to investigate the relationships among cognitive distortions, rumination, thriving at work, and gratitude. This design was appropriate for the study's purpose, as it enabled the proposed moderated mediation model to be tested under naturally occurring workplace conditions.

Participants and Procedure

Data were gathered from employees working across a variety of occupational sectors in Türkiye, including education, technology, communication, banking, finance, insurance, healthcare, media, information technology, and other service-based industries. Participants were recruited via an online questionnaire using a convenience sampling approach, with participation being voluntary, anonymous, and contingent on informed consent. Prior to starting the questionnaire, participants were briefed on the study's purpose, assured of response confidentiality, and informed of their right to withdraw at any point without penalty. Eligibility was restricted to individuals who were currently employed, and completion of the questionnaire required roughly 10–12 minutes.

Measures

Each construct was measured using an established scale with documented reliability and validity, as detailed below.

Cognitive Distortions: Cognitive distortions were measured using the Cognitive Distortions Scale (Yurica & DiTomaso, 2005), in its Turkish adaptation by (Ardanç, 2017). This 20-item instrument presents scenario-based statements addressing maladaptive cognitive patterns — including catastrophizing, mind reading, overgeneralization, personalization, and selective abstraction — rated on a 7-point scale ranging from 1 (Never) to 7 (Always), with higher scores denoting greater cognitive distortion. A sample item reads: "Please indicate how often you engage in mind reading in similar social situations."

Rumination: Rumination was assessed via the 20-item Ruminative Thought Style Questionnaire (Brinker & Dozois, 2009), in its Turkish adaptation by Karatepe, Yavuz, and Turkcan (2013), which taps the general tendency toward repetitive, intrusive, and uncontrollable thinking. Items were rated on a 7-point scale from 1 (Does not describe me at all) to 7 (Describes me very well), with higher scores reflecting stronger ruminative tendencies. A sample item states: "I notice that my mind keeps going over certain things again and again."

Thriving at Work: Thriving at work was assessed using the Thriving at Work Scale (C. Porath et al., 2012), in its Turkish adaptation by Toksöz, Pala, and Çapar (2020). Its nine items address the learning and vitality dimensions of thriving and were rated on a 5-point scale from 1 (Strongly disagree) to 5 (Strongly agree), with higher scores reflecting greater thriving at work.

Gratitude: Gratitude was assessed using the 25-item Gratitude Scale (Kardaş & Yalçın, 2019); in line with the scale developers' recommendation, the overall gratitude score rather than its subdimension scores was employed. Items were rated on a 5-point scale from 1 (Strongly disagree) to 5 (Strongly agree), with higher scores reflecting stronger dispositional gratitude. All instruments employed in this study were validated Turkish adaptations of established scales; accordingly, and given that participants were Turkish employees, every questionnaire was administered in Turkish.

Data Analysis

All analyses were carried out in IBM SPSS Statistics 26, IBM SPSS AMOS 24, and Hayes' PROCESS Macro (Version 4.2). Descriptive statistics, Cronbach's alpha coefficients, and Pearson correlations were computed first using SPSS. The measurement model was subsequently evaluated in AMOS through Confirmatory Factor Analysis (CFA), drawing on the χ^2/df ratio, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), Standardized Root Mean Square Residual (SRMR), and Root Mean Square Error of Approximation (RMSEA). Reliability and convergent validity were examined through Cronbach's alpha, Composite Reliability (CR), and Average Variance Extracted (AVE), while discriminant validity was assessed using the Fornell-Larcker criterion.

Once the measurement model was confirmed, Structural Equation Modeling (SEM) with maximum likelihood estimation was used to test the direct relationships among cognitive distortions, rumination, and thriving at work. Mediation and moderated mediation were subsequently examined using PROCESS Macro Model 14, with rumination specified as the mediator and gratitude as the moderator; indirect and conditional indirect effects were derived from

5,000 bootstrap samples with 95% bias-corrected confidence intervals. The index of moderated mediation was used to gauge the moderated mediation effect, and the interaction was further probed through simple slope analyses at low (-1 SD), mean, and high (+1 SD) levels of gratitude. Statistical significance was set at $p < .05$.

To evaluate potential common method bias, both Harman's single-factor test and a common latent factor analysis were conducted.

RESULTS/FINDINGS

Reliability and Validity of the Measurement Model

Prior to hypothesis testing, the psychometric properties of the measurement model were examined through confirmatory factor analysis (CFA). As reported in Table 1, all four measurement models exhibited good fit to the data: χ^2/df values ranged from 1.25 to 2.32, RMSEA from .02 to .05, SRMR from .03 to .06, CFI from .91 to .97, TLI from .92 to .94, GFI from .92 to .94, and AGFI from .90 to .95. Together, these indices reflect acceptable-to-good model fit and support the construct validity of the measurement model, providing a sound basis for the subsequent structural analyses.

Table 1 *CONFIRMATORY FACTOR ANALYSIS RESULTS OF THE MEASUREMENT MODEL*

Fit Index	Recommended Value	Cognitive Distortions	Rumination	Thriving at Work	Gratitude
χ^2/df	< 3.00	1.25	2.32	1.25	2.21
RMSEA	< .08	.05	.04	.03	.02
CFI	> .90	.95	.96	.97	.91
TLI	> .90	.92	.93	.94	.92
GFI	> .90	.94	.93	.93	.92
AGFI	> .90	.91	.90	.91	.95
SRMR	< .08	.03	.06	.05	.05

In addition to the CFA results, internal consistency and convergent validity were assessed to further confirm the measurement model's psychometric soundness. For this purpose, Cronbach's alpha, Composite Reliability (CR), and Average Variance Extracted (AVE) were computed, with the corresponding results presented in Table 2. As shown in Table 2, internal consistency was satisfactory across all constructs, with Cronbach's alpha coefficients ranging from .82 to .91. Composite Reliability values (ranging from .71 to .85) surpassed the recommended .70 threshold, and AVE values (ranging from .61 to .79) exceeded the recommended .50 cut-off, jointly indicating adequate convergent validity (Fornell & Larcker, 1981; Sarstedt, Ringle, & Hair, 2021) and reinforcing the reliability of the measurement model.

Table 2 *RELIABILITY AND CONVERGENT VALIDITY OF THE MEASUREMENT MODEL*

Construct	Cronbach's α	Composite Reliability (CR)	Average Variance Extracted (AVE)
Cognitive Distortions	.88	.71	.61
Rumination	.91	.81	.71
Thriving at Work	.89	.85	.79
Gratitude	.82	.79	.77

Discriminant validity was subsequently assessed using the Fornell–Larcker criterion. As reported in Table 3, the square root of each construct's AVE exceeded its correlations with all other constructs, confirming that the four latent constructs are empirically distinct and supporting the discriminant validity of the measurement model (Fornell & Larcker, 1981).

Table 3 *DISCRIMINANT VALIDITY (FORNELL-LARCKER CRITERION)*

Constructs	1	2	3	4
1. Cognitive Distortions	.781			
2. Rumination	.625	.843		
3. Thriving at Work	-.308	-.463	.889	
4. Gratitude	-.325	-.223	.572	.877

Descriptive Statistics and Correlations

Following validation of the measurement model, descriptive statistics and Pearson correlations were computed to examine means, standard deviations, and bivariate relationships among the study variables, drawing on a sample of 370 employees ($N = 370$); the results are presented in Table 4.

Table 4 *DESCRIPTIVE STATISTICS AND PEARSON CORRELATIONS*

Constructs	M	SD	1	2	3	4	5	6
1. Age	35.66	1.05	—					
2. Work Experience	11.50	1.98	.014	—				
3. Cognitive Distortions	5.92	0.25	.133	.165	—			
4. Rumination	6.18	0.65	.342	.196	.625	—		
5. Thriving at Work	3.56	0.73	.226	.305	-.308	-.463	—	
6. Gratitude	4.21	0.33	.388	.283	-.325	-.223	.572	—

As reported in Table 4, cognitive distortions were positively and significantly correlated with rumination ($r = .625$, $p < .01$), such that employees exhibiting more distorted thinking tended to report more frequent repetitive negative thinking. Cognitive distortions were likewise negatively correlated with thriving at work ($r = -.308$, $p < .01$), and rumination exhibited a significant negative relationship with thriving as well ($r = -.463$, $p < .01$), jointly suggesting that maladaptive cognitive processing may erode employees' vitality and learning at work.

In contrast, gratitude was positively associated with thriving at work ($r = .572$, $p < .01$) and negatively associated with both cognitive distortions ($r = -.325$, $p < .01$) and rumination ($r = -.223$, $p < .01$). These correlations followed the anticipated pattern and provided preliminary support for the proposed model, laying the groundwork for the structural equation modeling and moderated mediation analyses reported next.

Structural Model and Hypothesis Testing

Following validation of the measurement model, the proposed structural model was tested using Structural Equation Modeling (SEM). The model demonstrated acceptable fit to the data, permitting a meaningful assessment of the hypothesized structural relationships; standardized path coefficients and hypothesis-testing outcomes are presented in Table 5.

Table 5 *STRUCTURAL MODEL RESULTS*

Hypotheses	Structural Path	Stand. β	S.E.	C.R.	p	Result
H1	Cognitive Distortions $\rightarrow$ Rumination	.625	.041	15.36	< .001	Supported
H2	Rumination $\rightarrow$ Thriving at Work	-.444	.059	-7.49	< .001	Supported
H3	Cognitive Distortions $\rightarrow$ Thriving at Work	-.231	.059	-2.20	.029	Supported

As presented in Table 5, cognitive distortions exerted a significant positive effect on rumination ($\beta = .625$, $p < .001$), supporting H1, while rumination exerted a significant negative effect on thriving at work ($\beta = -.444$, $p < .001$), supporting H2. Cognitive distortions further showed a significant negative direct effect on thriving at work ($\beta = -.231$, $p = .029$), supporting H3.

Overall, the structural model supported the hypothesized direct relationships: higher cognitive distortions were associated with higher rumination, and both cognitive distortions and rumination were negatively related to thriving at work.

Having established these direct relationships, rumination's mediating role was next examined through bootstrapping, with the results reported below.

Mediation Analysis

The mediating role of rumination in the relationship between cognitive distortions and thriving at work was examined using Hayes' PROCESS Macro (Model 14) with 5,000 bootstrap resamples, with the indirect effect evaluated against bias-corrected 95% confidence intervals (CIs).

Table 6 *BOOTSTRAPPING RESULTS OF THE MEDIATION ANALYSIS*

Effect	Effect (b)	Boot SE	95% Boot LLCI	95% Boot ULCI	Result
Direct Effect	-0.21	0.07	-0.35	-0.08	Significant
Indirect Effect	-0.02	0.01	-0.04	-0.004	Significant
Total Effect	-0.23	0.07	-0.37	-0.10	Significant

As shown in Table 6, the total effect of cognitive distortions on thriving at work was statistically significant ($b = -0.23$, Boot SE = 0.07, 95% CI $[-0.37, -0.10]$). The direct effect remained significant after accounting for rumination's mediating role ($b = -0.21$, Boot SE = 0.07, 95% CI $[-0.35, -0.08]$), and the indirect effect of cognitive distortions on thriving at work via rumination was also significant ($b = -0.02$, Boot SE = 0.01, 95% CI $[-0.04, -0.004]$). Because this bias-corrected confidence interval did not include zero, rumination's mediating role — and thus H4 — received support.

Moderated Mediation Analysis

Next, gratitude's moderating role in the relationship between rumination and thriving at work was tested, again using Hayes' PROCESS Macro (Model 14). Table 7 reports the interaction effect, conditional indirect effects, and the index of moderated mediation.

Table 7 *MODERATED MEDIATION ANALYSIS RESULTS*

Panel A. Interaction Effect				
Predictor	b	SE	t	p
Rumination $\times$ Gratitude	-0.15	0.05	—	< .01
Panel B. Conditional Indirect Effects				
Gratitude Level	Effect	Boot SE	LLCI	ULCI
Low	-0.005	0.01	-0.03	0.02
Mean	—	—	—	—
High	-0.03	0.01	-0.06	-0.01
Panel C. Index of Moderated Mediation				
Index	Boot SE	LLCI	ULCI	
-0.01	0.01	-0.02	-0.0004	

As Table 7 shows, the interaction between rumination and gratitude was statistically significant ($b = -0.15$, SE = 0.05, $p < .01$), indicating that gratitude significantly moderated the rumination–thriving relationship.

To further interpret this interaction, a simple slope analysis was conducted. As Figure 2 illustrates, the relationship between rumination and thriving at work differed according to gratitude level, with the negative association being weaker among employees reporting higher gratitude relative to those reporting lower gratitude.

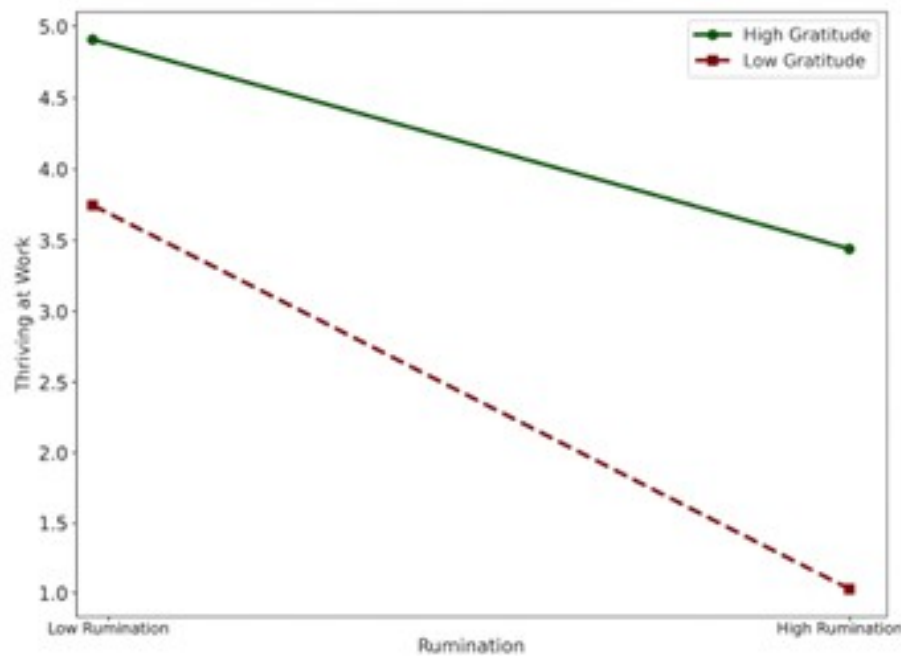


Figure 2 Simple Slopes of the Relationship Between Rumination and Thriving at Work at High and Low Levels of Gratitude

Notes: High and low gratitude represent values one standard deviation above (+1 SD) and below (−1 SD) the mean, respectively. The figure illustrates the moderating effect of gratitude on the relationship between rumination and thriving at work. The negative association between rumination and thriving at work is weaker at higher levels of gratitude than at lower levels of gratitude.

A comparable pattern emerged for the conditional indirect effects: the indirect association between cognitive distortions and thriving at work through rumination differed across gratitude levels, attaining significance at higher gratitude ($b = -0.03$, Boot SE = 0.01, 95% CI $[-0.06, -0.01]$) but not at lower gratitude ($b = -0.005$, Boot SE = 0.01, 95% CI $[-0.03, 0.02]$). The index of moderated mediation was likewise significant (Index = -0.01 , Boot SE = 0.01, 95% CI $[-0.02, -0.0004]$), confirming that the indirect effect of cognitive distortions on thriving at work through rumination varied significantly according to gratitude level, thereby supporting H5.

DISCUSSION/ANALYSIS

This study aimed to investigate how cognitive distortions, rumination, thriving at work, and gratitude relate to one another, testing a moderated mediation model among employees drawn from diverse occupational sectors in Türkiye. The findings largely confirmed the proposed theoretical model: cognitive distortions were positively associated with rumination and negatively associated with thriving at work, with rumination partially mediating this relationship, while gratitude moderated the rumination–thriving link such that rumination’s detrimental effect was attenuated among more grateful employees.

Collectively, these results extend the thriving literature by demonstrating that the manner in which employees cognitively interpret their workplace experiences — and the extent to which they become absorbed in repetitive negative thinking — helps explain why some individuals thrive while others struggle to sustain vitality and learning.

Consistent with H1’s prediction, cognitive distortions were found to be positively associated with rumination. In keeping with Cognitive Behavioral Theory (Beck, 1976), employees who habitually construed workplace events in distorted, pessimistic terms were more susceptible to repetitive negative thinking. This finding is consistent with prior research connecting cognitive distortions to rumination (Yeşilyaprak et al., 2019), while extending that relationship into organizational contexts that earlier research — largely centered on clinical populations — had not addressed. Accordingly, the present results broaden the applicability of cognitive-behavioral principles by establishing cognitive distortions as a meaningful antecedent of rumination in the workplace.

Consistent with H2’s prediction, rumination was found to be negatively associated with thriving at work: employees

who ruminated more frequently reported lower vitality and learning. This finding parallels prior evidence linking rumination to diminished psychological well-being, lower job satisfaction, heightened occupational stress, and greater work–family conflict (Blanco-Encomienda et al., 2020; Younus et al., 2024; Darathi & Sowmya, 2026), as well as with evidence indicating that thriving fluctuates in accordance with the personal resources available to employees on a day-to-day basis (Niessen et al., 2012).

Conservation of Resources (COR) Theory (Hobfoll, 2001, 1989) provides a useful explanatory framework for this pattern: rumination operates as a resource-depleting process, whereby persistent negative thinking consumes attentional and emotional resources that could otherwise be directed toward learning, adaptive coping, and proactive behavior. As these resources decline, employees progressively lose the psychological energy and developmental orientation that thriving requires. Whereas earlier research emphasized contextual antecedents such as supportive leadership, psychological capital, challenge stressors, and positive work environments (Paterson et al., 2014; Prem et al., 2017; Kleine et al., 2019), the present findings extend this literature by revealing that thriving also depends on employees' internal cognitive processes, with rumination emerging as a key cognitive mechanism through which psychological resources are gradually eroded.

Consistent with H3's prediction, cognitive distortions proved to be negatively associated with thriving at work: employees reporting more distorted cognitive processing also reported lower thriving, indicating that habitual interpretive patterns directly influence employees' capacity to remain energetic, engaged, and open to learning. Although cognitive distortions have long been associated with depression, anxiety, dysfunctional attitudes, and maladaptive coping (Beck, 1976; Yurica & DiTomasso, 2005; Özdel et al., 2014), their implications for positive organizational outcomes have received comparatively limited attention — a gap the present findings help address by positioning cognitive distortions as a previously overlooked cognitive antecedent of thriving at work.

These findings also complement emerging evidence indicating that cognitive biases shape how employees experience and evaluate their work (Tommasi et al., 2024). Building on this line of research, the present study demonstrates that distorted cognitive processing affects not only how employees evaluate their workplace experiences but also their capacity to sustain vitality and ongoing learning, reinforcing — in accordance with Cognitive Behavioral Theory — that thriving is shaped as much by employees' habitual cognitive appraisals as by organizational conditions.

H4, which predicted that rumination would mediate the relationship between cognitive distortions and thriving at work, was likewise supported: cognitive distortions reduced thriving both directly and indirectly, via rumination. Maladaptive cognitive processing thus appears to undermine thriving not merely because employees interpret events negatively, but because such interpretations trigger persistent, repetitive negative thinking.

This mediation pattern is consistent with Cognitive Behavioral Theory (Beck, 1976), which holds that dysfunctional cognitive schemas shape the interpretation of everyday experiences and give rise to maladaptive thought patterns. Employees who habitually catastrophize workplace difficulties, personalize negative feedback, or perceive ambiguous situations as threatening tend to remain cognitively preoccupied with these experiences, which constrains psychological recovery and reduces their capacity for learning and development.

This mediation effect is likewise consistent with Conservation of Resources (COR) Theory (Hobfoll, 1989, 2001): rumination depletes attentional, emotional, and self-regulatory resources that would otherwise support adaptive learning, creativity, and proactive work behavior. Employees exhibiting stronger cognitive distortions are therefore more susceptible to resource depletion, as distorted appraisals fuel rumination, which in turn undermines thriving. By identifying rumination as this connecting mechanism, the present study provides a fuller account of how maladaptive cognitive processes shape employees' vitality and ongoing learning.

Consistent with H5's prediction, gratitude was found to moderate the rumination–thriving relationship: the negative association between rumination and thriving was weaker among employees reporting higher gratitude. The moderated mediation results reinforced this pattern, showing that the indirect effect of cognitive distortions on thriving via rumination varied according to employees' gratitude level, underscoring gratitude's importance as a personal psychological resource.

This finding is consistent with Broaden-and-Build Theory (Fredrickson, 2001), which posits that positive emotions broaden individuals' cognitive perspectives while cultivating lasting psychological resources. Employees higher in gratitude appear better positioned to reinterpret stressful experiences, recognize available resources, and maintain psychological balance even amid repetitive negative thoughts, which likely explains why gratitude attenuates rumination's detrimental effects by helping preserve the psychological resources on which learning and vitality depend.

These findings further resonate with prior research on gratitude's benefits for psychological well-being, resilience, and adaptive coping (Kim & Bae, 2019; Layous et al., 2023; Kaya & Kaya, 2024; Yılmaz & Ekinci, 2023; Günsel & Ercan, 2025), while extending it by casting gratitude as a boundary condition that dampens rumination's negative impact on thriving at work. Notably, gratitude does not eliminate employees' tendency to ruminate altogether; rather, it reduces the extent to which repetitive negative thinking translates into diminished thriving — suggesting that positive psychological resources may not prevent negative thoughts from arising but can meaningfully soften their downstream consequences at work.

Taken together, these findings draw on Cognitive Behavioral Theory, Conservation of Resources Theory, and Broaden-and-Build Theory to explain how employees' cognitive processes shape thriving at work. The results suggest that thriving is shaped not only by organizational resources and contextual factors but also by employees' habitual cognitive interpretations and personal psychological resources. By demonstrating that cognitive distortions diminish thriving both directly and indirectly through rumination, while gratitude buffers these effects, this study provides a more integrated account of the cognitive and psychological mechanisms underlying employee thriving.

Theoretical Implications

This study contributes to organizational behavior theory in four principal ways. First, it extends the thriving-at-work literature by positioning cognitive distortions as a previously overlooked cognitive antecedent of employee thriving, demonstrating that employees' habitual interpretations of their workplace experiences shape vitality and learning alongside contextual factors. Second, it extends cognitive distortions beyond their traditional domain in clinical psychology into organizational settings, showing that distorted cognitive processing shapes not only psychological maladjustment but also positive work outcomes. Third, by identifying rumination as the linking mechanism between cognitive distortions and thriving, the study integrates Cognitive Behavioral Theory and Conservation of Resources Theory to explain how maladaptive cognitive appraisals undermine thriving through resource depletion. Finally, the findings reveal gratitude functioning as a personal resource that buffers rumination's negative effects, extending Broaden-and-Build Theory into the workplace domain — together yielding a more integrated picture of how maladaptive cognitions, psychological resources, and positive emotions jointly shape thriving at work.

Practical Implications

These findings carry several practical implications for organizations seeking to support employee thriving. Given that employees' cognitive interpretations of their workplace experiences matter as much as external working conditions, incorporating cognitive-behavioral principles into employee development programs could help employees recognize and reframe dysfunctional thinking patterns, thereby reducing both cognitive distortions and rumination. Interventions specifically targeting repetitive negative thinking — such as mindfulness training, reflective self-regulation practices, and stress management programs — could similarly help preserve employees' psychological resources and support sustained vitality and learning. Cultivating gratitude through recognition programs, appreciation practices, strengths-based feedback, and dedicated gratitude interventions offers a further avenue, one that may strengthen resilience and blunt rumination's negative impact. More broadly, employee well-being initiatives should extend beyond performance management alone to incorporate psychological support, emotional regulation, and continuous learning into human resource practices — steps capable of benefiting both individual employees and organizational sustainability.

CONCLUSION

This study set out to clarify how cognitive distortions shape employees' thriving at work, examining rumination as the underlying psychological mechanism and gratitude as a protective personal resource. The results indicated that cognitive distortions increase rumination and diminish thriving, with rumination partially mediating this relationship, while gratitude attenuates rumination's negative effect on thriving.

By integrating Cognitive Behavioral Theory, Conservation of Resources Theory, and Broaden-and-Build Theory, the study provides a more complete account of how maladaptive cognitive processes and positive psychological resources jointly shape employee thriving, indicating that thriving depends not only on organizational conditions but also on how employees habitually interpret their experiences and regulate negative thinking.

From a practical standpoint, organizations may be able to support employee well-being, continuous learning, and sustainable performance by fostering healthier cognitive processing, curbing rumination, and cultivating gratitude.

While longitudinal and experimental research would help establish causality, the proposed model, even in its present form, offers a useful framework for understanding the cognitive and psychological foundations of thriving at work.

LIMITATIONS AND STUDY FORWARD

Several limitations qualify these conclusions. First, the cross-sectional design restricts causal inferences; future research using longitudinal or time-lagged designs would help clarify the temporal relationships among cognitive distortions, rumination, gratitude, and thriving. Second, reliance on self-report measures alone raises the possibility of common method variance despite the procedural safeguards applied here; incorporating supervisor ratings, peer evaluations, or objective organizational indicators could strengthen validity in future work. Third, although participants were drawn from diverse occupational sectors in Türkiye, cultural factors may nonetheless shape cognitive appraisals, emotion regulation, and gratitude; replicating the model in other cultural contexts would therefore help establish the generalizability of these findings. Future studies might also examine additional mediators and moderators — including psychological capital, resilience, mindfulness, emotional intelligence, perceived organizational support, and leadership variables — as well as experimental or intervention-based designs testing cognitive-behavioral, mindfulness, and gratitude interventions would further strengthen the causal evidence base while informing evidence-based organizational practice.

Ethical Considerations

Participation in the survey was voluntary and based on informed consent.

Respondents were assured confidentiality and anonymity.

No personal or sensitive identifying information was disclosed.

The study adhered to standard academic ethical guidelines for social science research.

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