A Paradoxical Study of the Influence of Underdog Expectations on Employees' Work Status: Based on the Two-Mode Models of Self-Regulation Theory

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ABSTRACT

While prior studies have demonstrated that underdog expectations (UEs) can benefit or harm performance, research of whether they are detrimental or beneficial to employees' work status has not been much explored. Based on the two-mode models of self-regulation theory, the authors develop a model of the double-edged sword effect of UEs on employees' work status and their boundary conditions. Data from 357 employees showed that: (1) UEs positively affect affective rumination (AR), AR positively affects work alienation (WA) and thus mediates between UEs and WA; (2) UEs positively affect problem-solving pondering (PSP), PSP positively affects work engagement (WE) and thus mediates between UEs and WE; (3) Mindfulness moderated the relationship between UEs and PSP, thereby moderating the mediating effects of PSP. This study advances the UEs research. It also provides suggestions on how to leverage the positive effects of UEs with the alertness to mitigate its negative effects.

KEYWORDS

Affective Rumination, Mindfulness, Problem-Solving Pondering, Underdog Expectations, Work Alienation, Work Engagement

INTRODUCTION

In highly competitive organizations, only a few star employees receive high expectations, and they obtain a vast array of work resources and promising opportunities. In contrast, most employees are less favored, known as underdog expectations (UEs), referring to an individual's perception that he or she is seen as unlikely to succeed by others (Nurmohamed, 2020). UEs are prevalent in contemporary organizations, particularly in intensified competition and involution environments. In recent years, scholars have sparked

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interest in UEs. Xue et al. (2022) proposed that as an adverse event, UEs can elicit negative emotions among employees, leading to passive attitudes and behaviors, such as feedback avoidance behaviors and work disengagement. Loi et al. (2022) and Schmader et al. (2008) also identified this issue from self-determination theory and stereotypes perspectives. However, Nurmohamed et al. (2020) offered contrasting insights, suggesting that UEs can also motivate employees to think about how to challenge prevailing perceptions and prove others wrong, subsequently enhancing work engagement and improving performance. Given the divergent findings in existing research, our research aimed to delve deeper into the effects of UEs on employees' work status, questioning whether UEs contribute to work alienation (WA) or foster increased work engagement (WE).

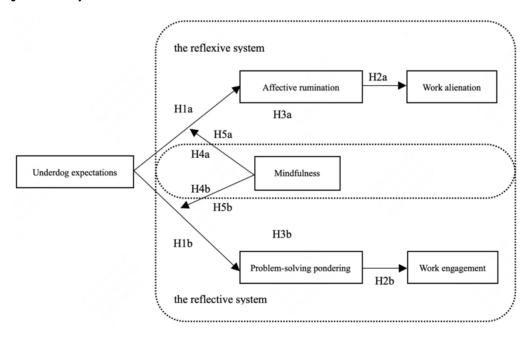
The two-mode model of self-regulation theory offers a comprehensive framework to understand how individuals respond to work events. This theory posits that individuals process information through two distinct systems: the reflexive and the reflective. The reflexive system operates automatically and habitually, enabling quick responses without taxing cognitive resources. In contrast, the reflective system involves slower, deliberate cognitive processes that offer greater flexibility at the expense of more cognitive resources. The response to events depends on the dominant system (Carver et al., 2013). Self-control behavior results from the interaction between impulsivity and reflection (Cheng et al., 2019; Smith & DeCoster, 2000). Therefore, we adopt the two-mode model of self-regulation theory as a theoretical foundation to elucidate the mechanisms through which UEs affect employees' work status. In particular, work rumination, defined as the inclination to contemplate work-related issues and events outside of work hours (Cropley & Zijlstra, 2011), can be categorized into two types: affective rumination (AR) and problem-solving pondering (PSP) (Cropley et al., 2012). Notably, researchers have demonstrated that work events can effectively influence work rumination (Wang et al., 2013). Accordingly, consistent with the two-mode model of self-regulation theory, we propose that UEs, as an adverse work event, trigger both reflexive and reflective systems simultaneously, resulting in the two types of work rumination.

On the one hand, when the reflexive system dominates, employees are likely to engage in AR, focusing on the negative emotions and disfavored status caused by UEs, depleting self-resources and ultimately leading to work alienation (WA). On the other hand, when the reflective system dominates, individuals are more inclined to engage in PSP, rationally analyzing reasons behind UEs, considering how to enhance their abilities, and changing unfavorable treatment, which fosters work engagement (WE). In sum, we adopt the two-mode model of self-regulation theory to examine the essential mediating role work rumination plays in the relationship between UEs and employees' work status.

Mindfulness, defined as receptive attention to the present moment with an accepting and non-judgmental attitude, is an individual difference closely associated with self-regulation (Bishop et al., 2004; Brown et al., 2007). Empirical evidence has demonstrated that mindfulness aids emotional regulation and diminishes emotional exhaustion (Hülsheger et al., 2014). For instance, Long and Christian (2015) found that mindfulness can regulate the association between perceived unfairness and retaliatory behavior by mitigating rumination and negative emotions. This line of work suggests the central role of mindfulness in explaining its positive workplace outcomes. Therefore, we draw upon the mindful self-regulation framework, complemented by the two-mode model of self-regulation theory, to further explore the moderating role of mindfulness. Specifically, we propose that mindfulness mitigates the negative AR caused by UEs, thereby reducing the likelihood of WA. However, it also facilitates PSP, encouraging employees to actively improve their problem-solving skills and contemplate work issues, ultimately contributing to WE.

In summary, based on the two-mode model of self-regulation theory, we have developed a double-edged sword model of the effects of UEs on employees' work status. We explore the mediating roles of AR and PSP between UEs and WA (as negative work status)/WE (as positive work status) while also considering the boundaries of mindfulness in this mechanism (see Figure 1 for the research model diagram). Our study makes three theoretical contributions. First, we transcend the prevailing negative perspectives on UEs and thus offer a more nuanced and balanced understanding of their impact on

Figure 1. The study's theoretical model



employees. By shedding light on the intricate nature of UEs and their potential for both positive and negative consequences, we advance empirical research on low expectations in organizational contexts. Second, we introduce a novel explanatory framework that emphasizes the mediating roles of AR and PSP. This framework enables a comprehensive understanding of the distinct effects of UEs in the workplace, clarifying mixed findings regarding the effects of UEs in organizational behavior research. Finally, we uncover the regulatory mechanism between UEs and employees' work status. By paying particular attention to the moderating role of mindfulness, we clarify the significance of self-regulation in controlling individuals' behaviors within the workplace. Furthermore, we highlight the critical influence of individual differences.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Two-Mode Model of Self-Regulation Theory

The two-mode model of self-regulation theory posits that individuals simultaneously engage in information processing through two distinct modes: the reflexive and the reflective systems. Each system has its unique operational characteristics (Carver et al., 2008), and behavior results from the interaction between these two systems (Smith & DeCoster, 2000). In other words, how an individual responds to an event depends on which system is dominant (Carver et al., 2013; Smith & DeCoster, 2000). The more primitive model is the reflexive system, which shows greater sensitivity to contextual cues, schematic associations, and especially to emotional responses triggered by these cues. It operates swiftly and requires minimal cognitive resources.

Consequently, even under limited information and time constraints, individuals can spontaneously generate behaviors when this mode is fully activated. Moreover, this system tends to react to short-term situational events without considering future or broader consequences. In contrast, the reflective system, characterized by verbal and deliberative processes guided by logical rules, operates consciously and relatively slowly. This rational system facilitates a cautious, analytical, and planned approach to action, offering a more comprehensive range for searching for relevant information and forming

up-bottom behavioral intentions based on predictions about future outcomes. In this research, the two-mode model of self-regulation theory will serve as the basis for explaining how UEs affect employees' work status.

UEs and Work Rumination

Work rumination, defined as being unable to disengage from work-related thoughts after work, can be categorized into two dimensions: AR and PSP. AR refers to thinking about work-related issues that result in a negative emotional response (e.g., frustration, annoyance, feeling emotionally exhausted), while PSP involves contemplating ways to improve work-related issues during nonwork time (Cropley et al., 2012). The two can be distinguished by the valence of rumination (negative vs. positive) and the focus of rumination content (affect vs. problem-solving) (Kinnunen et al., 2017). Below, drawing on the two-mode model of self-regulation theory, we discuss how UEs trigger various types of work ruminations by activating various self-regulation systems.

The reflexive self-regulation system is a bottom-up and more primitive mode. It is susceptible to situational cues, schema associations, and emotional responses (Carver et al., 2008). As described earlier, UEs imply that employees are not viewed positively in the workplace, which creates negative perceptions and fosters negative expectations regarding achieving work goals. At the organizational level, star employees are typically rewarded and recognized (Malhotra & Singh, 2016), making it challenging for underdogs to receive motivation and resources. At the leadership level, underdogs may be perceived as outsiders by their leaders, subjected to increased scrutiny, and assigned less meaningful tasks, leading to feelings of devaluation and underutilization (Manzoni & Barsoux, 1998). At the colleague level, individuals within a team may not assimilate those who are not expected to succeed (Brewer & Weber, 1994), which gives underdogs a high possibility of suffering workplace ostracism, leading to weakened relationships and limited peer support (Ferris et al., 2008; Lian et al., 2012). At the individual level, UEs can increase self-doubt and negatively affect employees' perception of their abilities (Loi et al., 2022). In sum, UEs not only inherently convey a negative message of being undervalued but also exert adverse effects on individuals from the organization, leadership, colleagues, and individual perspectives. These passive influences diminish employees' control over their work environment, leading to negative perceptions of achieving work goals. Thus, employees constantly doubt themselves and repeatedly contemplate UEs threats. Furthermore, negative associations amplify over time, further encoding negative self-concepts. Repetitive cognitions sustain the event saliency (Bordia et al., 2008; Carver et al., 2008). In this sense, UEs can be an evocative contextual cue that automatically triggers negative emotions. Taken together, such results brought by UEs make employees frequently experience negative emotions and find it difficult to disengage from negative work-related experiences, leading to AR among employees.

Conversely, UEs can activate the up-bottom reflective self-regulation system, providing a cautious and analytical approach (Carver et al., 2008). First, this system facilitates self-reflection and monitoring, guiding individuals toward goal-oriented learning (Cheng et al., 2019). In this context, UEs can serve as constructive feedback, prompting individuals to reevaluate their capabilities, look for improvement, optimize resource utilization, and explore alternative solutions to success (Ma & Zhu, 2023). Second, the reflective system enables individuals to recalibrate their motivation. Specifically, it allows individuals to interpret UEs as a source of intrinsic motivation rather than extrinsic pressure (Nurmohamed, 2014), thus propelling themselves toward success and recognition through challenging goals. Lastly, individuals are motivated to maintain a positive self-image (Alicke & Sedikides, 2009). When faced with UEs, employees refused to be viewed as losers, yearned to prove themselves, and ignited a desire to prove others wrong. This desire drives them to exert more effort in pursuing success, challenging the low expectations set by others (Nurmohamed, 2020). Accordingly, when UEs activate the reflective system, they motivate individuals to engage in proactive learning, continuously reflect on their work behaviors, and seek improvement strategies, leading to PSP among employees. Thus, based on the above, we hypothesize the following:

H1: UEs are positively related to employees' AR (H1a) and PSP (H1b).

The Effect of Work Rumination on Work Alienation and Work Engagement

Indeed, theories of conservation of resources and effort-recovery suggest that individuals are inherently motivated to maintain and replenish personal resources (Hobfoll, 1998; Meijman, 1998). Depletion of resources at work results in increased effort demands to maintain job performance. This relationship can lead to greater recovery needs and the accumulation of 'recovery debt' if adequate restoration is not achieved during rest periods. As noted, AR is a behavior characterized by persistent negative emotions related to work that extends into nonwork time. Research has shown that AR induces sustained physiological and psychological activation outside of working hours, which depletes employees' existing resources and leads to emotional exhaustion (Firoozabadi et al., 2018). Prolonged AR prevents full recovery for employees (Cropley & Zijlstra, 2011) and hinders resource replenishment (Meijman, 1998), creating a vicious cycle of 'recovery debt,' leaving employees trapped in resource depletion. As conservation of resources theory suggests, resource loss has a far more significant impact on individuals than resource gain. When faced with resource depletion, individuals adopt defensive strategies to protect themselves (Hobfoll, 1998). WA is one kind of defensive strategy that refers to the work status where employees actively reduce their devotion and distance themselves from work and the workplace (Armstrong-Stassen, 2006). It can help employees conserve resources and avoid exhaustion when experiencing resource loss. Therefore, we propose the following hypothesis:

H2a: AR has a positive effect on WA.

WE is conceptualized as a positive, fulfilling, work-related state of being characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). We propose that PSP is a positive and solution-focused form of work rumination that can facilitate individual work engagement. First, although PSP requires the expenditure of cognitive resources, it can serve as a method of resource replenishment. As noted by Bennett et al. (2016), through PSP, employees can access recovery resources and, in turn, facilitate WE. Moreover, when individuals proactively explore multiple perspectives to remove obstacles and gain creative insights, they generate positive emotions and pleasant experiences promoting resource creation. Consistent with this idea, Weinberger et al. (2018) empirically showed that PSP, can positively impact entrepreneurs' creativity at work as a form of out-of-work time resource reconstruction. Finally, the positive effects of PSP are highly stable over time. Longitudinal studies have indicated that PSP significantly predicts work creativity one year later and positively impacts WE two years later (Kinnunen et al., 2017; Vahle-Hinz et al., 2017). Therefore, we hypothesize that:

H2b: PSP has a positive effect on WE.

After synthesizing H1a, H1b, H2a, and H2b, we can conclude that the effect of UEs depends on which self-regulation system is dominant: When the reflexive system dominates, employees experience AR, leading to WA; when the reflective system is governing, employees tend to engage in PSP, leading to WE. Therefore, we hypothesize:

H3a: AR mediates the relationship between UEs and WA. **H3b:** PSP mediates the relationship between UEs and WE.

The Moderating Role of Mindfulness

Bishop et al. (2004) defined mindfulness as a cognitive process involving two components of attention: attentional self-regulation and cultivating a curious, open, and accepting attitude toward the present

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moment. Previous studies have demonstrated that mindfulness facilitates self-regulation and empowers individuals to navigate emotional distress and maladaptive behaviors effectively (Bishop et al., 2004; Hülsheger et al., 2021). Furthermore, it alters negative views of work and encourages the adoption of more adaptive cognitive strategies (Good et al., 2016; Guidetti et al., 2019). As described earlier, employees respond differently to work events due to the functions of different self-regulation systems. In the context of UEs, we propose that varying degrees of mindfulness can help activate different self-regulation systems, thereby exhibiting distinct patterns of work rumination.

Firstly, individuals high in mindfulness can effectively regulate their attention (Lyddy et al., 2021), enhancing their cognitive abilities and flexibility. When facing UEs, mindfulness can play a crucial role in alleviating employee self-doubt, often leading to decreased self-efficacy. By instilling a sense of control and confidence in adverse environments, mindfulness provides individuals with the necessary cognitive resources to cope with UEs. Moreover, when individuals are in mindfulness, they can better detach themselves from events, emotions, and experiences. This detachment is beneficial for reducing the association between negative stereotypes from others and their self-perception, thus increasing the likelihood of experiencing positive emotions and engaging in more adaptive coping strategies (Carmody & Baer, 2008). Furthermore, as Glomb et al. (2011) explained, mindfulness assists individuals in breaking free from automatic response patterns, which are frequently influenced by past experiences, schemas, and cognitive habits. By shifting information processing from reflexive to more reflective modes, individuals tend to interpret low expectations from others with less negativity. Specifically, when faced with UEs, mindfulness reduces the possibility that employees will subconsciously and reflexively interpret UEs as negative situations. Accordingly, mindfulness mitigates negative experiences and redirects efforts toward learning and goal achievement.

Secondly, mindfulness can foster openness, characterized by curiosity and acceptance of experiences (Costa & McCrae, 1987). By emphasizing the importance of 'accepting past experiences without judgment,' individuals can calmly face the current situation of being an underdog rather than avoiding it. This neutral and objective attitude helps to reduce impulsive reactions to negative experiences. Furthermore, mindfulness encourages individuals to focus on the present problem and reason through it (Zheng & Ni, 2018). For these reasons, in the context of UEs, individuals high in mindfulness can activate their reflective regulation system, enhancing their ability to focus on problems and contemplate improvements in their problem-solving skills, thereby promoting PSP among employees. In contrast, individuals low in mindfulness may have a less well-regulated ability to cope, pay more attention to adverse events, and are more likely to exhibit automatic responses. Therefore, we propose two hypotheses:

H4a: Mindfulness negatively moderates the positive relationship between UEs and AR; **H4b:** Mindfulness positively moderates the positive relationship between UEs and PSP.

In summary, mindfulness, which refers to a non-judgmental and objective awareness, contributes to enhanced cognitive flexibility, emotional regulation, and self-efficacy. It broadens behavioral and attentional repertoires through open acceptance, diminishes the cognitive impact of adverse events, circumvents the secondary processing of negative information, and fosters a spiral of resource acquisition. When encountering UEs, high-mindfulness individuals possess more cognitive resources, enabling them to activate their reflective system, bolster PSP, increase their investment in tasks, and shift their focus away from the 'underdog' label. Conversely, low-mindfulness individuals have fewer cognitive resources. Governed by the reflexive system, they are more likely to exhibit automatic responses, endure negative emotions, and struggle with adaptive self-regulation strategies due to weaker inhibition of negative thought patterns. They are at risk of engaging in ineffective AR and may detach from work as a form of self-protection mechanism in resource-depleted situations. Therefore, we hypothesize:

H5a: Mindfulness negatively moderates the mediating effect of AR between UEs and WA. **H5b:** Mindfulness positively moderates the mediating effect of PSP between UEs and WE.

METHODOLOGY

Sample and Data Collection

The study sample was collected from 12 enterprises (finance, integrated circuits, and international trade) in Shanghai and Zhejiang, China. The study received endorsement from senior company leaders and cooperation from various departments. Data were collected in two stages to avoid common method biases, with a two-week interval between them. In the first stage, demographic variables, UEs, mindfulness, AR, and PSP, were collected from employees, while WA and WE variables were collected in the second stage. A total of 426 questionnaires were collected, and after excluding the invalid and incomplete questionnaires, 357 valid questionnaires were obtained, and the recovery rate of valid questionnaires was 83.80%. Among the respondents, 53.31% were male and 46.69% were female. Regarding age, 28.79% were aged 25 and under, 54.09% were aged 26-35, 15.18% were aged 36-45, 1.17% were aged 46-55, and 0.78% were over 55 years old. Regarding education level, 5.06% had high school education or below, 14.79% had college degrees, 64.98% had bachelor's degrees, 12.45% had master's degrees, and 2.72% held doctoral degrees. Concerning tenure, 7.00% had worked for less than one year, 9.73% had worked for 1-2 years, 35.41% had worked for 3-5 years, 35.41% had worked for 6-10 years, and 12.45% had worked for more than ten years.

Measures

We controlled for the effects of demographic characteristics such as gender, age, education level, and tenure. The scales used the 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

- Underdog expectations. This was measured by a 3-item scale developed by Nurmohamed (2020), such as "I am viewed as an underdog in doing this job by other individuals. "The alpha coefficient of this scale is 0.915.
- **Affective rumination.** This was measured by a 3-item scale developed by Kinnunen et al. (2019), such as "I am irritated by work issues when not at work." The alpha coefficient of this scale is 0.878.
- **Problem-solving pondering.** This was measured by a 3-item scale also developed by Kinnunen et al. (2019), such as "I find solutions to work-related problems in my free time." The alpha coefficient of this scale is 0.865.
- **Mindfulness.** This was measured by a 5-item scale developed by Hülsheger et al. (2014), such as "I found myself doing things without paying attention." This scale was reverse-scored, and the alpha coefficient of this scale is 0.941.
- Work engagement. This was measured by a 9-item scale developed by Schaufeli et al. (2006), such as "My job inspires me." The alpha coefficient of this scale is 0.967.
- Work alienation. This was measured by an 8-item scale developed by Nair et al. (2010), such as "I don't enjoy my work; I just put in my time to get paid." The alpha coefficient of this scale is 0.941.

DATA ANALYSIS

This research employed SPSS 26.0 and AMOS 26.0 software for data analysis. First, confirmatory factor analysis (CFA) was conducted using AMOS 26.0 to examine the discriminant validity of this scale. Second, common method bias testing, descriptive statistics, including means, standard

deviations, correlation matrices, and hierarchical regression analysis were conducted using SPSS 26.0. Finally, hypothesis testing was carried out using SPSS 26.0 and SPSS macro PROCESS, with maximum likelihood estimation used for parameter estimation. The number of bootstrap samples is 5000 to ensure the robustness of the results. The Johnson-Neyman (J-N) approach was also used to optimize the moderation effect test by providing confidence intervals for simple slopes instead of point estimates.

Confirmatory Factor Analysis

Considering that the ratio of sample size to the number of items may impact the overall model fit, scholars have recommended employing item parceling methods (Little et al., 2013; Williams et al., 2009). Accordingly, in this study, WE was parcelled by grouping its measurement items into three parcels based on their respective dimensions. This approach was expected to improve the accuracy and reliability of the analysis results by reducing the potential bias caused by unbalanced ratios between sample size and item numbers.

This study employed confirmatory factor analysis to examine the discriminant validity among variables, and Table 1 presents the results. The fitting indexes of the six-factor model ($\chi^2 = 667.764$, df = 260, $\chi^2/df = 2.568$, RMSEA = 0.078, TLI = 0.919, CFI = 0.930) met the standard requirements and outperformed alternative models, indicating satisfactory discriminant validity among variables.

Checking for Common Method Bias

Given that this study mainly relied on employees' self-reported data, common method bias (CMB) may be a concern. Harman's single-factor method was used to test for CMB to address this issue, which revealed that the first principal component accounted for only 38.609% (less than 40%) before rotation. Moreover, a common method factor was added to the six-factor structure to assess its potential impact on the results. The findings showed that the improvement in the RMSEA, CFI, and other indicators of the seven-factor model did not exceed 0.02 (Δ RMSEA = 0.008, Δ CFI = 0.019, Δ TLI = 0.016), suggesting that CMB does not pose a threat to the research results.

Table 1. Results of confirmatory factor analyses

Model	χ²	df	χ²/df	RMSEA	TLI	CLI
1-Factor model (UEs+AR+PSP+MD+WA+WE)	3819.515	275	13.889	0.224	0.336	0.391
2-Factor model (UEs+AR+PSP, MD+WA+WE)	3559.835	274	12.992	0.216	0.382	0.435
3-Factor model (UEs, AR+PSP, MD+WA+WE)	3046.647	272	11.201	0.200	0.474	0.523
4-Factor model (UEs, AR+PSP, MD, WA+WE)	2086.383	269	7.756	0.162	0.652	0.688
5-Factor model (UEs, AR+PSP, MD, WA, WE)	1083.501	265	4.089	0.110	0.841	0.859
6-Factor model (UEs, AR, PSP, MD, WA, WE)	667.764	260	2.568	0.078	0.919	0.930
7-Factor model (UEs, AR, PSP, MD, WA, WE, CMB)	530.698	235	2.258	0.070	0.935	0.949

Note: N=357. UEs = underdog expectations, AR = affective rumination, PSP = problem-solving pondering, MD = mindfulness, WA = work alienation, WE = work engagement, CMB=common method bias.

Test of Hypotheses

Table 2 illustrates the variable means, standard deviations, and correlations. Of these, UEs were positively correlated with AR (r = 0.320, p < 0.001) and PSP (r = 0.165, p < 0.01); AR was positively correlated with WA (r = 0.496, p < 0.001), while PSP was positively correlated with WE (r = 0.427, p < 0.001). Mindfulness was negatively related to AR (r = -0.435, p < 0.001) and positively associated with PSP (r = 0.228, p < 0.001). The correlation results were consistent with the initial assumptions.

The results of the hierarchical regression analysis are presented in Table 3. As hypothesized, it was anticipated that UEs would positively associate with work rumination. Models 1 and 4 in Table 3 demonstrate that after controlling for covariates, UEs had a significant positive impact on AR (B

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
Gender	1.467	0.500	-									
Age	1.911	0.742	0.008	-								
Education	2.930	0.762	-0.047	0.072	-							
Tenure	3.366	1.049	0.083	0.640***	-0.139*	-						
UEs	2.188	1.010	-0.090	-0.120	-0.068	-0.097	-					
AR	2.632	0.696	0.015	-0.150**	-0.031	-0.204**	0.320***	-				
PSP	3.003	0.832	0.080	0.070	-0.092	0.025	0.165**	-0.177**	-			
MD	3.160	0.926	0.044	0.260***	0.083	0.260***	-0.168***	-0.435***	0.228***	-		
WA	2.557	0.717	-0.077	-0.079	-0.007	-0.246***	0.295***	0.496***	-0.178**	-0.396***	-	
WE	3.001	0.835	0.095	0.048	0.139*	0.034	-0.175***	-0.431***	0.427***	0.404***	-0.397***	-

Table 2. Means, standard deviation, and correlation among study variables

Note: N=357.*p<0.05,**p<0.01, ***p<0.001. UEs = underdog expectations, AR = affective rumination, PSP = problem-solving pondering, MD = mindfulness, WA = work alienation, WE = work engagement, CMW=common method bias.

= 0.211, p < 0.001) and PSP (B = 0.147, p < 0.01). Hypotheses 1a and 1b were therefore supported. AR was found to have a significant positive effect on WA (B = 0.482, p < 0.001), while PSP had a significant positive influence on WE (B = 0.443, p < 0.001). Hypotheses 2a and 2b were supported.

The SPSS macro PROCESS was used to examine mediation effects. As shown in Table 4, the indirect impact of UEs on WA through AR was 0.091, with a 95% confidence interval that did not include 0 (LLCI = 0.048, ULCI = 0.149). Likewise, as shown in Table 5, the indirect effect of UEs on WE through PSP was 0.071, with a 95% confidence interval that did not include 0 (LLCI = 0.006, ULCI = 0.133). Thus, hypotheses 3a and 3b were supported.

In Model 3 and Model 6, the results indicate that the interaction term between UEs and mindfulness negatively influences AR (B = -0.105, p < 0.01) and positively influences PSP (B = 0.159, p < 0.001). The Johnson-Neyman (J-N) approach can address the limitations of traditional spot-checking methods in testing moderation effects (i.e., mean \pm 1 standard deviation). This study further examined the moderating effect of mindfulness using the J-N approach.

As shown in Figure 2, in the part where mindfulness is less than 0.768, the confidence interval of the simple slope consistently includes 0, and the slope line is always above the X-axis, indicating that mindfulness negatively moderates the relationship between UEs and AR. Specifically, as individual levels of mindfulness decrease, the positive effect of UEs on AR increases. Hypothesis 4a was supported.

As shown in Figure 3, in the part where mindfulness is more than -0.625, the confidence interval of the simple slope consistently includes 0, and the slope line is always above the X-axis, indicating that mindfulness positively moderates the relationship between UEs and PSP. Specifically, as

Table 3. Hierarchical regression analysis

D. P. C.	AR			PSP		WA		WE		
Predictor	M1	M2	М3	M4	M5	М6	М7	M8	М9	M10
Gender	0.079	0.091	0.122	0.160	0.151	0.103	-0.096	-0.075	0.105	0.064
Age	-0.011	0.054	0.046	0.159	0.122	0.135	0.148*	0.159*	-0.049	-0.078
Education	-0.033	-0.001	-0.027	-0.104	-0.131	-0.092	-0.038	-0.031	0.215**	0.201**
Tenure	-0.127*	-0.082	-0.108*	-0.055	-0.094	-0.055	-0.170**	-0.172**	0.058	0.052
UEs	0.211***	0.177***	0.159***	0.147**	0.175**	0.203***		0.106**		-0.200**
AR							0.482***	0.434***		
PSP									0.443***	0.486***
MD		-0.284***	-0.240***		0.244***	0.178**				
UEs× MD			-0.105**			0.159***				
F	7.959***	14.957***	14.594***	2.863**	5.672***	6.893***	20.116***	18.325***	14.321***	15.952***
R ²	0.120	0.246	0.271	0.035	0.099	0.139	0.272	0.289	0.206	0.260
ΔR^2	0.090	0.127	0.027	0.031	0.066	0.043	0.208	0.019	0.190	0.055

Note: N=357. *p<0.05, **p<0.01, ***p<0.001, bootstraps=5000. UEs = underdog expectations, AR = affective rumination, PSP = problem-solving pondering, MD = mindfulness, WA = work alienation, WE = work engagement.

Table 4. The mediating effect of affective rumination

Dependent variable: WA	В	SE	LLCI	ULCI
Totally effect	0.197	0.042	0.115	0.280
Direct effect	0.106	0.040	0.027	0.186
Indirect effect	0.091	0.024	0.048	0.149

Note: N=357.B = coefficient; SE = standardized error; LLCI = lower-level confidence interval; ULCI = upper-level confidence interval. WA = work alienation.

Table 5. The mediating effect of problem-solving pondering

Dependent variable: WE	В	SE	LLCI	ULCI
Totally effect	-0.129	0.052	-0.231	-0.027
Direct effect	-0.200	0.046	-0.291	-0.110
Indirect effect	0.071	0.032	0.006	0.133

Note: N=357.B = coefficient; SE = standardized error; LLCI = lower-level confidence interval; ULCI = upper-level confidence interval. WE = work engagement.

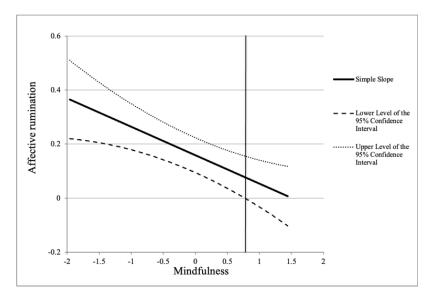
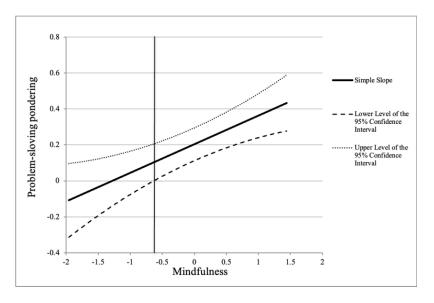


Figure 2. Mindfulness as a moderator of the relationship between underdog expectations and affective rumination

Figure 3. Mindfulness as a moderator of the relationship between underdog expectations and problem- solving pondering



individual levels of mindfulness increase, the positive effect of UEs on PSP increases. Hypothesis 4b was supported.

The SPSS macro PROCESS was used to examine moderated mediation effects. The results are presented in Tables 6 and 7. For WA, the indirect effect of AR was significant when mindfulness was at or below the mean level, with estimates of 0.069 (95% LCI = 0.037, ULCI = 0.102) and 0.111(95% LCI = 0.067, ULCI = 0.161), respectively. However, this mediating effect was weakened and not significant when mindfulness was high. Hypothesis 5a was supported. For WE, the indirect

Table 6. The mediating effect that is regulated:underdog expectations→affective rumination→work alienation

Moderator variable	Indirect effect	SE	LLCI	ULCI
M-SD	0.111	0.024	0.067	0.161
M	0.069	0.017	0.037	0.102
M+SD	0.027	0.019	-0.016	0.061

Note: N=357. SE = standardized error; LLCI = lower-level confidence interval; ULCI = upper-level confidence interval.

Table 7. The mediating effect that is regulated: underdog expectations→problem- solving pondering→work engagement

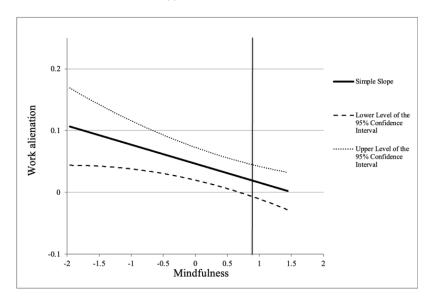
Moderator variable	Indirect effect	SE	LLCI	ULCI
M-SD	0.027	0.036	-0.043	0.100
M	0.099	0.025	0.051	0.149
M+SD	0.170	0.028	0.115	0.227

Note: N=357. SE = standardized error; LLCI = lower-level confidence interval; ULCI = upper-level confidence interval.

effect of UEs through PSP on WE was significant when mindfulness was above the mean level, with estimates of 0.099 (95% LCI = 0.051, ULCI = 0.149) and 0.170 (95% LCI = 0.115, ULCI = 0.227), respectively. This relationship was weakened and not significant in the low mindfulness group. Hypothesis 5b was supported.

The J-N approach was used to further analyze the moderated mediating effects. As presented in Figure 4, when mindfulness is less than 0.601, the confidence interval of the simple slope line excluded 0, indicating that as mindfulness decreased, the positive impact of UEs through AR on WA gradually increased. Hypothesis 5a was supported. As presented in Figure 5, when mindfulness is more than -0.553, the confidence interval of the simple slope line excluded 0, indicating that the increase in individual mindfulness levels strengthened the positive effect of UEs through PSP on WE. Hypothesis 5b was supported.

Figure 4. The effect of moderation-mediation mode (1)



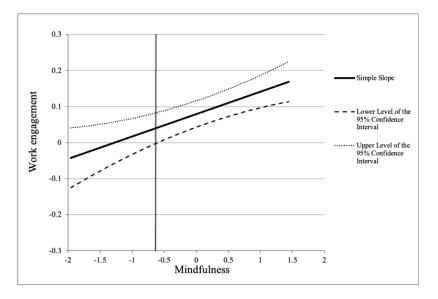


Figure 5. The effect of moderation-mediation mode (2)

DISCUSSION

Based on the two-mode model of self-regulation theory, this study sheds light on the differential impacts of UEs on employees' work status (WA as negative work status and WE as positive work status). Our results elucidate that AR and PSP serve as critical mediators in this relationship, finding that UEs are positively related to AR, which thus results in WA, while UEs are also positively related to PSP, resulting in WE. Additionally, our results demonstrate that mindfulness plays a pivotal moderating role in these mechanisms. Employees exhibiting high levels of mindfulness are inclined to pursue PSP, which fosters WE, whereas those with lower levels of mindfulness tend to AR, leading to WA. Collectively, these insights enhance our comprehension of the nuanced ways UEs can influence employees' work status and underscore the value of integrating mindfulness practices within organizational environments.

Theoretical Implications

Our study has several theoretical implications. First, we extend the literature on low expectations by demonstrating that UEs have two-sided effects. Although previous research on UEs has predominantly focused on negative consequences, such as decreased performance, lower job adaptation, and reduced organizational commitment (Binyamin, 2020; Chen & Klimoski, 2003; Manzi et al., 2019), recent scholars have pointed out that UEs may not always be negative and have begun to explore their positive effects, including the motivation to prove detractors wrong and consequently improve performance (Nurmohamed, 2020). While both positive and negative effects have been explored, most studies have focused only on one side of UEs and have not yet empirically integrated the underlying mechanisms and boundary conditions of these potential dual effects. Drawing from the two-mode model of self-regulation theory, we addressed this gap by proposing a 'double-edged sword' model of UEs. Aligned with this, we move beyond focusing solely on the one-side impact of UEs. This advancement is theoretically and practically important as it will assist scholars in shifting from a singular viewpoint to a balanced and dialectical understanding of the impact of UEs on employees, and it promotes further research in the field of UEs.

Second, we illuminate the underlying mechanisms that link UEs to employees' work status (WA as negative work status and WE as positive work status). Specifically, our results indicate that UEs are

positively related to PSP, which enhances WE, while they are also positively related to AR, leading to WA. By adopting the lens of two different kinds of work rumination, our research encourages further investigation into the reasons behind individuals' varied responses to UEs. Furthermore, due to variations in the content of thoughts, different work ruminations yield significant differences in their subsequent effects (Zhang et al., 2020). Research exploring the subsequent effects of various types of work rumination remains rare. By proposing AR and PSP as two mediating mechanisms, we not only extend the literature on work rumination but also unveil the black box of how UEs impact employees' work status, providing new explanatory mechanisms for why UEs can have such divergent effects.

Third, we establish mindfulness as a moderator and develop a moderated mediation model, investigating the boundary conditions in the impact of UEs on employee work status. From the perspective of individual differences, we further clarify the conditions under which UEs can yield positive or negative outcomes. As anticipated, when confronted with UEs, individuals high in mindfulness demonstrate superior self-regulation and possess greater cognitive resources, facilitating engagement in PSP and promoting WE. In contrast, individuals low in mindfulness cannot shift their attention effectively, often focusing on adverse situations and negative emotions, leading to AR and consequently inducing WA. Our findings are in line with previous perspectives asserting that mindfulness can positively affect employee behavior (Good et al., 2016; Hülsheger et al., 2021; Long & Christian, 2015) and add to research documenting the self-regulatory benefits of mindfulness (Leyland et al., 2019). Mindfulness, as an essential boundary condition, effectively explains the double-edged sword effects of UEs, thus addressing the question of when UEs facilitate PSP and enhance WE and when they induce AR and result in WA.

Managerial Implications

First, it is crucial to exercise caution when utilizing UEs as a motivational tool within organizations. Leaders should be more aware of the importance of recognizing that not all employees possess an inherent inclination for effective PSP when faced with UEs. To optimize employee potential, organizations should improve job design and ensure that individuals are matched with work roles that align with their strengths and abilities.

Second, organizations can consider implementing mindfulness training programs to enhance employees' mindfulness. This approach has gained popularity as a means to help individuals cope effectively with stressors in the work environment. By practicing mindfulness, employees develop better emotional regulation abilities, foster positive thoughts about their work, and ultimately enhance their job performance. Organizations can organize mindfulness lectures, practical activities, and courses at appropriate times to promote engagement at work. Similarly, from the employees' perspective, they can actively pursue improvements in their mindfulness and self-regulation capabilities through both formal and informal training methods. A well-known model for this purpose is the Mindfulness-Based Stress Reduction (MBSR) program developed by Kabat-Zinn (2003), which has been extensively validated as an effective method for enhancing individual mindfulness levels (Lange & Rowold, 2019).

Third, the findings highlight the importance of extending the positive impact of work events on employees, encouraging them to concentrate on the positive aspects of their work. Reflecting on work-related matters during nonwork hours is crucial. Positive thinking about work content replenishes employee resources and enhances their problem-solving abilities. Conversely, dwelling on negative thoughts can create a harmful cycle of resource depletion. Organizations should encourage employees to reflect on positive work events through work reports and reward their proactive contributions to counter this. These approaches can help reduce their tendency to ruminate on adverse events.

When leaders notice signs of AR among employees, they should listen attentively and offer assistance in addressing past incidents, aiming to minimize the lingering effects of such events. Furthermore, managers and leaders are advised to promote improved work efficiency and avoid falling into the trap of 'ineffective involution' caused by excessive workload pressure. This promotion

enables employees to fully detach from work during off-hours, facilitating effective resource recovery and promoting overall well-being.

Limitations and Future Research

Although variable data were collected anonymously and at multiple time points to mitigate possible common method bias, our analyses indicated that the effect of common method bias was not serious. However, given that the variables were psychological and were assessed through self-reporting, there remains potential for common method bias. Future research could employ a multi-wave, longitudinal approach to data collection to address this concern and incorporate other methods, such as pairing employees with their leaders or colleagues, to integrate subjective and objective data analysis effectively. Additionally, due to the reliance on cross-sectional survey data in this study, self-reported work rumination may be influenced by current job stress and adverse events. We recommend that future studies employ a continuous diary method to observe employees over an extended duration to establish more robust causal relationships between variables. Furthermore, it is crucial to acknowledge that the individual-level variables examined in this study did not account for team-level or organization-level factors, including organizational social support, which may influence the relationship between UEs, work rumination, and WA/WE. For more precise analyses, future research should incorporate these factors and consider their impact on the investigated relationships.

AUTHOR NOTES

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REFERENCES

Alicke, M. D., & Sedikides, C. (2009). Self-enhancement and self-protection: What they are and what they do. *European Review of Social Psychology*, 20(1), 1–48. doi:10.1080/10463280802613866

Armstrong-Stassen, M. (2006). Determinants of how managers cope with organisational downsizing. *Applied Psychology*, 55(1), 1–26. doi:10.1111/j.1464-0597.2006.00225.x

Bennett, A. A., Gabriel, A. S., Calderwood, C., Dahling, J. J., & Trougakos, J. P. (2016). Better together? Examining profiles of employee recovery experiences. *The Journal of Applied Psychology*, *101*(12), 1635–1654. doi:10.1037/apl0000157 PMID:27618407

Binyamin, G. (2020). Do leader expectations shape employee service performance? Enhancing self-expectations and internalization in employee role identity. *Journal of Management & Organization*, 26(4), 536–554. doi:10.1017/jmo.2017.68

Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Speca, M., Velting, D., & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology : a Publication of the Division of Clinical Psychology of the American Psychological Association*, 11(3), 230–241. doi:10.1093/clipsy.bph077

Bordia, P., Restubog, S., & Tang, R. (2008). When employees strike back: Investigating mediating mechanisms between psychological contract breach and workplace deviance. *The Journal of Applied Psychology*, *93*(5), 1104–1117. doi:10.1037/0021-9010.93.5.1104 PMID:18808228

Brewer, M. B., & Weber, J. G. (1994). Self-evaluation effects of interpersonal versus intergroup social comparison. *Journal of Personality and Social Psychology*, 66(2), 268–275. doi:10.1037/0022-3514.66.2.268 PMID:8195985

Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, *18*(4), 211–237. doi:10.1080/10478400701598298

Carmody, J., & Baer, R. A. (2008). Relationships between mindfulness practice and levels of mindfulness, medical and psychological symptoms and well-being in a mindfulness-based stress reduction program. *Journal of Behavioral Medicine*, *31*(1), 23–33. doi:10.1007/s10865-007-9130-7 PMID:17899351

Carver, C. S., Johnson, S. L., & Joormann, J. (2008). Serotonergic function, two-mode model of self-regulation, and vulnerability to depression: What depression has in common with impulsive aggression. *Psychological Bulletin*, 134(6), 912–943. doi:10.1037/a0013740 PMID:18954161

Carver, C. S., Johnson, S. L., & Joormann, J. (2013). Two-mode model of self-regulation and serotonergic functioning: Divergent manifestations of impulse and constraint. In B. W. Sokol, F. M. E. Grouzet, & U. Müller (Eds.), *Self-regulation and autonomy* (1st ed., pp. 255–278). Cambridge University Press. doi:10.1017/CBO9781139152198.018

Chen, G., & Klimoski, R. J. (2003). The impact of expectations on newcomer performance in teams as mediated by work characteristics, social exchanges, and empowerment. *Academy of Management Journal*, 46(5), 591–607. doi:10.2307/30040651

Cheng, Y., Wu, Y., & Li, H. (2019). Dual-learning systems under stress. *Xinli Kexue Jinzhan*, 27(6), 1044–1057. doi:10.3724/SPJ.1042.2019.01044

Costa, P. T. J., & McCrae, R. R. (1987). Personality assessment in psychosomatic medicine. Value of a trait taxonomy. *Advances in Psychosomatic Medicine*, 17, 71–82. doi:10.1159/000414007 PMID:3591565

Cropley, M., Michalianou, G., Pravettoni, G., & Millward, L. J. (2012). The relation of post-work ruminative thinking with eating behaviour: Unwinding and food choice. *Stress and Health*, 28(1), 23–30. doi:10.1002/smi.1397 PMID:22259155

Cropley, M., & Zijlstra, F. R. H. (2011). Work and rumination. In J. Langan-Fox & C. Cooper, Handbook of stress in the occupations (p. 14333). Edward Elgar Publishing. doi:10.4337/9780857931153.00060

Ferris, D. L., Brown, D. J., Berry, J. W., & Lian, H. (2008). The development and validation of the Workplace Ostracism Scale. *The Journal of Applied Psychology*, 93(6), 1348–1366. doi:10.1037/a0012743 PMID:19025252

- Firoozabadi, A., Uitdewilligen, S., & Zijlstra, F. R. H. (2018). Should you switch off or stay engaged? The consequences of thinking about work on the trajectory of psychological well-being over time. *Journal of Occupational Health Psychology*, 23(2), 278–288. doi:10.1037/ocp0000068 PMID:27991803
- Glomb, T. M., Duffy, M. K., Bono, J. E., & Yang, T. (2011). Mindfulness at work. In A. Joshi, H. Liao, & J. J. Martocchio (Eds.), *Research in personnel and human resources management* (Vol. 30, pp. 115–157). Emerald Group Publishing Limited. doi:10.1108/S0742-7301(2011)0000030005
- Good, D. J., Lyddy, C. J., Glomb, T. M., Bono, J. E., Brown, K. W., Duffy, M. K., Baer, R. A., Brewer, J. A., & Lazar, S. W. (2016). Contemplating mindfulness at work: An integrative review. *Journal of Management*, 42(1), 877–880. doi:10.1177/0149206315617003
- Guidetti, G., Viotti, S., Badagliacca, R., Colombo, L., & Converso, D. (2019). Can mindfulness mitigate the energy-depleting process and increase job resources to prevent burnout? A study on the mindfulness trait in the school context. *PLoS One*, 14(4), e0214935. doi:10.1371/journal.pone.0214935 PMID:30947256
- Hobfoll, S. E. (1998). Stress, culture, and community: The psychology and philosophy of stress. (pp. xvi, 296). Plenum Press. 10.1007/978-1-4899-0115-6
- Hülsheger, U. R., Lang, J. W., Depenbrock, F., Fehrmann, C., Zijlstra, F. R., & Alberts, H. J. (2014). The power of presence: The role of mindfulness at work for daily levels and change trajectories of psychological detachment and sleep quality. *The Journal of Applied Psychology*, *99*(6), 1113–1128. doi:10.1037/a0037702 PMID:25198098
- Hülsheger, U. R., van Gils, S., & Walkowiak, A. (2021). The regulating role of mindfulness in enacted workplace incivility: An experience sampling study. *The Journal of Applied Psychology*, *106*(8), 1250–1265. doi:10.1037/apl0000824 PMID:32914993
- Kinnunen, U., Feldt, T., de Bloom, J., Sianoja, M., Korpela, K., & Geurts, S. (2017). Linking boundary crossing from work to nonwork to work-related rumination across time: A variable- and person-oriented approach. *Journal of Occupational Health Psychology*, 22(4), 467–480. doi:10.1037/ocp0000037 PMID:27123888
- Lange, S., & Rowold, J. (2019). Mindful leadership: Evaluation of a mindfulness-based leader intervention. *Gruppe. Interaktion. Organisation.* [GIO]. *Zeitschrift Für Angewandte Organisationspsychologie*, 50(3), 1–17. doi:10.1007/s11612-019-00482-0
- Leyland, A., Rowse, G., & Emerson, L.-M. (2019). Experimental effects of mindfulness inductions on self-regulation: Systematic review and meta-analysis. *Emotion (Washington, D.C.)*, 19(1), 108–122. doi:10.1037/emo0000425 PMID:29578742
- Lian, H., Lance Ferris, D., & Brown, D. J. (2012). Does taking the good with the bad make things worse? How abusive supervision and leader—member exchange interact to impact need satisfaction and organizational deviance. *Organizational Behavior and Human Decision Processes*, 117(1), 41–52. doi:10.1016/j.obhdp.2011.10.003
- Little, T. D., Rhemtulla, M., Gibson, K., & Schoemann, A. M. (2013). Why the items versus parcels controversy needn't be one. *Psychological Methods*, *18*(3), 285–300. doi:10.1037/a0033266 PMID:23834418
- Loi, T. I., Feng, Z., Kuhn, K. M., & Tripp, T. M. (2022). When and how underdog expectations promote cheating behavior: The roles of need fulfillment and general self-efficacy. *Journal of Business Ethics*, 181(2), 375–395. doi:10.1007/s10551-021-04976-0
- Long, E. C., & Christian, M. S. (2015). Mindfulness buffers retaliatory responses to injustice: A regulatory approach. *The Journal of Applied Psychology*, 100(5), 1409–1422. doi:10.1037/apl0000019 PMID:25751750
- Lyddy, C. J., Good, D. J., Bolino, M. C., Thompson, P. S., & Stephens, J. P. (2021). The costs of mindfulness at work: The moderating role of mindfulness in surface acting, self-control depletion, and performance outcomes. *The Journal of Applied Psychology*, *106*(12), 1921–1938. doi:10.1037/apl0000863 PMID:33570968
- Ma, J., & Zhu, M. (2023). Accept or change your fate: Exploring the Golem effect and underdog effect of underdog expectations. *Acta Psychologica Sinica*, 55(06), 1029–1048. doi:10.3724/SP.J.1041.2023.01029
- Malhotra, P., & Singh, M. (2016). Indirect impact of high performers on the career advancement of their subordinates. *Human Resource Management Review*, 26(3), 209–226. doi:10.1016/j.hrmr.2016.01.002
- Manzi, C., Paderi, F., Benet-Martínez, V., & Coen, S. (2019). Age-based stereotype threat and negative outcomes in the workplace: Exploring the role of identity integration. *European Journal of Social Psychology*, 49(4), 705–716. doi:10.1002/ejsp.2533

Manzoni, J. F., & Barsoux, J. L. (1998). Inside the Golem Effect: How bosses can kill their subordinates' motivation. INSEAD.

Meijman, T. F. (1998). Psychological aspects of workload. In P. J. D. Drenth, H. Thierry, & C. J. de Wolff (Eds.), New handbook of work and organizational psychology: Volume 2: Work psychology (pp. 5–34). Psychology Press.

Nurmohamed, S. (2014). Over or under? The motivational implications of an underdog image [Doctoral dissertation, University of Michigan]. Deep Blue Documents. https://deepblue.lib.umich.edu/handle/2027.42/107335

Nurmohamed, S. (2020). The underdog effect: When low expectations increase performance. *Academy of Management Journal*, 63(4), 1106–1133. doi:10.5465/amj.2017.0181

Schaufeli, W. B., Salanova, M., González-romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, *3*(1), 71–92. doi:10.1023/A:1015630930326

Schmader, T., Johns, M., & Forbes, C. (2008). An integrated process model of stereotype threat effects on performance. *Psychological Review*, *115*(2), 336–356. doi:10.1037/0033-295X.115.2.336 PMID:18426293

Smith, E. R., & DeCoster, J. (2000). Dual-process models in social and cognitive psychology: Conceptual integration and links to underlying memory systems. *Personality and Social Psychology Review*, 4(2), 108–131. doi:10.1207/S15327957PSPR0402_01

Vahle-Hinz, T., Mauno, S., de Bloom, J., & Kinnunen, U. (2017). Rumination for innovation? Analysing the longitudinal effects of work-related rumination on creativity at work and off-job recovery. *Work and Stress*, 31(4), 315–337. doi:10.1080/02678373.2017.1303761

Wang, M., Liu, S., Liao, H., Gong, Y., Kammeyer-Mueller, J., & Shi, J. (2013). Can't get it out of my mind: Employee rumination after customer mistreatment and negative mood in the next morning. *The Journal of Applied Psychology*, 98(6), 989–1004. doi:10.1037/a0033656 PMID:23895040

Weinberger, E., Wach, D., Stephan, U., & Wegge, J. (2018). Having a creative day: Understanding entrepreneurs' daily idea generation through a recovery lens. *Journal of Business Venturing*, 33(1), 1–19. doi:10.1016/j.jbusvent.2017.09.001

Williams, L. J., Vandenberg, R. J., & Edwards, J. R. (2009). 12 Structural equation modeling in management research: A guide for improved analysis. *The Academy of Management Annals*, 3(1), 543–604. doi:10.5465/19416520903065683

Xue, J., Zhu, M., Guo, Y., & Kong, D. (2022). The double-edged sword of underdog expectations in organizations in Shanghai, China: The mediating role of feedback-avoiding behaviors and proving others wrong and the moderating role of regulatory focus. *Psychology Research and Behavior Management*, 15, 2205–2218. doi:10.2147/PRBM.S368632 PMID:35996736

Zhang, J., Li, W., Shi, Y., Zhang, N., & Ma, H. (2020). Work-related rumination and its "double-edged sword" effect. *Xinli Kexue Jinzhan*, 28(2), 358–367. doi:10.3724/SP.J.1042.2020.00358

Zheng, X. M., & Ni, D. (2018). Review of mindfulness research in organizational management. *Management Review*, 30(10), 153–168. doi:10.14120/j.cnki.cn11-5057/f.2018.10.014

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