

Research Paper

From Stress to Cognitive Failures: A Serial Mediation Chain

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ABSTRACT

High levels of perceived stress are widely recognized to impair attentional functioning, increasing susceptibility to everyday cognitive lapses; however, the mechanisms underlying this relationship remain insufficiently understood, particularly in the Indian context. The present study addresses this gap by examining the sequential mediating roles of mindful attention awareness and mind-wandering in the relationship between perceived stress and cognitive failures. A correlational research design was employed with a sample of Indian adults ($N = 466$; $M = 254$, $F = 212$, 18-55 yrs) and data were collected using the Perceived Stress Scale, Mindful Attention Awareness Scale, Mind Wandering Questionnaire, and Cognitive Failures Questionnaire. Serial mediation analysis with bootstrapping was conducted to test the hypothesized model. Results indicated that perceived stress was positively associated with cognitive failures and mind-wandering, and negatively associated with mindful attention awareness. Further, a significant serial mediation effect was observed, wherein higher perceived stress predicted lower mindful attention awareness, which in turn increased mind-wandering, ultimately leading to greater cognitive failures. These findings highlight attentional regulation as a key mechanism linking stress to cognitive failures and suggest that mindfulness-based interventions may be effective in reducing cognitive failures in population experiencing high-stress level.

Keywords: *Perceived Stress, Mindful Attention Awareness, Mind Wandering, Cognitive Failures, Serial Mediation*

In contemporary society, individuals are increasingly exposed to high levels of psychological stress, which has been shown to adversely affect both mental and cognitive functioning. Perceived stress, defined as the degree to which individuals appraise situations in their lives as stressful (Cohen et al., 1983), has been widely studied in relation to various psychological and behavioral outcomes. It is not merely the presence of stressors but the subjective perception of stress that determines its impact on an individual's functioning. High levels of perceived stress have been consistently related to deficits in attention, memory and executive function in everyday life (Lupien et al., 2009; McEwen & Sapolsky, 1995).

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One of the most relevant constructs in understanding the cognitive consequences of stress is cognitive failure, defined as everyday lapses in perceptual, memory and motor functioning. Other examples are forgetting appointments, losing the thread of conversation, making mistakes (Broadbent et al., 1982). These attention and memory lapses, although low in intensity, can impair everyday functioning. Empirical studies suggest that self-reported stress is linked with cognitive failures (Matthews et al., 2002; Mahoney et al., 2019). According to the Attentional Control Theory, attentional control systems are compromised when attentional resources are depleted under conditions of stress and anxiety. When attentional resources are depleted, an individual is in a vulnerable state of distraction (Eysenck et al., 2007). Perceived stress may negatively affect mental functioning by disrupting attentional control, or the ability to suppress distracting stimuli.

More recently the construct of mindful attention awareness has been used extensively in research studies to study how individuals regulate their emotions and cognitive flexibility under stress. It is defined as the capacity to purposefully attend to and process present-moment experiences in a nonjudgmental way (Brown & Ryan, 2003). A core component of self-regulation is the ability to sustain attention and avoid distraction. Mindful attention awareness is negatively associated with perceived stress, meaning that more mindful individuals tend to see stressors differently than less mindful individuals, and tend to have higher ability to regulate emotions (Creswell & Lindsay, 2014; Weinstein et al., 2009). In contrast, high stress levels are associated with low mindful attention awareness: this occurs when a person is focused on their worries about the past or the future, rather than the current moment (Kabat-Zinn, 1994).

Mindful attention awareness has been found to be positively correlated with attentional stability, working memory capacity, and executive control (Chiesa et al., 2011). Higher mindfulness correlates with sustained attention to tasks and fewer attentional lapses, suggesting potential to protect cognitive performance from detrimental effects of stress (Chiesa et al., 2011). By contrast, decreased levels of mindful attention awareness may impair sustained attentional control, and thus, cognitive performance, by increasing the chances of cognitive failures.

Other relevant concepts include mind-wandering, which is when attention shifts from the task to internally generated thoughts (Smallwood & Schooler, 2006). Mind-wandering is common in waking life (Smallwood & Schooler, 2006) where it can also lead to poorer performance and an increase in errors on tasks (Smallwood et al., 2007). However, there are also adaptive forms of mind-wandering, such as creative problem solving. The majority of the research investigating mind-wandering has documented its negative influence on cognitive performance. For example, mind-wandering is associated with lower attentional control and greater cognitive failures of the type that occur when people become disengaged from the task at hand (McVay & Kane, 2012; Mooneyham & Schooler, 2013).

Mindful attention awareness has also been discussed as a cognitive mode that is distinct from mind-wandering. Whereas mindful attention awareness refers to sustained attention towards the environment and task at hand, mind-wandering refers to attentional failure, in which attention is withdrawn from the environment and decoupled from the current task (Mrazek et al., 2012; Schooler et al., 2011). The negative correlation between mindful attention awareness and mind-wandering has been consistently found. Mindful attention awareness is associated with less task-unrelated thoughts, as shown by Mrazek et al. (2012).

Thus mindful attention awareness may be associated with attentional control, and may be negative correlated to mind wandering.

Taken together, perceived stress, mindful attention awareness, and mind-wandering indices may give a more thorough account of cognitive failures by showing how they are related, as those who perceive a higher amount of stress may have decreased mindful attention awareness, which may, in turn, increase the likelihood of mind-wandering, as attention becomes less stable and more prone to internal distractions. Increased mind-wandering may ultimately lead to cognitive failures, as individuals are less able to maintain focus on tasks and are more likely to commit errors. Although previous research has examined the relationships among these variables independently, there is a need to integrate these constructs within a single framework to better understand the underlying mechanisms linking stress to cognitive functioning.

Rationale of the Study

Although there is considerable literature linking perceived stress with cognitive performance, the cognitive processes through which stress impacts our performance on daily cognitive tasks are not well understood. Most studies on the role of perceived stress in cognition have demonstrated the association between perceived stress and cognitive impairment, for example in the attention and memory domains (Lupien et al., 2009; Matthews et al., 2002), but the specific psychological processes that explain this relationship are not fully understood. In particular, there is limited research examining how attentional constructs such as mindful attention awareness and mind-wandering jointly contribute to cognitive outcomes.

Mindful attention awareness, on the one hand, improves attentional control and reduces the influence of stress on attention (Creswell & Lindsay, 2014). Mind-wandering, on the other hand, has been linked to cognitive failures because it is associated with disengaged attention (Smallwood & Schooler, 2006). However, mindful attention awareness and mind-wandering have been mainly studied as separate constructs, despite the fact that they respectively represent correlates of opposing attentional states. Given their relationship, the relationship between mindfulness and mind-wandering should be understood in the context of stress.

To address this gap in the literature, the current study seeks to incorporate perceived stress, mindful attention awareness, mind-wandering, and cognitive failures, in order to further examine the relationship between these variables, and contribute to the understanding of how stress affects cognitive processes through attentional mechanisms. This approach is particularly relevant in high-stress contexts, where cognitive efficiency is critical for performance and well-being. The findings of this study may also have practical implications for developing interventions aimed at enhancing mindful attention awareness and reducing cognitive failures.

Aim

To examine the relationship between perceived stress and cognitive failures while exploring the roles of mindful attention awareness and mind-wandering in this association.

METHODOLOGY

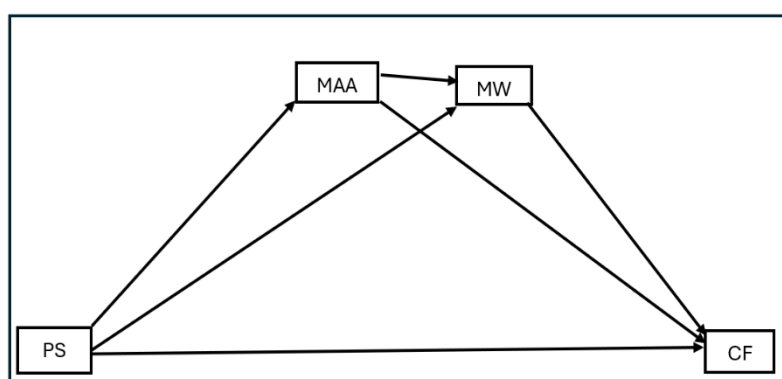
Objectives:

- To ascertain the relationship between Perceived Stress and Cognitive Failures.
- To assess the functions Mindful Attention Awareness and Mind-Wandering as sequential mediators between Perceived Stress and Cognitive Failure.

Hypotheses

- **H₁:** Perceived Stress will exhibit a significant correlation with Cognitive Failure.
- **H₂:** Mindful Attention Awareness and Mind-Wandering will sequentially mediate the relationship between Perceived Stress and Cognitive Failure.

Figure 1 Hypothesized Model



PS: Perceived Stress; MAA: Mindful Attention Awareness; MW: Mind Wandering; CF: Cognitive Failures

Sample

A total of 466 Indian adults participated in this study with 254 males (54.5%) and 212 females (45.5%), aged between 18 and 55 years. Samples were recruited from diverse geographic, linguistic backgrounds across India, with educational qualification of class 12th pass and above. The present study employed a purposive sampling technique to ensure inclusion of respondents who met the required criteria and could provide meaningful data.

Inclusion/Exclusion criteria

Individuals aged between 18-55 yrs, fluency in English and/or Hindi, and willingness to give informed consent were included in this study. Whereas, those having any neurological or psychological disorders were excluded from this study.

Instruments

Four measures were used in this study:

1. **Perceived Stress Scale (PSS; Cohen, 1983):** is a widely used 10-item, 5-point Likert scale that assesses the degree to which individuals appraise situations in their lives as stressful. It measures perceived unpredictability, uncontrollability, and overload in daily life experiences. The scale demonstrates good psychometric properties, including satisfactory reliability (Cronbach's α typically $> .70$) and established construct validity across diverse populations.
2. **Mind Wandering Questionnaire (MWQ; Mrazek et al., 2013):** It assesses frequency and intensity of spontaneous mind wandering episodes in recent weeks¹⁵ on

a 6-point Likert-type scale. The MWQ shows strong internal consistency ($\alpha = .85$), test-retest reliability, and convergent validity with measures of attentional lapses.

3. **Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003):** The MAAS comprises 15 items and measures the dispositional tendency to attend to present-moment experiences in a mindful manner. It is a unidimensional scale, with items rated on a 6-point Likert-type scale. Higher scores indicate greater levels of mindful attention awareness. The scale has shown good internal consistency, with reported $\alpha = .82$.
4. **Cognitive Failures Questionnaire (CFQ, Broadbent et al., 1982):** A 25-item self-report measure of cognitive slips and lapses¹⁶ on a 5-point Likert-type scale. The CFQ has consistently demonstrated high internal reliability ($\alpha = .91$), and though some debate its multidimensionality, the total score robustly captures global error frequency. It correlates with perceived stress and psychological distress.

Research Design

The study followed a correlational research design, as it aimed to examine the associations and indirect effects among multiple psychological variables without manipulating any condition. It allows the researcher to explore the strength and direction of relationships among predictors, mediators, and the outcome variable within a natural setting.

Procedure

Rapport was established with the participants and they were briefed about the study. Consent was taken from them. The participants completed the survey online or on paper (offline) following standardized instructions clearly mentioned. Demographic information and all self-report questionnaires were obtained anonymously. All guidelines for research with human subjects were followed.

Statistical Analysis:

Data were first screened for completeness, missing values, and outliers, followed by preliminary descriptive statistics to examine the distribution, central tendency, and variability of the study variables. Correlational analyses were performed to explore associations among metacognitive awareness, mind wandering, mindful attention awareness, and cognitive failures. To test the hypothesized serial mediation model, in which mindful attention awareness and mind wandering sequentially mediated the relationship between perceived stress and cognitive failures, Hayes' PROCESS macro (Model 6) was employed with bootstrapping (5,000 samples) to obtain bias-corrected confidence intervals.

RESULTS

This section presents the results of the analyses conducted to test the study hypotheses. The findings are organized and reported in the tables below.

Table 1: Mean and Standard Deviation of the study variables

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
PS	28.56	6.02	0.02	0.11	0.67	0.22
MAA	58.01	13.04	0.16	0.11	0.19	0.22
MW	15.78	5.14	0.05	0.11	0.36	0.22
CF	65.35	16.93	-0.04	0.11	0.42	0.22

Note: PS: Perceived Stress; MAA: Mindful Attention Awareness; MW: Mind Wandering; CF: Cognitive Failures

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Table 1 reports the descriptive statistics and normality indices of the study variables, including perceived stress (PS), mindful attention awareness (MAA), mind-wandering (MW), and cognitive failures (CF). The mean scores were 28.56 (SD = 6.02) for PS, 58.01 (SD = 13.04) for MAA, 15.78 (SD = 5.14) for MW, and 65.35 (SD = 16.93) for CF. Skewness values ranged from -0.04 to 0.16, and kurtosis values ranged from 0.19 to 0.67, indicating that all variables were approximately normally distributed.

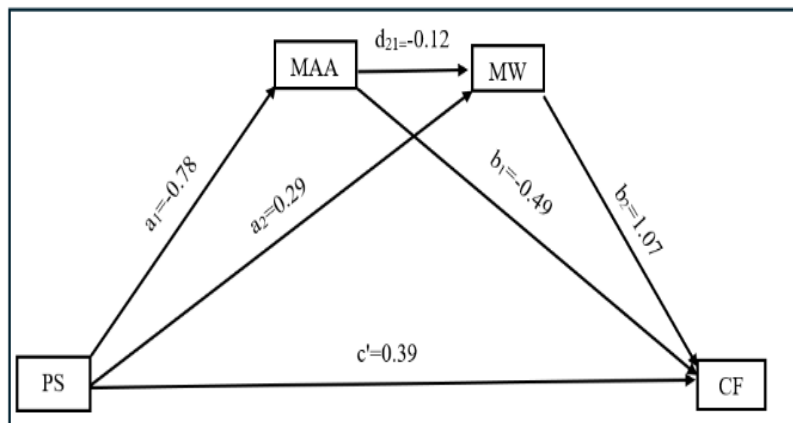
Table 2: Correlations among the Variables

	PS	MAA	MW	CF
PS	-			
MAA	-0.345**	-		
MW	0.442**	-0.418**	-	
CF	0.418**	-0.526**	0.573**	-

Note: PS: Perceived Stress; MAA: Mindful Attention Awareness; MW: Mind Wandering; CF: Cognitive Failures; **significant at 0.01 level

Table 2 highlights the correlations among the study variables. Perceived stress (PS) was significantly negatively correlated with mindful attention awareness (MAA; $r = -0.345$, $p < .01$) and positively correlated with cognitive failures (CF; $r = 0.418$, $p < .01$) and mind-wandering (MW; $r = 0.442$, $p < .01$). Mindful attention awareness (MAA) was significantly negatively correlated with mind-wandering (MW; $r = -0.418$, $p < .01$) and cognitive failures (CF; $r = -0.526$, $p < .01$). Additionally, mind-wandering (MW) was significantly positively correlated with cognitive failures (CF; $r = 0.573$, $p < .01$).

Figure 2 Hypothesized Model (with statistical values)



Note: PS: Perceived Stress; MAA: Mindful Attention Awareness; MW: Mind Wandering; CF: Cognitive Failures; a_1 = Effect of PS on MAA; a_2 = Effect of PS on MW; b_1 = Effect of MAA on CF; b_2 = Effect on MW on CF; d_{21} = Effect of MAA on MW; c' = Direct effect of PS on CF

Table 3: Regression Model Predicting MAA (Mediator 1)

Predictor	t	p	LLCI	ULCI
PS	-8.58	0.00	-0.96	-0.60

Note: PS: Perceived Stress; MAA: Mindful Attention Awareness

Table 3 presents the regression model predicting mindful attention awareness (MAA) as the first mediator. Perceived stress (PS) significantly predicted MAA ($t = -8.58$, $p < .001$), and the 95% confidence interval ranged from -0.96 to -0.60. As the absolute t-value exceeded

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1.96 and the confidence interval did not include zero, the effect was statistically significant, indicating that higher perceived stress is associated with lower mindful attention awareness.

Table 4: Regression Model Predicting MW (Mediator 2)

Predictor	t	p	LLCI	ULCI
PS	8.41	0.00	0.22	0.36
MAA	-7.76	0.00	-0.16	-0.09

Note: PS: Perceived Stress; MAA: Mindful Attention Awareness; MW: Mind-wandering

Table 4 reports the regression model predicting mind-wandering (MW) as the second mediator. Perceived stress (PS) significantly positively predicted MW ($t = 8.41$, $p < .001$; LLCI = 0.22, ULCI = 0.36), and mindful attention awareness (MAA) significantly negatively predicted MW ($t = -7.76$, $p < .001$; LLCI = -0.16, ULCI = -0.09). In both cases, the absolute t-values exceeded 1.96 and the confidence intervals did not include zero, confirming that both predictors had statistically significant effects on mind-wandering.

Table 5: Regression Model Predicting Cognitive Failure (CF; Outcome Variable)

Predictor	t	p	LLCI	ULCI
PS	3.60	0.00	0.18	0.61
MAA	-9.64	0.00	-0.59	-0.39
MW	7.98	0.00	0.81	1.34

Note: PS: Perceived Stress; MAA: Mindful Attention Awareness; MW: Mind Wandering; CF: Cognitive Failures

Table 5 presents the regression model predicting cognitive failures (CF) as the outcome variable. Perceived stress (PS) significantly positively predicted CF ($t = 3.60$, $p < .001$; LLCI = 0.18, ULCI = 0.61). Mindful attention awareness (MAA) significantly negatively predicted CF ($t = -9.64$, $p < .001$; LLCI = -0.59, ULCI = -0.39), whereas mind-wandering (MW) significantly positively predicted CF ($t = 7.98$, $p < .001$; LLCI = 0.81, ULCI = 1.34). In all cases, the absolute t-values were greater than 1.96 and the confidence intervals excluded zero, indicating statistically significant effects of all predictors on cognitive failures.

Table 6: Direct effect of PS on CF

Path	Effect	t	p	LLCI	ULCI
PS->CF	0.39	3.60	0.00	0.18	0.61

Note: PS: Perceived Stress; CF: Cognitive Failures

Table 6 describes the direct effect of perceived stress (PS) on cognitive failures (CF). The results indicated a significant positive direct effect (effect = 0.39, $t = 3.60$, $p < .001$), with a 95% confidence interval ranging from 0.18 to 0.61. Since the t-value exceeded 1.96 and the confidence interval did not include zero, the direct effect was statistically significant, suggesting that perceived stress independently contributes to cognitive failures.

Table 7: Conditional Indirect Effects of PS on CF

Path	Effect	LLCI	ULCI
PS->MAA->CF	0.38	0.24	0.55
PS->MW->CF	0.31	0.19	0.45
PS->MAA->MW->CF	0.10	0.06	0.16

Note: PS: Perceived Stress; MAA: Mindful Attention Awareness; MW: Mind Wandering; CF: Cognitive Failures

Table 7 presents the conditional indirect effects of perceived stress (PS) on cognitive failures (CF) through mindful attention awareness (MAA) and mind-wandering (MW). The indirect effect through MAA (PS → MAA → CF) was significant ($\beta = 0.38$, LLCI = 0.24, ULCI = 0.55), as the confidence interval did not include zero. Similarly, the indirect effect through MW (PS → MW → CF) was also significant ($\beta = 0.31$, LLCI = 0.19, ULCI = 0.45). The serial mediation pathway (PS → MAA → MW → CF) yielded a smaller but significant effect ($\beta = 0.10$, LLCI = 0.06, ULCI = 0.16), with the confidence interval excluding zero. These findings indicate that both MAA and MW independently and sequentially mediate the relationship between perceived stress and cognitive failures, with MAA showing the strongest indirect effect.

DISCUSSION

The present study examined a serial mediation model wherein perceived stress predicted cognitive failures through mindful attention awareness and mind-wandering. The findings revealed that perceived stress had a significant direct effect on cognitive failures, as well as significant indirect effects through both individual and sequential mediating pathways. Specifically, perceived stress negatively predicted mindful attention awareness, which in turn negatively predicted mind-wandering, and mind-wandering positively predicted cognitive failures. Furthermore, the serial indirect pathway (perceived stress → mindful attention awareness → mind-wandering → cognitive failures) was found to be significant, thereby supporting the hypothesized sequential mediation model.

Support for direct effects of stress on cognitive failures is consistent with the previous literature on stress-cognition effects. Cognitive failures, such as lapses of perception, memory and motor function in daily life, as defined by Broadbent et al. (1982), are particularly sensitive to stress-related decrements in performance. As stated in the Attentional Control Theory (Eysenck et al., 2007), stress and anxiety are assumed to decrease available attentional capacity, thereby decreasing executive control functions and increasing distractibility. The present findings are consistent with previous research reporting that at more elevated levels of stress, participants report experiencing more cognitive failures such as forgetting items, inattentional blinks, and lower efficiency (Matthews et al., 2002; Mahoney et al., 2019). This pattern mirrors the large direct effect documented here, and is consistent with the suggestion that stress may especially impair everyday cognition.

This study expands on the existing literature by including mindful attention awareness as a mediator. The negative association between perceived stress and mindful attention awareness is theoretically grounded in the conceptualization of mindful attention awareness as present-moment awareness (Kabat-Zinn, 1994). Under stress, individuals are more likely to engage in maladaptive attentional processes such as rumination and worry that distract attention away from present-moment awareness (Brown & Ryan, 2003). Stress reduces the ability of people to be mindful or pay attention to present experiences. The results converge with prior empirical evidence showing a negative relationship between mindful attention awareness and stress, as well as research showing that mindful attention awareness-based interventions buffer the negative effects of stress (Creswell & Lindsay, 2014; Weinstein et al., 2009). The results also support previous theoretical accounts of MA acting as a buffer against the effects of cognitive distraction resulting from stress.

The study further demonstrated that mindful attention awareness negatively predicted mind-wandering, indicating that individuals with higher levels of mindful attention awareness are

less likely to experience task-unrelated thoughts. This finding is consistent with the growing body of literature suggesting that mindful attention awareness and mind-wandering represent opposing cognitive states (Mrazek et al., 2012; Smallwood & Schooler, 2006). While mindful attention awareness involves sustained attention to the present moment, mind-wandering is characterized by a shift of attention away from the external environment toward internally generated thoughts. Reduced mindful attention awareness, therefore, compromises attentional stability, making individuals more prone to spontaneous cognitive drift.

Furthermore, mind-wandering was found to be an important positive predictor of cognitive failures, further linking mind-wandering with everyday cognitive failures and errors. Mind-wandering has also been linked with poorer performance, increased likelihood of making an error and decreased cognitive efficiency (Smallwood et al., 2007). When attention is no longer focused on the task, individuals are more likely to miss stimulus events, forget intentions, or make errors on a task. Thus, it is consistent with prior findings that greater levels of mind-wandering are associated with greater cognitive failures and lower levels of executive functioning (McVay & Kane, 2012; Mooneyham & Schooler, 2013). Thus, mind-wandering may be a prominent domain through which disruptions in attention manifest as cognitive failures.

The most important contribution of this study is the sequential mediation effect between perceived stress and cognitive failures through mindful attention awareness and mind-wandering, which indicates that the effect of stress on cognition is due to a chain of attentional processes rather than to isolated attention processes. This means that stress seems to decrease attention to the present moment, which increases mind-wandering, which ultimately leads to cognitive failures. This model is consistent with other theories of cognitive control, which state that attentional regulation processes are necessary for goal-oriented behavior (Posner & Rothbart, 2007). This study shows that both the mindful attention awareness and mind-wandering can fit into a framework that can more fully explain the cognitive mechanisms behind stress-related deficits.

The findings also suggest that attentional awareness and mind-wandering are not orthogonal to each other but dynamically interact, so that low mindful attention awareness leads to an increase in cognitive failures both directly and indirectly via the experience of more mind-wandering. These findings highlight the relevance of attentional control in cognitive failures, and the importance of considering multiple mediating pathways in psychological research. The present study adds to the literature by showing the serial mediation effects between these constructs with cognitive-based outcomes.

Implications

This has implications for real-world interventions to reduce cognitive failures. Mindful attention awareness-based interventions have been shown to enhance attentional control, reduce stress, and decrease mind-wandering (Kabat-Zinn, 2003; Chiesa et al., 2011). By improving present-moment awareness, such interventions may help individuals maintain focus and reduce everyday cognitive errors. The present findings suggest that targeting mindful attention awareness may have a cascading effect, reducing mind-wandering and ultimately minimizing cognitive failures. This has practical relevance in high-stress environments, such as academic and occupational settings, where cognitive efficiency is critical.

Theoretically, this study has extended the literature in this area by both confirming that stress can negatively impact cognition and expanding on the existing research by explaining how this occurs. In particular, in contrast to simply seeing stress and cognitive failure as direct constructs, the sequential mediation model highlights the role of attentional processes as a mechanism by which stress impacts cognitive failure. The present findings extend existing theories of stress and cognition by reframing mindful attention awareness, not merely as a passive buffer against stress, but as an active regulatory resource that directly shapes how far stress is able to disrupt attentional functioning and everyday behavior (Lazarus & Folkman, 1984; Kabat-Zinn, 2003). The current findings also extend attentional control theory (Eysenck et al., 2007) by explaining mind-wandering as a downstream product of diminished present-moment awareness in combination with an emerging body of evidence for mind-wandering as the often unrecognized but powerful link between stress and everyday cognitive breakdown (Smallwood & Schooler, 2015).

Limitations

Although the study has its strengths, a few limitations should be considered. First, the study had a cross-sectional design, and thus, did not allow us to determine causal relationships. Even though these findings support the hypothesized serial mediation model, the causal direction of these relationships must be tested through longitudinal or experimental studies. Second, the reliance on self-report measures may introduce common method bias and social desirability effects, potentially inflating the observed relationships. Future research should incorporate objective measures of attention and cognitive performance to enhance the validity of findings. Third, the sample characteristics could limit the generalizability of the findings. The study may have been conducted within a specific demographic or cultural context, and therefore, the findings may not be applicable to other populations. Addressing these limitations in future studies would provide a more comprehensive understanding of the underlying mechanisms.

Future Directions

Longitudinal and experimental studies should continue the line of research of the current study by measuring the potential causal role of perceived stress, mindful attention awareness, mind-wandering, and cognitive failures on one another. Experience sampling methods (ESM) could also be implemented to capture the day to day fluctuations of the variables mentioned above. Future research should include measures of attention, such as attention tasks and neuroimaging approaches, in order to explore how the effect of stress on cognition may be mediated by deficits in attention. In addition, intervention studies should include mindfulness-based attention awareness training to examine whether such programs may reduce mind-wandering and cognitive failures amongst high-stress individuals, such as students and those in the workforce. That said, exploring the generalizability of the results from this study through cross-cultural research would provide valuable insights for future research and would build upon the findings of this study to create a more thorough understanding of cognitive processes related to stress.

CONCLUSION

To summarize, the present study provides evidence for a serial mediation model, in which perceived stress is related to cognitive failures via mindful attention awareness and mind-wandering. Our findings indicate that, in addition to the direct relation, perceived stress has an indirect relation with cognitive failures via the mediators of attentional processes. In short, the more stressed participants felt, the less were their mindful attention to the task, which led to more mind wandering and resulted in cognitive failures. This study exemplifies

the critical role of attention regulation in shaping stress-related cognitive outcomes. The present study integrated the roles of mindful attention awareness and mind-wandering into a single framework. The current results not only provide a novel understanding of the mechanisms involved in cognitive failures in everyday life, but also suggest practical implications. Increasing mindful attention awareness may be an effective means of preventing cognitive failures in stressful circumstances. Overall, the study provides further support for the associations between stress, attention, and cognitive function, as well as a basis for further research on the subject.

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Conflict of Interest

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