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Research Paper

Mind-Wandering and Depressive Symptoms: Does Self-Focused Attention Mediate the Links?

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ABSTRACT

Mind-wandering is a shifting of attention from the here and now, towards thoughts that are not related to the task at hand. Many studies have demonstrated that excessive mind-wandering is associated with symptoms of psychopathology, including depression. Recent research on Mind-Wandering has shifted to examining the content of mind-wandering episodes to determine the variability in outcomes associated with it. Keeping this in mind, the present study sought to examine whether self-focused attention in the form of rumination and self-reflection independently mediate the relationship between mind-wandering and depressive symptoms. A sample of 270 university students participated in the study by filling a series of self-report questionnaires. Regression analyses and bootstrapping were used to test the proposed indirect pathways. Results indicated that both rumination and, contrary to hypothesized associations, self-reflection partially mediate the association between mind-wandering and depressive symptoms. The current findings have important implications for practice and theory by attempting to provide a deeper understanding of the variability in consequences of Mind-Wandering, and suggesting therapy techniques that can be used to counter the negative effects of mind-wandering on mental health.

Keywords: *Mind-Wandering, Task Unrelated Thoughts, Depressive Symptoms, Self-Focused Attention, Rumination, Self-Reflection, Self-Generated Thought, Mediator*

Human minds have a tendency to often become focused on thoughts and feelings that are not generated by the external world, but on those that are instead self-generated. This phenomenon is widely referred to as 'mind-wandering', which involves the occurrence of thoughts that are not tied to the immediate environment, or related to the task at hand (Wong et al., 2023).

Research on the occurrence of such thoughts has revealed many positive outcomes associated with mind wandering, such as planning and preparing for the future (Girardeau et al., 2023), evaluating personal goals (Vago & Zeidan, 2016), and enhanced creative thinking (Murray et al., 2021).

However, research has also uncovered several deleterious consequences of mind-wandering, especially when it comes to its impact on mental health outcomes (Gaynor & Fitzgerald,

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2023; Hobbiss et al., 2019). For instance, several studies have discovered that increased mind-wandering is associated with an increase in depressive symptomatology (Chaieb & Fell, 2022; Nayda & Takarangi, 2021; Soffer-Dudek & Somer, 2018).

Furthermore, some studies have found that there is a greater likelihood of Mind-Wandering contributing to depressive symptoms when there is a retrospective bias to it (Shrimpton et al., 2017; Spronken et al., 2016). Similarly, other researchers have found that affective content (Linz et al., 2021), and intentionality (Seli et al., 2019) also play a role in deciding the variability of mind-wandering outcomes.

In light of this, many researchers have suggested that the variable outcomes associated with mind-wandering could be better understood by taking into account the content of thoughts during mind-wandering (Kam et al., 2024; Marchetti et al., 2014; Shrimpton et al., 2017). This is also known as the "content regulation hypothesis" (Smallwood & Schooler, 2015).

One factor that has not received much attention when it comes to the content of mind-wandering is whether mind-wandering is internally oriented in its focus (Shrimpton et al., 2017; Smallwood & Schooler, 2015). According to Marchetti et al. (2012), this internally oriented focus leads to greater self-focus as opposed to focus on others or the external environment, which is ultimately associated with higher negative affect and depressive symptoms.

Two specific types of self-focus are often cited in the literature, namely rumination and self-reflection (Trapnell & Campbell, 1999). According to Trapnell and Campbell (1999), there are two distinct types of self-focus: rumination and self-reflection. Rumination is defined as "the focused attention on one's distress, and on its possible causes and consequences, as opposed to its solutions" (Nolen-Hoeksema et al., 1993), Reflection is defined as "examination, contemplation, and analysis of one's thoughts, feelings, and actions" (American Psychological Association, 2018).

Rumination is associated with ineffective problem-solving skills and reduction in effectiveness of therapy (Watkins & Roberts, 2020), and a greater vulnerability to depression (Hasegawa et al., 2018). In addition to that, out of the two types of self-focused attention discussed, Rumination is closely associated with negative affect (Lask et al., 2021) and suicidal ideation (Rogers & Joiner, 2017). Most importantly, rumination is a serious risk factor for depression (Bean & Ciesla, 2023; Sun, 2014). Studies have shown that rumination levels predict the severity and duration of depression, and also predicts the onset of later episodes (Patel et al., 2023).

Christoff et al. (2016) proposed a framework through which ruminative self-focus may lead to depression or negative affect in general. He hypothesizes that due to rumination, the patterns of thought that are repeatedly rehearsed may become an 'attractor', get encoded into LTM, and will be replayed any time one engages in mind-wandering.

Hence, rumination seems to be a maladaptive type of self-focus. Self-reflective focus, on the other hand, has not been described in the same way. Self-reflection allows individuals to think about their feelings in a positive light and engage themselves in an inquisitive exploration of who they are as a person. Self-reflection has been associated with a number of positive outcomes, such as increased ability to do perspective taking and higher empathy (Gerace et al, 2017), being able to regulate one's own emotions (He & Gan, 2025),

decreased depressive symptoms (Forgeard et al., 2020; Silvia et al., 2022) and increased resilience (Falon et al, 2022).

In line with this, Khosravani et al. (2020) found that individuals with major depression who engage in frequent rumination are more likely to have suicidal ideation than individuals who regularly engage in self-reflective thought. In relation to depression, reflective self-focus may be directed towards understanding the reasons for depressive moods, which has been shown to reduce depression (Mori et al., 2015).

However, such findings are not consistent across studies. In some studies self-reflection has been found to negatively impact well-being, correlating with an increase in depressive symptoms just like its counterpart, rumination (Forgeard et al., 2020; Silvia & Philips, 2010; Takano & Tanno, 2009; Philippi et al., 2014). Hence, researchers have identified self-reflection as a type of self-focused thinking that has the potential to lead to both adaptive and maladaptive outcomes.

Keeping in mind the gap in the literature and the inconsistencies surrounding the impact of different types of self-focus on depressive symptoms, the present study sought to investigate whether the presence of two types of self-focused attention on depressive symptoms, namely rumination and self-reflection, mediate the relationship between Mind-Wandering and Depressive symptoms.

Moreover, an important limitation in the previous literature is that the majority of studies till date on Mind-Wandering and its consequences have been conducted in western countries. It is necessary to examine the generalizability of their findings in other populations, because studies have discovered that cultural differences exist in terms of the frequency, content, and consequences of mind-wandering (Killingsworth & Gilbert, 2010; Martinon, 2019; Song & Wang, 2012). Specifically, a review of the extant literature revealed that no such study has been conducted in India. By examining Mind-Wandering among a sample of young adults in India, the present study seeks to address this issue.

Research Objectives

1. To test the presence of an indirect effect of mind wandering on depressive symptoms through ruminative self-focus.
2. To test the presence of an indirect effect of mind wandering on depressive symptoms through reflective self-focus.
3. To bring into focus ways to curb the negative effects of mind-wandering on affective well-being.
4. To provide directions for future research in this area.

Research Hypotheses

- **H1:** Mind Wandering will positively predict levels of depressive symptomatology
- **H2:** Mind Wandering will positively predict levels of rumination
- **H3:** Mind-wandering will positively predict levels of self-reflection.
- H**4:** Rumination will mediate the relationship between mind wandering and depressive symptomatology.
- **H5:** Self-reflection will mediate the relationship between mind wandering and depressive symptomatology.

METHOD

Participants and Procedure

The study was approved by the Department of Psychology, Pandit Deendayal Energy University. The final form circulated included the informed consent and the instructions on how to respond to the questionnaire. The intention behind conducting the research, and aims of the study were also delineated.

The questionnaires were circulated through google forms to young adults between the ages of 17 and 24 in Ahmedabad, India. Initially, 276 participants had responded, however 270 were considered because some participants did not fill the form completely. The final sample consisted of 141 women (52.2%), 114 men (42.2%), and 15 participants who selected 'other gender' (5.6%). The average age of participants was 18.2. The responses were collected over a span of two months. All subjects participated voluntarily. Moreover, participants were also given the option of receiving a response sheet containing the responses they had submitted.

Tools

- **Mindful Attention Awareness scale (MAAS):** The Mindful Attention Awareness scale (Brown and Ryan, 2003) is a self-report questionnaire that is used to measure the extent to which respondents pay attention to the present moment. It consists of 15 items and is scored on a 6-point Likert Scale (where "1" = Almost Always; "6"= Almost Never). The questionnaire includes items like "I do jobs or tasks automatically, without being aware of what I'm doing" and "I forget a person's name almost as soon as I've been told it for the first time." Higher scores represent higher levels of Mindfulness. The scale shows very good internal consistency reliability ($\alpha = 0.93$) according to previous research (MacKillop & Anderson, 2007).
- **Rumination-Self-Reflection Questionnaire (RRQ):** The RRQ was developed by Trapnell & Campbell (1999) to measure two types of self-focused attention, namely rumination and self-reflection. The original scale has 24 items but the present study has used a shortform of the scale, which has 16 items in total and 8 in each scale. The scale has two subscales: Self-Reflection and Rumination. The Rumination subscale includes items like "I spend a great deal of time thinking back over my embarrassing or disappointing moments" while the Self-Reflection subscale includes items like "I love exploring my "inner" self". The items are scored on a 5-point Likert scale (where "1"= Strongly Disagree; "5"= Strongly Agree). According to studies by Trapnell & Campbell (1999) and Joireman et al. (2002), the scales display good internal consistency reliability ($\alpha = 0.90$).
- **The Center for Epidemiological Studies-Depression Scale Revised (CESD-R):** The scale was developed by Radloff (1977) to assess depressive symptoms in a non-clinical population. It has 20 items, scored on a 4-point Likert scale ("0" = Rarely or none of the time; "3" = Most or all of the time). The possible range for scores is 0-60. A score of 16 or higher is considered to be at risk for depression. Examples of items include "I felt lonely" and "I thought my life had been a failure". The internal consistency reliability of the scale is high ($\alpha > 0.85$). The test has been shown to be a reliable measure across gender, age, and racial categories (Kimong, 2020).

RESULTS

Description analyses

Means, Standard Deviations, and Pearson r correlations of the data have been reported in Table 1. As expected, there was a moderate negative correlation ($r = -.57$, $p < .001$) between Mindfulness and Depressive symptoms. Similarly, ruminative self-focus had a strong positive correlation ($r = 0.69$, $p < .001$) between rumination and depressive symptoms. However, there was only a weak positive correlation ($r = .27$, $p < .001$) between self-reflection and depressive symptoms. In addition, rumination was negatively and significantly ($r = -.55$, $p < .001$) related with Mindfulness, however the correlation was a weak positive one for self-reflection and Mindfulness ($r = -.27$, $p < .001$).

Mediation analyses

To test for mediation, the approach suggested by Preacher & Hayes (2008) was followed. The Preacher and Hayes approach is a bootstrapping technique that proves to be an effective test for statistical significance. The PROCESS (Hayes, 2013) macro in SPSS was used to test for the indirect effects of rumination and self-reflection on depressive symptoms.

Table 1 Means, Standard Deviations, and intercorrelations among variables

Variables	M	SD	1	2	3	4
1. MAAS	3.179	.970	-	-.549**	-.262**	-.568**
2. RRQ-RM	3.788	.882	-.549**	-	.314**	.689**
3. RRQ-RF	3.304	.806	-.262**	.314**	-	.269**
4. CESD-R	26.84	12.708	-.568**	.689**	.269**	-

Table 2 presents the bootstrap estimates of path c, c' and a1b1 (Figure 1, Figure 2). From Table 2, it can be inferred that the total effect of Mind Wandering on Depressive Symptoms (path c) without the involvement of rumination or self-reflection is statistically significant (b = -7.4393, s.e. = 0.6580, LLCI = -8.7347, ULCI= -6.1439). The direct effect of Mind Wandering on Depressive Symptoms in the presence of rumination (path c') is also statistically significant (b = -3.5594, s.e. = .6591, LLCI = -4.8571, ULCI= -2.2617). Finally, the indirect effect (path a1b1) of Mind-Wandering on Depressive Symptoms through rumination is also statistically significant (b = -3.8799, s.e. = 0.6014, LLCI = -5.1416, ULCI = -2.7609). This shows that rumination acts as a mediator in the relationship between Mind-Wandering and Depression. However, since both the residual direct effect and the indirect effect are statistically significant, the model shows evidence for partial mediation only.

Similarly, Table 3 presents the bootstrap estimates of path c, c' and a2b2 (Figure 1, Figure 2). From Table 3, it can be inferred that the direct effect of Mind Wandering on Depressive Symptoms in the presence of reflection (path c') is statistically significant (b = -6.9970, s.e.= 0.6753, LLCI = -8.3266, ULCI = -5.6674). Most importantly, the indirect effect (path a2b2) of Mind-Wandering on Depressive Symptoms through reflection is also statistically significant (b = -0.4423, s.e. = 0.2142, LLCI = -0.0842, ULCI = -0.04423). This shows that self-reflection acts as a mediator in the relationship between Mind- Wandering and Depression. However, since both the residual direct effect and the indirect effect are statistically significant, the model again shows evidence for partial mediation only.

Table 2 Indirect, direct, and total effect of Mind-Wandering on depressive symptoms through Rumination (5000 bootstrap samples)

	Bootstrap estimate (SE)	95% CI	
		LL	UL
Indirect effect	.60	-5.14	-2.76
Direct effect	.66	-4.86	-2.26
Total effect	.66	-8.74	-6.14

Table 3 Indirect, Direct, and total effect of Mind-Wandering on depressive symptoms through Self-Reflection (5000 bootstrap samples)

	Bootstrap estimate (SE)	95% CI	
		LL	UL
Indirect effect	.21	-.08	-.44
Direct effect	.68	-8.33	-5.67
Total effect	.66	-8.74	-6.14

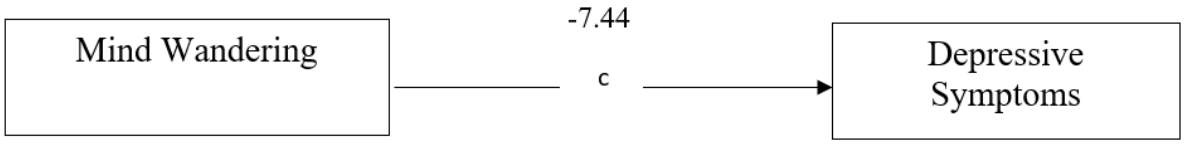

Figure 1: Total Effect (Path c)

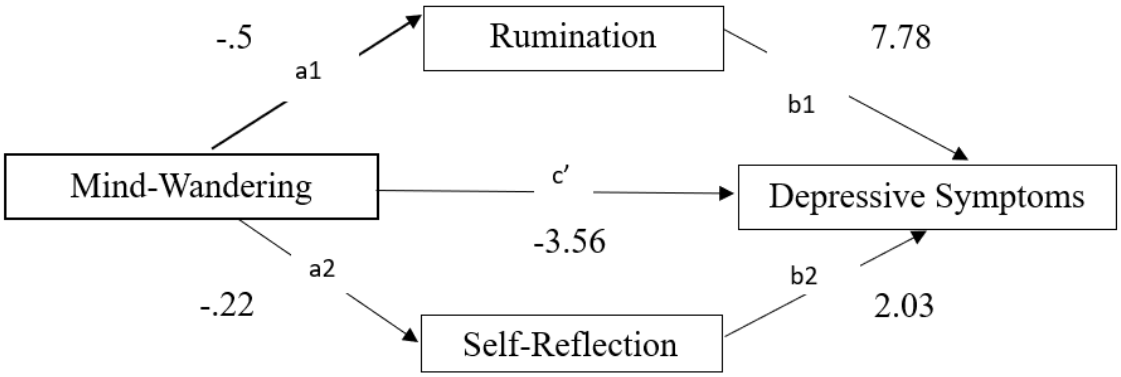

Figure 2: Direct effect (path c') and Indirect effects (path a1b1 and path a2b2)

DISCUSSION

Mind-Wandering is a normal everyday occurrence in which our thoughts drift away from the task currently at hand and onto other concerns. The present study attempted to investigate whether ruminative and reflective self-focus mediate the relationship between Mind Wandering and Depressive symptoms in a sample of non-clinical young adults.

The results indicate that there is evidence for a partial mediation between Mind-Wandering and Depressive symptoms for both, Path a1b1 (Mind-Wandering → Rumination → Depressive symptoms) and path a2b2 (Mind-Wandering → Self-Reflection → Depressive Symptoms). This is because even though the indirect effects (path a1b1 and path a2b2) were significant, Mind-Wandering continued to positively predict Depressive symptoms after controlling for the mediators, pointing towards a significant direct effect (path c'). Hence,

the results indicate that ruminative and self-reflective focus independently account for some, and not all, of the relationship between Mind-Wandering and Depressive Symptoms.

Moreover, rumination predicted the level of depressive symptoms to a much larger extent than self-reflection, and the mediation effect was also stronger with path a1b1 (Mind-Wandering → Rumination → Depressive symptoms) than it was with a2b2. This is consistent with previous studies that have found a very strong positive association between Rumination and depression (Rickerby et al., 2022; Sun, 2014; Zou et al., 2025). Rumination has been indicated to not only predict depression, but also predict its severity and future episodes (Hjartarson et al., 2022; Miranda et al., 2023)

Contrary to the hypothesized association, the results indicated that self-reflection has a positive association with depressive symptoms. This is not in line with many past studies which have suggested that self-reflective focus has an adaptive effect on well-being and is associated with reduced levels of depression (Crane et al., 2019; Shrimpton et al., 2017; Verhaeghen et al., 2014). However, as suggested by Takano & Tanno (2009) and Joormann et al. (2006), even if self-reflection has an adaptive effect on mental health outcomes, it is possible that rumination counteracts this effect because those who engage in self-reflection are also likely to ruminate at the same time.

Another perspective to consider is when attempts at understanding current problems and generating solutions are unsuccessful, individuals get discouraged and turn to negative and passive thoughts that lead to increased negative affect (Miranda & Nolen-Hoeksema, 2007).
There are some limitations in this study which need to be addressed. The study is a cross sectional one and employed a correlational research design, which means that even though a significant indirect effect was found between mind-wandering, self-focused attention and depressive symptoms, no cause-and-effect relations can be drawn from this study. Also, the study used self-report tools for collecting data, which are known to not be completely accurate and are subject to bias, both in the form of increased susceptibility to socially desirable responses, as well as recall bias. Furthermore, the study utilized convenience sampling, a type of non-probability sampling, which means that the sample is less likely to be representative of the population that is being studied, amounting to low generalizability of the results.

Nonetheless, the results have important implications for practice and theory. Since Mind-Wandering occupies a substantial portion of our daily lives, it is necessary to understand its affective consequences and also shed light on the underlying mechanisms that drive these consequences.

Moreover, the results provide additional evidence for incorporating therapy techniques that enhance Mindfulness such as Mindfulness-based Cognitive Therapy (MBCT) into the treatment sessions with individuals that suffer from depressive symptoms or from excessive mind - wandering that disrupts their daily lives. This is because Mindfulness has been shown to counter the negative effects of mind-wandering on mood, and lead to less mind-wandering over time (Belardi et al., 2022; Xu et al., 2017). It has been found that being fully aware of the present moment helps to prevent negative cognitions and promotes well-being in individuals with depression (Mao et al., 2023; Reangsing et al., 2021).

The results of the present research also highlight the importance of incorporating therapy techniques that focus on reducing attention that is focused on the self in order to reduce the

negative impact of mind-wandering on depressive symptoms, since the results of this study have indicated that the harmful effect of mind-wandering on depressive symptoms is partially because of negative mentation about the self (Bean & Ciesla 2023). Hence, treatment therapies such as RFCBT (Rumination Focused Cognitive Behavioural Therapy) may be employed by counsellors to treat individuals who report excessive mind-wandering. Future research in this area should try to employ an experimental research design in order to truly delve into the cause-and-effect relationship in the association between mind-wandering, self-focused attention, and depression. Methods such as experience sampling, ecological momentary assessment, and Sustained Attention to Response Tasks (SART), have been shown to be more valid and objective measures of Mind-Wandering that enable a more accurate measurement of the change in affective states in relation to moment-to-moment mind-wandering (Bedi et al., 2023; Welhaf & Banks, 2024). Future studies should also take into account situational variables that may have an impact on the relationship between mind-wandering and depressive symptoms, such as stress and task characteristics, as well as dispositional traits such as neuroticism and resilience that may influence the strength of the association between Mind-Wandering and mood.

In sum, the current study sought to examine the relationship between Mind-Wandering and depression as mediated by two types of self-focused attention. The results show that there is a significant indirect effect between Mind-Wandering and Depressive symptoms, through both rumination and self-reflection. The study has attempted to contribute to our understanding of the harmful effects of Mind-Wandering and the mechanisms that govern it.

REFERENCES

American Psychological Association. (2018). Self-Reflection. In *APA dictionary of psychology*. Retrieved May 4, 2022, from https://dictionary.apa.org/self-reflection

Bean, C. a. L., & Ciesla, J. A. (2023). Ruminative variability predicts increases in depression and social anxiety. *Cognitive Therapy and Research*, *48*(3), 511–525. https://doi.org/10.1007/s10608-023-10451-z

Bedi, A., Russell, P. N., & Helton, W. S. (2023). Go-stimuli probability influences response bias in the sustained attention to response task: A signal detection theory perspective. *Psychological Research*, *87*(2), 509-518.

Belardi, A., Chaieb, L., Rey-Mermet, A., Mormann, F., Rothen, N., Fell, J., & Reber, T. P. (2022). On the relationship between mind wandering and mindfulness. *Scientific Reports*, *12*(1). https://doi.org/10.1038/s41598-022-11594-x

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*(4), 822–848.

Chaieb, L., Hoppe, C., & Fell, J. (2022). Mind wandering and depression: A status report. *Neuroscience and Biobehavioral Reviews, 133,* Article 104505. https://doi.org/10.1016/j.neubiorev.2021.12.028

Christoff, K., Irving, Z. C., Fox, K. C., Spreng, R. N., & Andrews-Hanna, J. R. (2016). Mind-wandering as spontaneous thought: a dynamic framework. *Nature reviews neuroscience*, *17*(11), 718-731.

Crane, M. F., Searle, B. J., Kangas, M., & Nwiran, Y. (2019). How resilience is strengthened by exposure to stressors: the systematic self-reflection model of resilience strengthening. *Anxiety, stress, and coping*, *32*(1), 1–17. https://doi.org/10.1080/10615806.2018.1506640

Falon, S. L., Hoare, S., Kangas, M., & Crane, M. F. (2022). The coping insights evident through self-reflection on stressful military training events: Qualitative evidence from

self-reflection journals. Stress and Health, 38(5), 902–918. https://doi.org/10.1002/smi.3141

Forgeard, M., Corcoran, E., Beard, C., & Björgvinsson, T. (2020). Relationships between depression, self-reflection, brooding, and creative thinking in a psychiatric sample. *Psychology of Aesthetics, Creativity, and the Arts, 14*(3), 325–333. https://doi.org/10.1037/aca0000206

Fox, K.C., & Beaty, R.E. (2018). Mind-wandering as creative thinking: neural, psychological, and theoretical considerations. *Current Opinion in Behavioral Sciences, 27*, 123-130.

Gable, S. L., Hopper, E. A., & Schooler, J. W. (2019). When the muses strike: creative ideas of physicists and writers routinely occur during mind wandering. Psychological Science, 30(3), 396–404. https://doi.org/10.1177/0956797618820626

Gerace, A., Day, A., Casey, S., & Mohr, P. (2017). 'I think, you think': understanding the importance of Self-Reflection to the taking of another person's perspective. *Journal of Relationships Research*, *8*. https://doi.org/10.1017/jrr.2017.8

Gaynor, N., & Fitzgerald, L. (2023). Mind-Wandering and Its Relationship with Psychological Wellbeing and Obsessive-Compulsive Symptomatology in the Context of Covid-19. Psychological Reports, 0(0). https://doi.org/10.1177/00332941231203563

Girardeau, J. C., Ledru, R., Gaston-Bellegarde, A., Blondé, P., Sperduti, M., & Piolino, P. (2023). The benefits of mind wandering on a naturalistic prospective memory task. *Scientific reports*, *13*(1), 11432. https://doi.org/10.1038/s41598-023-37996-z

Hasegawa, A., Kunisato, Y., Morimoto, H., Nishimura, H., & Matsuda, Y. (2018). Depressive rumination and urgency have mutually enhancing relationships but both predict unique variance in future depression: A longitudinal study. *Cogent Psychology*, *5*(1). https://doi.org/10.1080/23311908.2018.1450919

Hayes, Andrew F. (2013). Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. New York, NY: The Guilford Press. *Journal of Educational Measurement*, *51*(3), 335–337. https://doi.org/10.1111/jedm.12050

He, W., & Gan, J. (2025). The relationship between self-reflection and mental health: a meta-analysis review. *Current Psychology*. https://doi.org/10.1007/s12144-025-07415-9

Hjartarson, K. H., Snorrason, I., Bringmann, L. F., & Ólafsson, R. P. (2022). Automaticity and depression: Daily mood-reactive rumination in people with and without depression history. *Journal of Psychopathology and Clinical Science, 131*(4), 327–340. https://doi.org/10.1037/abn0000752

Hobbiss, M. H., Fairnie, J., Jafari, K., & Lavie, N. (2019). Attention, mindwandering, and mood. *Consciousness and cognition*, *72*, 1–18. https://doi.org/10.1016/j.concog.2019.04.007

Joireman, J. A., Parrott, L., III, & Hammersla, J. (2002). Empathy and the Self-Absorption paradox: support for the distinction between Self-Rumination and Self-Reflection. *Self and Identity*, *1*(1), 53–65. https://doi.org/10.1080/1529886023172328

Joormann, J., Dkane, M., & Gotlib, I. H. (2006). Adaptive and maladaptive components of rumination? Diagnostic specificity and relation to depressive biases. *Behavior therapy*, *37*(3), 269–280. https://doi.org/10.1016/j.beth.2006.01.002

Kam, J. W. Y., Wong, A. Y., Thiemann, R. F., Hasan, F., Andrews-Hanna, J. R., & Mills, C. (2024). On the relationship between unprompted thought and affective well-being: A systematic review and meta-analysis. *Psychological bulletin*, *150*(5), 621–641. https://doi.org/10.1037/bul0000428

Khosravani, V., Baseri, A., Kamali, Z., Mohammadzadeh, A., & Amirinezhad, A. (2020). Direct and Indirect Effects of Behavioral Inhibition/Activation Systems on Depression and Current Suicidal Ideation Through Rumination and Self-Reflection. *Archives of suicide research: official journal of the International Academy for Suicide Research*, *24*(4), 568–588. https://doi.org/10.1080/13811118.2019.1649224

Killingsworth, M. A., & Gilbert, D. T. (2010). A wandering mind is an unhappy mind. *Science*, *330*(6006), 932. https://doi.org/10.1126/science.1192439

Kimong, P. J. (2020). *Psychometric Synthesis of the Center for Epidemiologic Studies Depression Scale-Revised Across Cultures*. University of South Dakota.

Lask, L. S., Moyal, N., & Henik, A. (2021). Rumination, emotional intensity and emotional clarity. Consciousness and Cognition, 96, 103242. http://dx.doi.org/10.1016/j.concog.2021.103242

Linz, R., Pauly, R., Smallwood, J., & Engert, V. (2021). Mind-wandering content differentially translates from lab to daily life and relates to subjective stress experience. *Psychological research*, *85*(2), 649–659. https://doi.org/10.1007/s00426-019-01275-2

Lu, F. Y., Yang, W. J., Zhang, Q. L., & Qiu, J. (2017). Thought Control Ability Is Different from Rumination in Explaining the Association between Neuroticism and Depression: A Three-Study Replication. *Frontiers in psychology*, *8*, 838. https://doi.org/10.3389/fpsyg.2017.00838

MacKillop, J., & Anderson, E. J. (2007). Further psychometric validation of the Mindful Attention Awareness Scale (MAAS). *Journal of Psychopathology and Behavioral Assessment*, *29*(4), 289–293. https://doi.org/10.1007/s10862-007-9045-1

Marchetti, I., Koster, E. H., & De Raedt, R. (2012). Mindwandering heightens the accessibility of negative relative to positive thought. *Consciousness and cognition*, *21*(3), 1517–1525. https://doi.org/10.1016/j.concog.2012.05.013

Marchetti, I., Van de Putte, E., & Koster, E. H. W. (2014). Self-generated thoughts and depression: from daydreaming to depressive symptoms. *Frontiers in Human Neuroscience, 8*, 131. doi:10.3389/ fnhum.2014.00131.

Martinon, L.M., Smallwood, J., Hamilton, C.J., & Riby, L.M. (2019). Frogs' Legs Versus Roast Beef: How Culture Can Influence Mind-Wandering Episodes Across the Lifespan. *Europe's Journal of Psychology, 15*, 211 - 239.

Miranda, R., & Nolen-Hoeksema, S. (2007). Brooding and reflection: Rumination predicts suicidal ideation at 1-year follow-up in a community sample. *Behaviour Research and Therapy, 45*(12), 3088–3095. https://doi.org/10.1016/j.brat.2007.07.015

Miranda, R., Wheeler, A., Chapman, J. E., Ortin-Peralta, A., Mañaná, J., Rosario-Williams, B., & Andersen, S. (2023). Future-oriented repetitive thought, depressive symptoms, and suicide ideation severity: Role of future-event fluency and depressive predictive certainty. *Journal of Affective Disorders*, *335*, 401–409. https://doi.org/10.1016/j.jad.2023.05.050

Mooneyham, B. W., & Schooler, J. W. (2013). The costs and benefits of mind-wandering: a review. *Canadian Journal of Experimental Psychology/Revue canadienne de psychologie expérimentale*, *67*(1), 11.

Mori, M., Takano, K., & Tanno, Y. (2015). Role of self-focus in the relationship between depressed mood and problem solving. *Motivation and Emotion*, *39*(5), 827–838. https://doi.org/10.1007/s11031-015-9486-x

Murray, S., Liang, N., Brosowsky, N., & Seli, P. (2021). What are the benefits of mind wandering to creativity? *Psychology of Aesthetics, Creativity, and the Arts.* Advance online publication. https://doi.org/10.1037/aca0000420

Nayda, D. M., & Takarangi, M. K. T. (2021). The cost of being absent: Is meta-awareness of mind-wandering related to depression symptom severity, rumination tendencies and trauma intrusions? *Journal of affective disorders*, *292*, 131–138. https://doi.org/10.1016/j.jad.2021.05.053

Nolen-Hoeksema, S., Morrow, J., & Fredrickson, B. L. (1993). Response styles and the duration of episodes of depressed mood. *Journal of Abnormal Psychology*, *102*(1), 20–28. https://doi.org/10.1037/0021-843x.102.1.20

Patel, A., Daros, A. R., Irwin, S. H., Lau, P., Hope, I. M., Perkovic, S. J., Laposa, J. M., Husain, M. I., Levitan, R. D., Kloiber, S., & Quilty, L. C. (2023). Associations between

rumination, depression, and distress tolerance during CBT treatment for depression in a tertiary care setting. *Journal of Affective Disorders*, *339*, 74–81. https://doi.org/10.1016/j.jad.2023.06.063

Philippi, C. L., & Koenigs, M. (2014). The neuropsychology of self-reflection in psychiatric illness. *Journal of psychiatric research*, *54*, 55–63. https://doi.org/10.1016/j.jpsychires.2014.03.004

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, *40*(3), 879-891.

Radloff, L.S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, *1*(3),385-401.

Reangsing, C., Punsuwun, S., & Schneider, J. K. (2021). Effects of mindfulness interventions on depressive symptoms in adolescents: A meta-analysis. *International journal of nursing studies*, *115*, 103848.

Rickerby, N., Krug, I., Fuller-Tyszkiewicz, M., Forte, E., Davenport, R., Chayadi, E., & Kiropoulos, L. (2022). Rumination across depression, anxiety, and eating disorders in adults: A meta-analytic review. *Clinical Psychology Science and Practice*, *31*(2), 251–268. https://doi.org/10.1037/cps0000110

Rogers, M. L., & Joiner, T. E. (2017). Rumination, Suicidal Ideation, and Suicide Attempts: A Meta-Analytic Review. *Review of General Psychology*, 21(2), 132-142. https://doi.org/10.1037/gpr0000101

Seli, P., Beaty, R. E., Marty-Dugas, J., & Smilek, D. (2019). Depression, anxiety, and stress and the distinction between intentional and unintentional mind wandering. *Psychology of Consciousness Theory Research and Practice*, *6*(2), 163–170. https://doi.org/10.1037/cns0000182

Shrimpton, D., McGann, D., & Riby, L. M. (2017). Daydream Believer: Rumination, Self-Reflection and the Temporal Focus of Mind Wandering Content. *Europe's journal of psychology*, *13*(4), 794–809. https://doi.org/10.5964/ejop.v13i4.1425

Silvia, P. J., & Phillips, A. G. (2010). Evaluating self-reflection and insight as self-conscious traits. *Personality and Individual Differences*, *50*(2), 234–237. https://doi.org/10.1016/j.paid.2010.09.035

Silvia, P. J., Eddington, K. M., Harper, K. L., & Kwapil, T. R. (2022). Self-reflection, insight, and mood disorder symptoms: Evaluating the short form of the self-reflection and insight scale with clinical interviews and self-reports. *Current Psychology*, *42*(16), 13906–13912. https://doi.org/10.1007/s12144-021-02619-1

Smallwood, J., & Schooler, J. W. (2015). The Science of Mind Wandering: Empirically Navigating the Stream of Consciousness. Annual Review of Psychology, 66, 487-518. https://doi.org/10.1146/annurev-psych-010814-015331

Soffer-Dudek, N., & Somer, E. (2018). Trapped in a Daydream: Daily Elevations in Maladaptive Daydreaming Are Associated with Daily Psychopathological Symptoms. *Frontiers in psychiatry*, *9*, 194. https://doi.org/10.3389/fpsyt.2018.00194

Song, X., & Wang, X. (2012). Mind wandering in Chinese Daily Lives – an experience sampling study. *PLoS ONE*, *7*(9), e44423. https://doi.org/10.1371/journal.pone.0044423

Spronken, M., Holland, R. W., Figner, B., & Dijksterhuis, A. (2016). Temporal focus, temporal distance, and mind-wandering valence: Results from an experience sampling and an experimental study. *Consciousness and cognition*, *41*, 104–118. https://doi.org/10.1016/j.concog.2016.02.004

Sun, H., Tan, Q., & Fan, G. (2014) Different Effects of Rumination on Depression: Key Role of Hope. *International Journal of Mental Health Systems*, 8, 53. https://doi.org/10.1186/1752-4458-8-53

Trapnell, P.D., & Campbell, J.D. (1999). Private self-consciousness and the five-factor model of personality; Distinguishing rumination from reflection. *Journal of Personality and Social Psychology, 76*, 284-304.

Vago, D. R., & Zeidan, F. (2016). The brain on silent: mind wandering, mindful awareness, and states of mental tranquility. *Annals of the New York Academy of Sciences*, *1373*(1), 96–113. https://doi.org/10.1111/nyas.13171

Verhaeghen, P., Joormann, J., & Aikman, S. N. (2014). Creativity, mood, and the examined life: Self-reflective rumination boosts creativity, brooding breeds dysphoria. *Psychology of Aesthetics, Creativity, and the Arts, 8*(2), 211–218. https://doi.org/10.1037/a0035594

Verhaeghen, P. (2019). The mindfulness manifold: Exploring how self-preoccupation, self-compassion, and self-transcendence translate mindfulness into positive psychological outcomes. Mindfulness, 10(1), 131-145.

Watkins, E. R., & Roberts, H. (2020). Reflecting on rumination: Consequences, causes, mechanisms and treatment of rumination. *Behaviour research and therapy*, *127*, 103573. https://doi.org/10.1016/j.brat.2020.103573

Welhaf, M. S., & Banks, J. B. (2024). Effects of emotional valence of mind wandering on sustained attention performance. *Journal of Experimental Psychology: Learning, Memory, and Cognition*.

Wong, Y. S., Willoughby, A. R., & Machado, L. (2023). Reconceptualizing mind wandering from a switching perspective. *Psychological research*, *87*(2), 357–372. https://doi.org/10.1007/s00426-022-01676-w

Xu, M., Purdon, C., Seli, P., & Smilek, D. (2017). Mindfulness and mind wandering: The protective effects of brief meditation in anxious individuals. *Consciousness and cognition*, *51*, 157–165. https://doi.org/10.1016/j.concog.2017.03.009

Zou, H., Ma, X., Li, X., & Zhang, W. (2025). Longitudinal Relationships Between Rumination and Depression Symptoms and the Influence of Lag Duration Among College Students. *International Journal of Cognitive Behavioural Therapy*. https://doi.org/10.1007/s41811-025-00252-5

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Conflict of Interest

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