

Research Paper

Rumination and Its Relationship with Psychological Distress: Exploring the Moderating Role of Reflective Functioning among Female College Students

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ABSTRACT

Psychological distress among university students is a growing public health concern, and cognitive aspects such as rumination have been recognized as contributing factors to the development and maintenance of psychological distress. The study aimed to examine the relationship between brooding rumination and psychological distress and determine the moderation effect of reflective functioning, i.e., hypomentalization, on this relationship among female college students. A quantitative correlational study using a moderation analysis was employed to examine the relationship between the variables with a total of 163 female college students of Banasthali Vidyapith who were recruited for the study. The study employed the Brooding Subscale of the Ruminative Responses Scale (Treynor et al., 2003), the Reflective Functioning Questionnaire (RFQ-R-7) (Fonagy et al., 2016; Horváth et al., 2023), and the Kessler Psychological Distress Scale (K-10) (Kessler et al., 2002) to measure brooding rumination, reflective functioning, and psychological distress, respectively. Descriptive statistics showed moderate levels and Pearson's product-moment correlation analysis showed a positive significant relationship between brooding rumination and psychological distress ($r = 0.43, p < 0.01$), between brooding rumination and reflective functioning ($r = 0.47, p < 0.01$), and between reflective functioning and psychological distress ($r = 0.54, p < 0.01$). Structural Equation Modeling (SEM) was employed to test the moderation hypothesis. While both brooding rumination and reflective functioning showed a significant main effect on psychological distress, the moderation effect was not significant. Thus, the study suggests that brooding rumination and reflective functioning function as two independent vulnerability factors rather than an interrelated factor. The study contributes to the literature by examining the relationship between rumination and reflective functioning together in a non-clinical population of female college students and highlights the need to address both rumination and mentalizing in the treatment of psychological distress in college students.

Keywords: Rumination, Reflective Functioning, Hypomentalization, Psychological Distress

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Everywhere in the world, there are many university students who are silently suffering from their mental health issues. The transition to university life brings new pressures of its own, like new demands of academia, new social circles, and an uncertain but possibly overwhelming future. For the individual, these pressures build up to a point where they become unmanageable and finally manifest as anxiety, stress, or depression. The depth of this problem can be calculated by the fact that emotional issues do not stop within the individual but also affect academic performance, personal relationships, and are just the start for long-term mental health issues to come. Therefore, understanding the psychological mechanisms behind these issues and why certain individuals are at more risk of them than others becomes more than simply a question but an issue of vital importance.

Rumination as Risk Factor

Most people have this tendency of overthinking, which involves reliving the situation, reliving same worrying thoughts, and inability to disengage. Psychologists have termed this behavior as rumination, which refers to the tendency to passively and continuously focusing on negative emotions, the causes of negative emotions, and the possible outcomes of negative emotions (Treyner et al., 2003). The major problem with rumination is that it does not help the individual to overcome the problem or move towards the goal, and focuses on the problem only. According to the response styles theory, this passive behavior leads to increased levels of negative emotions, causing the individual to stay stuck in that state, thereby diminishing problem-solving abilities (Treyner et al., 2003).

Treyner et al. (2003) have identified that rumination is not single, but has two types. The first type is brooding, which is a passive comparison of one's reality with one's unrealistic expectations. Brooding is usually accompanied by negative evaluation of one's own thinking and underlying negativity about one's situation. The second type is reflection, which is a more purposeful and possibly beneficial exploration of one's emotional experiences in order to gain a better understanding of them (Treyner et al., 2003). Brooding is considered to be a less adaptive type of rumination and is associated with depressive symptoms and emotional suffering.

Research carried out with university students showed that brooding ruminations were significant predictors of psychological distress in undergraduate students, while reflective ruminations did not have a similar effect (Nuhari & Musabiq, 2020). The importance of brooding rumination can be seen in studies carried out with adolescents and young adults in psychiatric settings, where it was found that those who had made previous attempts at suicide had higher levels of brooding rumination compared to those who had not made such attempts (Horwitz et al., 2019).

Brooding is not just a state, but a form of emotional regulation that clashes with itself. People who tend to brood have poor emotional regulation and tend to have intense, more negative emotional responses (Yalvaç & Gaynor, 2021). The most interesting fact is that, instead of helping to reduce pressure, brooding seems to continue it and extend its duration. If we look at the research on coping shows that people who tend to rely too heavily on brooding have higher perceived stress and lower confidence in their ability to cope (Rosenbaum et al., 2022). As a result, one can see that negative thinking cycles do not just correlate with emotional problems, but actually weaken the ability to cope with them. As a result, the data suggests that brooding is a form of cognitive vulnerability that influences the intensity and duration of emotional responses.

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Reflective Functioning and Mentalization

But alongside rumination, another concept has increasingly gained popularity in psychological literature known as mentalization, or reflective functioning. This is the ability to understand people's behavior, our own and others, by seeing through the lens of underlying mental states such as our thoughts, feelings, wishes, and intentions that quietly but continuously guide our actions and motivations (Katznelson, 2014; Fonagy et al., 2016; Luyten et al., 2020). This is a skill that allows us to understand people's emotional lives and social interactions, not just on the surface but in a psychologically balanced way, in order to respond to social situations more flexibly and compassionately.

Mentalization can be traced back to the very first relationships that an individual had in life. When the individual responds to the emotions of the child with sensitivity and understanding, by validating the child's feelings, empathizing with them, and creating a safe environment for the child to explore the inner world, this provides the basis for the child to eventually be able to mentalize on their own (Katznelson, 2014). It forms the basis of emotional regulation, empathy, and complex social relationships. As the individual grows up, this mentalizing ability becomes more complex, helping the individual to navigate the complex emotional requirements of life.

Mentalization extends very deep into the area of psychopathology as well. When the ability to mentalize, or to understand and interpret mental states, is impaired, this leads to emotional confusion, where emotions are felt without any reason, the behavior of other people becomes difficult to understand, and one's own emotions are difficult to regulate (Luyten et al., 2020). This kind of confusion actually forms the basis of many different kinds of psychological issues, like depression, anxiety, and personality disorders, not because mentalizing forms the sole basis of it, but because, without mentalizing, the world of emotions becomes much more difficult to navigate.

One of the most studied and clear ways in which people have difficulties with thinking about mental states is through the phenomenon of hypomentalization. Individuals who hypomentalize often have difficulties in thinking about their own emotions and about the emotions of others. When they are in a stressful situation or feel emotionally uncomfortable and cannot readily understand it, they go back to unhealthy ways of coping with their difficulties, which are not very effective in dealing with things that they don't really understand. Overall, different studies using the Reflective Functioning Questionnaire showed that difficulties with mentalization are associated with a range of problematic psychological traits, such as rumination, worries, and impulsive behaviors (Horváth et al., 2023).

Mentalization, Emotion Regulation, and Psychological Distress

Research continues to indicate that how well we can understand our own mind plays an important role in how we can manage emotions and stay mentally healthy (Yalvaç & Gaynor, 2021). When people can recognize what they're feeling inside themselves, name it, understand the reason for it, and recognize how it influences their behavior, they're in a better place to manage their emotions in a healthy way. If they cannot do that, their emotions build up and overwhelm them, making it easy to get into dysregulation.

Studies have consistently supported that individuals with low capacities for mentalizing experience higher levels of emotional dysregulation, leading to higher levels of negative

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emotions and psychological distress (Ghanbari et al., 2023). It makes sense that when people can't make sense of their emotions or reasons for them, how can they possibly regulate those emotions. When research looks at adolescents, mentalizing impairment may not directly result in depressive symptoms but can do so by leading people into unhealthy cognitive patterns, such as rumination or blame, as a way to attempt to make sense of emotions (Łubińska-Salej & Radziwiłłowicz, 2025).

Not only is mentalization a risk factor when it is low, but it is also a psychological resource when it is high. Those with strong capacities for mentalizing use more adaptive coping strategies and have higher levels of resilience to stress (Schwarzer et al., 2022). They appear to process what's going on and work their way through it. There have also been some research that indicate that good mentalizing skills are related to worse emotional dysregulation and fewer internalizing problems like anxiety or depression (Parolin et al., 2024). Most recently, some new research explored the relationship between mentalization and the processes of resilience, and indicates that the way that mentalization impacts mental health outcomes could be more broad and dynamic than we ever imagined (Chang et al., 2024). All of this research puts mentalization at the center as a psychological construct that has widespread effects on emotional well-being.

Overview of this Study

While we have a good body of work on rumination and mentalization as two separate contributors to emotional distress, we have paid little attention to the interplay between these two constructs. That is an important gap, as rumination and mentalization are talking about the very same thing. The interplay between these two constructs might provide some insight into why some students become emotionally at-risk in college, while others somehow manage effectively.

This study attempts to explore the interplay between brooding rumination, reflective functioning, and psychological distress in female college students, as well as whether reflective functioning moderates the effects of brooding rumination on psychological distress. It is hoped that this study makes a small contribution to the literature about the cognitive and metacognitive bases for student mental health.

From a theoretical point of view, the bases for both rumination and mentalization are well established. Brooding rumination, the passive, self-critical, and habitual tendency to focus the mind on what is wrong and why, has consistently been found to be a robust predictor of depression and distress in student populations (Treyner et al., 2003; Nuharini & Musabiq, 2020). Reflective functioning, on the other hand, has been viewed as an important psychological asset, as it enables an individual to understand themselves and others, as well as their own and others' mental states, and consequently manage emotions and cope more effectively (Katznelson, 2014; Luyten et al., 2020). If an individual struggles with reflective functioning, such as through the process of hypomentalization, then maladaptive cognitive styles such as rumination may take over, leading to increasing levels of emotional distress (Horváth et al., 2023).

The empirical evidence supporting the importance of mentalization for emotional well-being is well established. A lower capacity for mentalization has been related to greater emotional dysregulation and higher levels of negative emotions, which suggests that the capacity for mentalization is central to psychological well-being (Ghanbari et al., 2023). On the other

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hand, individuals who have a higher capacity for mentalization have been found to deal more effectively with adversity, have fewer psychological symptoms, and have higher levels of emotional well-being (Schwarzer et al., 2022; Parolin et al., 2024). Thus, it is important to examine if the capacity for reflective functioning is related to the emotional regulatory mechanisms that brooding interferes with, then it also plays a protective role against the effects of brooding. Deriving from these theoretical and empirical evidence, the hypotheses proposed in this study are:

- **H1:** There will be a significant positive correlation between Brooding Rumination and Psychological Distress among female college students.
- **H2:** There will be a significant positive correlation between Brooding Rumination and Reflective Functioning (Mentalization) among female college students.
- **H3:** There will be a significant positive correlation between Reflective Functioning (Mentalization) and Psychological Distress among female college students.
- **H4:** There will be a significant moderating role of Reflective Functioning (Mentalization) in the relationship between Brooding Rumination and Psychological Distress.

METHOD

Participants

The study employed a sample of 163 female college students drawn from Banasthali Vidyapith, Newai, Rajasthan. Initially, the data collection process employed 180 respondents; however, 17 respondents were dropped out of the final analysis due to incomplete data and the lack of voluntary participation, leading to a final sample of 163 respondents. All the respondents were between 18 and 25 years of age and were actively pursuing either an undergraduate or postgraduate course of study at the time of the study. Only respondents who gave consent to participate were included in the final analysis.

Measures

- **Brooding Rumination:** The assessment of brooding rumination was conducted using the brooding subscale of the Ruminative Response Scale, which was first proposed by Treynor, Gonzalez, and Garner (2003). This scale comprises five items that focus on the passive comparative nature of brooding rumination, which is “the tendency to evaluate one’s current reality in comparison to an idealized reality and see oneself as deficient.” This subscale was used because there is huge evidence that brooding rumination is related to depressive symptoms and psychological distress, and thus it is “the most clinically relevant aspect of rumination to be examined in a student population” (Treynor et al., 2003; Nuharini & Musabiq, 2020).
- **Reflective Functioning (Mentalization):** The reflective functioning level was evaluated using the 7-item revised version of the Reflective Functioning Questionnaire, which was developed by Fonagy et al. (2016) and revised by Horváth et al. (2023). This scale assesses levels of hypomentalization, which is “characterized by the degree of uncertainty or difficulty in understanding one’s own and others’ mental states.” The level of each participant’s agreement with each statement was indicated using a Likert scale, and the scale was selected because past research has shown “a constant link between increased levels of hypomentalization and maladaptive psychological traits” (Horváth et al., 2023), which makes it appropriate to use in determining the effect of mentalization difficulties on student mental health issues.

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- **Psychological Distress:** The Kessler Psychological Distress Scale (K-10), as introduced by Kessler et al. (2002), was utilized to measure psychological distress. The 10-question scale measures the level of anxiety and depression symptoms experienced over the last four weeks. A 5-point Likert scale was utilized for the measurement, ranging from 1 (none of the time) to 5 (all of the time). The scale was chosen based on the reliability and validity it has demonstrated in a number of population-based studies (Kessler et al., 2002), as it is a widely trusted scale for the measurement of psychological distress.

Procedure

The participants were selected from a university population. The data collection was done in form of questionnaires, which were collected using Google Forms. Before the participants contributed the required information, they were made aware of the purpose of the research. This was followed by an informed consent from the participants. The participants were not obligated to contribute to the research. The participants were assured of the confidentiality of the information collected.

Data Analysis

All the analyses were performed in Python, in the Google Colab environment. Descriptive analysis, including means and standard deviations, was carried out for each variable to provide an initial assessment of the characteristics of the data. Internal reliability for all three scales was assessed using Cronbach's alpha coefficient, and Pearson product-moment correlations were used to investigate the relationship between brooding rumination, reflective functioning, and psychological distress.

For assessing the proposed model of moderation, Structural Equation Modeling (SEM) was carried out with brooding rumination as the predictor variable, psychological distress as the outcome variable, and mentalization as the moderating variable. The test for the proposed model of moderation was carried out by including an interaction term between brooding rumination and reflective functioning in the model itself. Bootstrapping with 5,000 resamples was used to ensure the reliability of the results for assessing the proposed model of moderation, which provided bias-corrected confidence intervals for all parameter estimates. Fit indices used were the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA), which are standard indices used to assess model fit and provide an overall assessment of how well the model fits the data.

RESULTS

Descriptive Data

The descriptive statistics for the three variables show a clear trend. Brooding ruminations had a mean of 12.12 (SD = 2.83), ranging from 7 to 20. Reflective functioning had a mean of 27.90 (SD = 7.80), ranging from 10 to 47. Psychological distress, as measured by the K10 scale, had a mean of 27.04 (SD = 7.37), ranging from 10 to 49.

Table 1. Descriptive statistics for the study variables

| Variable | N | Mean | SD | Min | Max |
|-------------------------------|-----|-------|------|-----|-----|
| Brooding Rumination | 163 | 12.12 | 2.83 | 7 | 20 |
| Reflective Functioning | 163 | 27.9 | 7.8 | 10 | 47 |
| Psychological Distress | 163 | 27.04 | 7.37 | 10 | 49 |

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For all three variables, the scores lie in the moderate zone, which indicates that the female college students in this study experienced actual but not serious levels of brooding, mentalizing difficulties, and psychological distress. More importantly, the spread of scores for all variables was sufficiently broad, suggesting that the sample did not only provide similar responses but actually varied on these variables. This is crucial to allow for a meaningful exploration of the interrelations among these three processes.

Reliability Analysis

Reliability was assessed using Cronbach's alpha as a common measure of internal consistency. The subscale for rumination on brooding had an alpha of 0.603, which is modest but acceptable for a five-item scale. The Reflective Functioning Questionnaire had a slightly higher alpha of 0.742, which is adequate. The Kessler Psychological Distress Scale had the highest level of reliability of the three, with an alpha of 0.884, which is highly confident in its measurement of distress symptoms. Taken together, these values suggest that while the degree of internal consistency differs, each of the instruments is at least adequate enough to measure its respective construct.

Correlation Analysis

Table 2. Pearson Correlation Matrix for Study Variables

| | Brooding Rumination | Reflective Functioning | Psychological Distress |
|-------------------------------|----------------------------|-------------------------------|-------------------------------|
| Brooding Rumination | 1.000** | 0.471** | 0.434** |
| Reflective Functioning | 0.471** | 1.000** | 0.535** |
| Psychological Distress | 0.434** | 0.535** | 1.000** |

** $p < 0.01$

A Pearson correlation analysis was carried out to explore the relationships between brooding rumination, reflective functioning, and psychological distress. Brooding rumination was found to have a positive and significant correlation with psychological distress, indicating that students who experience higher levels of rumination also experience higher levels of psychological distress ($r = 0.434$, $p < 0.01$). Brooding rumination was also found to have a positive and significant correlation with reflective functioning difficulties, indicating that students who experience higher levels of brooding rumination also experience higher levels of difficulty in understanding their mental states ($r = 0.471$, $p < 0.01$). The strongest correlation was found between reflective functioning and psychological distress, indicating that psychological distress is significantly affected by students' ability or inability to interpret their mental states correctly ($r = 0.535$, $p < 0.01$).

Structural Equation Modeling

Table 3. Structural Equation Model Parameter Estimates

| Predictor | Estimate | Std Err. | z-value | p-value |
|--|-----------------|-----------------|----------------|----------------|
| Brooding Rumination | 0.612 | 0.189 | 3.232 | 0.001 |
| Reflective Functioning | 0.405 | 0.069 | 5.873 | 0 |
| Rumination × Reflective Functioning | 0.011 | 0.021 | 0.496 | 0.62 |

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In order to test the moderating role of reflective functioning on the relationship between brooding rumination and psychological distress, Structural Equation Modeling (SEM) was used. All predictor variables were mean-centered before running the model. An interaction term between brooding rumination and reflective functioning was created. The model was found to have excellent fit to the observed data, with all standard indices suggesting a good model. The CFI was 1.061, TLI was 1.091, while the RMSEA was 0.000. These findings suggest that the model was a good fit.

In the model, brooding rumination was found to be a significant predictor of psychological distress ($\beta = 0.612$, $SE = 0.189$, $p = 0.001$), while reflective functioning was found to have a significant positive effect on psychological distress ($\beta = 0.405$, $SE = 0.069$, $p < 0.001$). However, the interaction term between brooding rumination and reflective functioning was found not to be significant ($\beta = 0.011$, $SE = 0.021$, $p = 0.620$). Although both variables were found to independently predict psychological distress, reflective functioning was not found to have a moderating effect on the relationship between brooding rumination and psychological distress.

Bootstrapping Analysis

Table 4. Bootstrapped Parameter Estimates and 95% Confidence Intervals (5,000 Resamples)

| | Mean | SD | CI Lower | CI Upper |
|--|----------------|---------------|----------------|---------------|
| Brooding Rumination | 0.008809632507 | 0.01803286991 | -0.02514226577 | 0.04441959689 |
| Reflective Functioning | 0.3982712409 | 0.07470565422 | 0.2457824013 | 0.5417762494 |
| Rumination × Reflective Functioning | 0.6251201055 | 0.2070941214 | 0.22546417 | 1.049857684 |

To further support the results in terms of moderation, bootstrapping with 5,000 resamples was used to compute bias-corrected confidence intervals for the interaction term. Consistent with the results obtained via SEM, the results showed that the 95% confidence interval for the interaction effect included zero ($\beta = 0.011$, 95% CI [-0.025, 0.044]), suggesting that reflective functioning did not significantly moderate the association between brooding rumination and psychological distress. The confidence interval including zero indicates that there is no way to distinguish the result from chance. This was clearly evident in this set of results. Brooding rumination and mentalization remained as independent predictors, yet again, there was no evidence for reflective functioning.

DISCUSSION

This study examined if reflective functioning moderates the relationship between brooding rumination and psychological distress in female college students. The results show that brooding and mentalization deficit (hypomentlization) are independent predictors of distress, but reflective functioning does not moderate the relationship between brooding and distress. Instead, they seem to represent separate pathways to distress. However, the relationship between brooding rumination and psychological distress is consistent with a significant body of literature. Basic psychometric research on rumination defined it as a composite of two factors, brooding and reflection. However, brooding is more damaging than reflection. It is a passive and critical style of thinking that is more drawn to depression than resolution

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(Treyner et al., 2003). Research on university students has also confirmed this pattern. Brooding is a consistent predictor of distress, but reflection is either a weak or negligible predictor (Nuharini & Musabiq, 2020). This is not just relevant for daily life. Brooding is also a predictor of suicidal thoughts and behaviors in adolescents. This suggests that brooding is not just a bad thinking style but is relevant to important aspects of life (Horwitz et al., 2019).

The impact of brooding on emotional well-being can also be explained in terms of emotion regulation. In that respect, rumination does not promote progressive movement forward. Instead, it maintains focus on negative emotional experience, which further strengthens the negative emotion it surrounds and prevents more adaptive coping from emerging, which might be more helpful (Yalvaç & Gaynor, 2021). This is also in line with coping research, which has also established that individuals who use rumination as their primary coping style report lower perceived ability to cope with stress, which in turn creates a vicious cycle (Rosenbaum et al., 2022). The current study has also established the expected trend.

The association between hypomentalization and psychological distress can also be explained in terms of logic. When an individual is unable to make sense of their inner experience, as their emotions are murky and difficult to explain, it becomes harder to regulate their emotions, which increases their distress (Luyten et al., 2020). In all studies that used the Reflective Functioning Questionnaire, it has been established that hypomentalization is associated with emotional instability and maladaptive behaviors, including rumination (Horváth et al., 2023; Ghanbari et al., 2023).

The association between brooding and hypomentalization, which was moderate, also calls for some thought. There is an obvious link between the two. When an individual does not understand their inner experience, as it is difficult to explain, it becomes easy to get lost in thought as an unproductive way of making sense of something that does not make sense. This is the rumination that occurs as a substitute for emotional clarity. When an individual has higher levels of mentalization, it has been established that they have access to more adaptive coping (Schwarzer et al., 2022; Łubińska-Salej & Radziwiłłowicz, 2025).

However, the lack of a significant moderation effect contradicts initial hypotheses and must be interpreted. It is possible that, as a psychological construct, both brooding and hypomentalization have an impact on psychological distress, but through largely unrelated psychological mechanisms, each of significant impact in its own right, but without direct influence over, or moderation of, the other. Research into the impact of mentalization on psychological outcomes suggests that it is likely to have an indirect, rather than a direct, influence, such as through mechanisms such as emotional regulation and the reduction of internalizing symptoms, rather than through direct moderation of cognitive styles such as brooding (Parolin et al., 2024). The sample used in the study, consisting as it does of non-clinical students experiencing moderate levels of distress, might also have implications for the findings. Mentalization might have served as a more generalized psychological resource, rather than as a specific buffer against a particular cognitive vulnerability, as might have been the case in a clinical sample (Luyten et al., 2020). Further research into the mechanisms underlying mentalization suggests that it might actually have a protective effect mediated through resilience and interpersonal coping, rather than direct moderation of rumination (Chang et al., 2024).

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In conclusion, it is possible to propose that the findings indicate a more complex interrelationship than was initially hypothesized. Brooding rumination and hypomentalization might be seen as independent contributors to psychological distress, each significant in its own right, rather than as interrelated psychological constructs. The longitudinal nature of the relationships between the constructs and the conditions under which they might change, are open to further research.

Limitations and Future Directions

However, the findings of this study need to be viewed within the context of particular methodological and conceptual limitations. These limitations do not invalidate the findings but highlight areas where further scientific inquiry is needed.

The first limitation is that the study is based on a cross-sectional study. The study only gathered information at a single point in time, and therefore, while the findings are statistically significant, it is not possible to determine if brooding rumination or hypomentalization leads to psychological distress, or if psychological distress leads to them. These are important questions, as they have considerable implications for our understanding and interventions for these processes. Further research, possibly longitudinal studies that follow students over time and through various pressures and transitions, is needed.

A second limitation is that the study only employed self-report methods. Although it is a commonly used method, and the instruments used have established psychometric properties, the data collected in this way are necessarily subjective. People may report themselves in a more positive light, consciously or unconsciously. Future studies would benefit from increasing the methodological scope to include behavioral tasks that measure mentalization, or observational approaches, or even structured clinical interviews, in order to provide a more complete and objective picture of mentalization and other processes.

A third limitation that should be considered is that of the sample. All of the 163 participants in the study were female students recruited from one university in Rajasthan. Rumination and mentalization may not necessarily be gender-neutral constructs and may differ in male and female populations. They may not even be culture-neutral. Whether or not these findings generalize to male populations, or to clinical samples, or to different cultural and educational settings, is still to be seen.

Lastly, the aspect of statistical power should be taken into consideration. The detection of main effects, which pertain to the direct relationship between the variables, requires a relatively smaller sample size. However, the detection of interaction effects is much more statistically demanding. It should be noted that the lack of finding a significant moderating effect should be treated with some caution, as this may either indicate a true null effect or it may be indicative of an effect that is too small to be detected with 163 participants.

Practical and Theoretical Implications

Despite the limitations, this study offers valuable insights that must be taken into account, theoretically and practically. From a theoretical viewpoint, this investigation offers valuable insights in bridging a connection between two separate bodies of literature, those based on cognitive vulnerability theories of ruminative styles and those grounded in mentalization-based theories. From this integration, one important finding is that psychological distress among young adults is unlikely to be explained by a single cause. Brooding and

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mentalization are revealed as separate yet related vulnerabilities (Ghanbari et al., 2023; Horváth et al., 2023). Emotional distress is more likely to be explained by multiple factors than by any one cognitive process operating in isolation.

Practically, this means that if we are to intervene in such distress, we must take into account this important distinction. If we are to treat one or more factors, we must recognize that we might still leave the other untreated. Cognitive-behavioral and mindfulness-based interventions offer powerful tools for disrupting negative thinking patterns (Yalvaç & Gaynor, 2021; Rosenbaum et al., 2022). However, mentalization-based interventions offer a separate yet equally powerful tool for gaining clarity in one's emotional experiences (Schwarzer et al., 2022; Chelouche-Dwek & Fonagy, 2024). A more comprehensive solution is required, particularly in a university setting where student distress is now more pronounced.

CONCLUSION

This study aimed to explore the relationships between brooding rumination, mentalization, and psychological distress in female college students and to investigate whether reflective capacity could mitigate the negative impact of brooding. The study found that brooding and hypomentalization independently predicted high levels of psychological distress but did not influence one another in their predictions. Reflective capacity did not moderate the relationship between brooding and psychological distress in this study. This study has significant theoretical and practical implications. Brooding and hypomentalization are not different aspects of one underlying problem but are distinct risk factors that share a common outcome. Brooding and mentalization deficits, separately, contribute to the poor psychological well-being of university students. This study found that one should not look for just one cognitive process to understand emotional distress in university students. The interpretation of emotional experiences and the understanding of emotional experiences are relevant in this regard, and attempts to address these issues should cover both aspects.

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Conflict of Interest

The author(s) declared no conflict of interest.

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