



**COMPARATIVE STUDY OF RUMINATION LEVELS IN MEN AND WOMEN:
INVESTIGATING THE ROLE OF MINDFULNESS**

¹Nandini Dutta, Masters of Arts, Clinical Psychology, Amity Institute of Psychology and

Allied Sciences, Noida, India

dutta.nandini06@gmail.com

²Dr. Shruti Dutt, Assistant Professor, Amity Institute of Psychology and Allied Sciences,

Noida, India

Sdutt1@amity.edu

Abstract

Rumination is defined as passive, recurring thoughts that centre on the reasons behind and consequences of one's grief. Multiple detrimental impacts on the mind and body are linked to ruminating. People's psyches can get disrupted by repetitive thought patterns in response to stimuli. Rumination is often linked to females as well and it is observed that mindfulness decreases rumination levels in individuals. The present study was aimed at assessing two things. Firstly, it aimed at studying the levels of rumination across males and females, and secondly, it aimed to study the relationship between mindfulness and rumination. The sample

consisted of 150 participants (N=150) (F=75, M=75) aged 18-35 years. The sample was selected through a combination of simple random sampling and convenience sampling. Standardized scales were used to assess the two hypotheses. The results revealed that there is no significant gender disparity in the levels of rumination with $p=.75$ ($p>0.05$) despite slight variations in mean scores with, females (30.84) and males (30.24). The results further discovered that mindfulness and rumination have a significant negative correlation with ($r = -.428$), supporting the notion that mindfulness interventions can help alleviate psychological distress by reducing rumination. These findings underscore the importance of mindfulness in promoting mental well-being and suggest avenues for future research to explore nuances in gender differences and the efficacy of mindfulness interventions.

Keywords: Rumination, Mindfulness, Gender Disparity, Young Adults

Introduction

Understanding the complex interactions between gender, mindfulness, and rumination has been a focus of research in the field of mental health. The current study compares and contrasts the subtle differences in rumination levels between men and women, examining the critical influence of mindfulness techniques on these thought processes. In the context of the growing interest in mindfulness therapies, this investigation aimed to shed light on how these practices differ in their effects on people based on their gender. This will add further to our understanding of how these practices affect psychological health in a variety of demographic groups.

Rumination is the habit of pondering about the causes and effects of one's misery regularly while remaining inactive. These concepts do not, however, encourage the individual to actively participate in coping strategies or problem-solving techniques that might lessen pain and

improve mood. Although ruminating might be normal for humans, it can exacerbate stress to the point of creating more problems. There are several negative effects of ruminating on the body and psyche.

Brooding and reflecting are the two categories under which rumination falls. Brooding is more negative and self-sustaining than reflective thinking, which is analytical and problem-solving in nature. Bad feelings and problems with self-esteem might result from ruminating. A drug abuse problem or other mental health problems, such as worry and hopelessness, may arise from brooding. Since introspective rumination enables one to consider one's own choices and consequences rather than allowing past events to ruin their day, it is frequently viewed as constructive behaviour. Yet, melancholy, anxiety, and substance abuse are associated with both kinds of rumination. Sadly, people are more likely to think the same things over and over again when they are anxious. An innate drive to find solutions to problems that people encounter usually starts this tendency. Rationing doesn't lead to solutions, even if it seems like solving the issue will reduce stress. Reviewing experiences, memories, and emotions is a necessary component of the processing process. It's crucial to understand the difference between processing and ruminating, since doing so may improve your mental health.

It becomes clear that recognizing the difference between constructive brooding and introspective processing is critical for promoting mental health when traversing the tricky terrain of rumination. Recognizing this difference helps people develop more constructive coping strategies and break out from the never-ending cycle of self-reflection. Adopting proactive problem-solving techniques and mindfulness is a potential way to reduce suffering and build resilience in the face of life's obstacles.

Clear comprehension is referred to as mindfulness, or *sampajañña* in Pali, a key dialect used in Buddhist teachings. Its definition aligns with its goal, which is to make us see things

more clearly, interact with life more successfully, and ultimately make better judgments. Although mindfulness originated in traditional Chinese medicine, it is now more widely used in Western medicine to treat a wide range of psychological and physical conditions. At Texas Tech University, Yi-Yuan Tang teaches psychological science and internal medicine. She claims that “mindfulness training can improve mental activity and change brain connectivity and bodily processes” (Tang, 2018, p. viii). Since the central and autonomic nervous systems are important for controlling involuntary body functions, processing stress and danger, and maintaining the connection between our brain and internal organs, even five sessions of practice can lead to improvements in these systems (Tang, 2018).

Our perception of the present may have an impact on our sense of contentment, happiness, and meaningful existence, as the idea that our brains are constantly changing throughout our lives suggests. Psychology claims that by teaching us to "step outside of our constant negative self-talk" as well as our reactive impulses and emotions, mindfulness might assist us in escaping the vicious cycle of negative thought. After all, while we may not be able to stop painful or unpleasant memories, critical thoughts, or negative self-talk from happening again, we do have power over what happens next. By moving from "doing" to "being," mindfulness offers a stop, a reset, and an alternative viewpoint on who we are and where we are. An association between mindfulness meditation and detectable changes in brain regions linked to emotion, memory, and learning was found in a National Institutes of Health-funded study. An additional study supported by the NIH found that mindfulness practices help reduce urban children's anxiety and aggressiveness, which reduces stress, reduces conflicts, and improves interpersonal relationships.

The increasing amount of studies, in conclusion, emphasizes the significant influence that mindfulness has on both our physical and mental health. A transforming strategy for overcoming life's obstacles, mindfulness can change brain connections, promote emotional

control, and improve interpersonal relationships. Our ability to shape our experiences with clarity, compassion, and resilience increases as we practice being more aware of ourselves and our surroundings. This leads to a more meaningful and balanced life.

Knowledge of how rumination affects mental health conditions including stress, anxiety, and depression requires an understanding of the link between ruminating and mindfulness. More effective treatment therapies can be developed by having a better understanding of how mindfulness might reduce or interrupt ruminating. The propensity to dwell on the past or worry about the future is countered by mindfulness techniques, which encourage present-moment awareness and non-judgmental acceptance. Researchers can better understand mindfulness' therapeutic advantages and improve mindfulness-based therapies for people with rumination-related diseases by looking into how mindfulness approaches might disrupt ruminating. Furthermore, by providing people with resilience attitudes to guard against rumination-driven discomfort, knowledge of the interaction between rumination and mindfulness might guide preventative interventions for maintaining mental health.

Rumination

According to Nolen-Hoeksema's Response Styles Theory (1998), rumination is the “concentrated attention on the symptoms of one's distress as well as on its potential origins and repercussions, as opposed to its remedies.” Nolen-Hoeksema (1997) claims that although males seek to divert themselves during times of depression, women prefer to ruminate. It was suggested that this distinction in reaction style might account for women's greater rates of depression than those of males. Although the hypothesis that males are more prone to divert themselves has not always been validated, researchers have shown that women are more inclined to ruminate (1997).

Krys (2023) investigated how rumination affects psychological discomfort and personal development. A unique account of an unfavourable experience was given by 590 individuals in the study. The findings demonstrated the correlation between rumination and purposeful thought as well as negative affect and a reduction in pleasant mood. However, through thoughtful reflection and constructive revaluation, rumination had a positive effect on human development. Different patterns of expression were found for high- and low-ruminators based on linguistic research. Based on thoughtful analysis and constructive self-evaluation, the study found a positive correlation between rumination and personal progress and a negative correlation with well-being.

Pei (2023) claimed that although the precise frequency of sleep issues in teenagers with depression is unknown, they are widespread. Up to 70% of teenagers in research with 2192 participants reported having sleep issues. Sleep issues have been linked to rumination, self-esteem, childhood trauma, and alexithymia. According to the study, therapies aimed at addressing rumination, self-esteem, and alexithymia may be successful in helping these teenagers with their sleep issues. It's yet unknown how these elements interact with one another.

Mindfulness

Mindfulness is defined by Dr. Jon Kabat-Zinn (1979) as an “awareness that results from deliberate, judgment-free present-moment attention.” It consists of three elements: compassion, inquiry, and nonjudgment as well as intention and present-moment awareness. Combining these components results in a kinder, more serene way of being by changing the way we respond to circumstances. Keeping an attentive, loving perspective on our thoughts, feelings, physical experiences, and external surroundings while appreciating each moment as

it arises is the practice of mindfulness. Practicing acceptance is another aspect of mindfulness. This is observing our thoughts and emotions without passing judgment on them, that is, without holding the belief that there is a “right” or “wrong” way to feel or think at any particular time. Rather than dwelling on the past or envisioning the future, mindfulness training trains our minds to focus on the sensations we are experiencing right now.

Barcaccia (2024) executed a short online mindfulness training which significantly decreased trait anxiety, rumination, and depression in research including 486 university students. Every day during free time and once a week during class, participants in the intervention practised mindfulness meditation. Regular class activities were not conducted with the control group. Higher baseline mindfulness levels were shown to be negatively correlated with depression, trait anxiety, and rumination, and to predict improved intervention success. The results underline the significance of baseline psychological states in intervention outcomes and the role that early mindfulness levels play in moderating outcomes. The results of the study demonstrate how well online mindfulness training may reduce mental health problems in academic environments.

Wang (2023) investigated the relationship between mindfulness and stigma stress among individuals with mental disorders. It hypothesized that mindfulness could reduce negative rumination and increase positive reappraisal, leading to lower stigma stress. Lower stigma stress was also linked to reduced self-stigma content and process, resulting in higher well-being. The results showed that individuals with mental disorders who practised mindfulness experienced lower stigma stress and improved overall well-being.

Exploring Gender Disparities in Rumination Levels

Several studies show that women ruminate more than males do, for a variety of reasons including socialization, biological variations, and societal expectations. Women are

conditioned to value emotional expression and relationships above all else, which results in a tendency for rumination. This inclination is also influenced by changes in brain chemistry and hormone levels. Individual variations among genders, however, also matter a great deal. Interventions for mental health and issues associated to ruminating can benefit from an understanding of these gender differences.

Dawson (2023) investigated the connection between sadness, rumination, and sex throughout middle to late adolescence. In a sample of students, it assesses the reciprocal relationships between sex, brooding, introspective, and depressed symptoms through the use of structural equation modelling. The findings indicate that, in comparison to male participants, females exhibit greater average levels of both rumination and depressive symptoms. Additionally, the researchers discovered that early depressed symptoms predicted later brooding in females, whereas brooding rumination predicts later depressive symptoms in men. It has never been shown before that self-reflective rumination has detrimental long-term repercussions.

Rationale of the Study

This research delves at the influence of mindfulness techniques and gender differences in rumination levels. Repetitive thinking, or rumination, has been connected to anxiety and depression. Though it's unknown what causes it, women seem to ruminate more than men do. There may be benefits to lessening ruminating via practising mindfulness, which is an accepting awareness of the present moment. To reduce rumination-related suffering and enhance mental health, it is essential to comprehend these processes to devise focused therapies. To improve mental health therapies, the study intends to add to the body of knowledge by clarifying the relationship between gender, rumination, and mindfulness.

Research Gap

The lack of investigation into the impact of gender variations on rumination levels is the research gap in the field of rumination and mindfulness studies. Research on gender differences in rumination tends to be lacking, despite studies indicating women often ruminating at greater levels (Nolen-Hoeksema, 2012). Though, some research has demonstrated the effectiveness of mindfulness-based therapies in samples with mixed genders, few studies have explicitly looked at how gender can influence the association between rumination and mindfulness (Holzel, 2011). This disparity is dangerous because it makes it difficult to determine if mindfulness programs help reduce rumination, which is a major contributor to mental health problems like anxiety and depression, in the same way for men and women.

Purpose

The research aims to examine how rumination levels vary by gender and how mindfulness affects rumination levels.

Hypothesis

- H1: There will be a significant difference in the levels of rumination across males and females.
- H2: There will be a significant relationship between mindfulness and rumination

Sample

A total sample of 150 [(M=75, F=75), (N=150)] young adults in the age range of 18-35 was collected from Delhi/NCR.

Measures

The following scales were used to measure rumination levels across genders and the influence of mindfulness on rumination levels. The measures used were reliable and valid.

- **Rumination:** The scale as developed by Ehring et al. (2011) is used to measure repetitive negative thoughts, including their intrusive and repetitive nature. PTQ is a 15-item, self-administered Likert-type scale. The scale consists of responses ranging from “never”, “rarely”, “sometimes”, “often” and “almost always.”
- **Mindfulness:** The scale as developed by Brown and Ryan (2003) is used to measure a person's ability to practice mindfulness in everyday life. It assesses the frequency of open awareness and attention to the present moment, using both general and situation-specific statements. MAAS is a 15-item scale that consists of responses ranging from “almost always” to “almost never” across a 6-point scale.

Procedure

The participants were informed about the purpose of the research and the questionnaire was filled through both offline and online mode. Each participant was thanked for their cooperation. Standardized psychological tests were administered to the participants.

Analysis of data

Result

Table 1

T-test between females (1) and males (2) across Rumination

	Mean	SD	T	Sig. (2 tailed)	Result
Perseverative thinking					
Females	30.84	12.64	.31	.75	NS
Males	30.24	10.60			

NS-Not significant, S-Significant

Table 2

Correlation between Mindfulness and Rumination

		Mindful attention awareness
Rumination	Pearson Correlation	-.428**
	Sig. (2-tailed)	.000
	N	150

**Correlation is significant at 0.01 level

Discussion

The first hypothesis suggested that “there will be a significant difference in the levels of rumination across males and females.” A T-test was used to analyse the difference levels between the two groups. The results show that there is no significant difference in the rumination levels across males and females, with ($p>0.05$). As a result, the hypothesis was rejected. However, we can see that there are differences in the mean scores of females (30.84) and males (30.24). These differences could suggest and support previous pieces of literature to

an extent in the way that females tend to ruminate more than males, subsequently having a link to and higher prevalence of depression as well (Dawson, 2023). On the other hand, the hypothesis of the present study yields contradictory results and are not in sync with past research. This rejection could be due to various reasons. Firstly, the sample size was too small to detect a true difference, if one exists. One future implication for future research is that a larger sample size should be considered to understand the different levels on such topics. Secondly, this was not a highly controlled study, where factors like – personality type, cultural backgrounds and certain other variability between groups could have affected the results. In conclusion, while a difference in mean scores is an important observation, statistical significance provides a way to assess the likelihood that this difference reflects a real effect rather than a random variation, as clearly visible in the above-stated result.

The second hypothesis under consideration claimed that “there will be a significant relationship between mindfulness and rumination.” To examine the link between the two variables, Pearson's correlation was employed. At the 0.01 level, this relationship is significant. Table 2 displays Pearson's correlation value between rumination and mindfulness. Rumination and mindfulness do have a substantial and negative association, with ($r = -.428$). Consequently, the idea was retained. There are several detrimental impacts of ruminating on the body and psyche. The aforementioned findings indicate that rumination and mindfulness have a strong, negative correlation. There is also prior research to support these results. Khavari (2024) sought to assess how well Mindfulness-Based Cognitive Therapy (MBCT) addressed rumination, self-compassion, and psychological distress symptoms in students who were experiencing psychological distress. According to the study's findings, MBCT can help students become more self-compassionate while also lowering symptoms of psychological discomfort and rumination. The study confirms a negative correlation between mindfulness and rumination, supporting the effectiveness of mindfulness interventions in reducing psychological distress.

Conclusion

The present research aimed to study the differences in rumination levels across males and females as well as to identify if there is a significant difference between mindfulness and rumination. A total sample of 150 young adults in the age range of 18-35 years of age were collected. Standardized scales were used to study the above-mentioned hypotheses. The results revealed that the levels of rumination across males and females are not significant. Secondly, the data also suggested that mindfulness and rumination are related confirming a strong negative association and bolstering the idea that mindfulness programs like MBCT help lessen ruminating to relieve psychiatric discomfort. The aforementioned results highlight the significance of mindfulness in fostering psychological wellness and provide potential directions for further investigations into the subtleties of gender disparities and the effectiveness of mindfulness approaches.

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