

Perseverative Thinking and Mindfulness Among Young Adults

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Abstract - The current study examined the relationship between perseverative thinking and five facets of mindfulness in young adults. The study also investigated if there were any gender differences in perseverative thinking and five facets of mindfulness among young adults. Two hundred young adults (Male: 100, Female: 100) from the state of Tamil Nadu completed the Perseverative Thinking questionnaire (PTQ) and the 15-item Five Facets of Mindfulness Questionnaire (FFMQ). Pearson's product moment correlations were carried out to find if there were any significant relationships between the variables. Independent samples t tests were computed to find out if there were any gender differences in these variables. The analysis revealed that there was significant positive relationship between describing facet of mindfulness and perseverative thinking among young adults. There was significant positive relationship between aware actions facet of mindfulness and perseverative thinking among young adults. There was a significant positive relationship between non-judging facet of mindfulness and perseverative thinking among young adults. There was no significant gender difference in perseverative thinking and five facets of mindfulness among male and female high school students.

Index Terms - Perseverative thinking, facets, mindfulness, young adults.

INTRODUCTION

Young adults from all over the world tend to experience repetitive negative thinking at some point of their life. In India, a large number of people tend to go through perseverative thinking, especially in their inconvenient life phases, during university times and work spots as they have to make crucial life decisions regarding their career and relationships. Most people believe that over thinking occurs during hard times, but it is very common for one to ruminate on petty issues too. People, who overthink, complain symptoms like headache, crying, fidgeting and lesser appetite.

Perseverative cognition is the repeated or chronic activation of the cognitive representation of one or more psychological stressors. It is a psychological term used for the constant thinking about negative events in the past or in the future. The perseverative cognition is a cognitive representation of stressors that are negative and unconstructive. (Ehring et. al., 2011) It usually blocks the mental capacity and other rational thoughts of a person. When a person sets unrealistic ways of evaluating their self-worth and when it is not met, it may lead to overthinking which directly affects a person's self-esteem highly (Robinson and Cervone, 2006). When a person sets unrealistic ways of evaluating their self-worth and when it is not met, it may lead to overthinking which directly affects a person's self-esteem highly. For example, if a student's expectations of scores are not achieved, then the child may engage itself in perseverative thinking. It can be known that perseverative thinking has a negative effect on the academic achievement.

According to Banerjee et al. (2018) rumination and worry greatly hindered cultivating heedfulness as they led to physical and psychological disengagement of mindfulness-based self-help (MBSH) intervention. Brosschot et al. (2006) found that perseverative cognition might act directly on somatic disease through enhance activation via the cardiovascular, immune, endocrine, and neurovascular systems. According to Trick et al. (2016), perseverative negative thinking predicts subsequent depression, anxiety and emotional distress in people with long term conditions.

Mindfulness is generally characterized to incorporate bringing one's complete attention to encounters happening at the very moment in a non-judgmental or tolerating way (Brown and Ryan, 2003). The term mindfulness was first coined by a Buddhist scholar T.W. Rhys Davids at the wake of the 20th century. Mindfulness plays a vital role in the field of

psychology. It is used as a way in the treatment of chronic psychopathologies. There are various researchers and theories that bring about a clear focus on the fact that mindfulness helps increase the metacognitive awareness and lowers rumination to foster a healthy well-being both physically and mentally.

Raes et al. (2009) assessed mindfulness and cognitive reactivity to unhappy mood among 164 participants. They found that trait mindfulness is significantly negatively correlated with psychological feature reactivity. According to Deyo et al. (2009), mindfulness contributed to overall welfare of the adult community and reduced rumination and symptoms of depression. It consists of five facets: observing, describing, acting with awareness, non-judging of inner experience and non-reactivity. Descriptions of mindfulness and techniques for developing it begin in eastern spiritual customs, which recommend that mindfulness can be created through the customary act of meditation, and that expansions in certain characteristics like awareness, insight, wisdom, sympathy, and composure are probably going to result (Goldstein, 2002; Kabat-Zinn, 2000). Thompson (2014) assessed differential relationships of the Five Facets of mindfulness to fret, rumination and transdiagnostic perseverative thought among three independent samples (N1=289, N2= 255, N3= 261). They found that higher here and now awareness foreseen lower perseverative thinking. Non reactivity and non-judgement were considerably negatively associated with attribute worry and rumination severally. Mindfulness may be a healthy brick strategy for each chronic and acute stress because it was related to reduce reactivity and multiply recovery (Ritchie, 2016)

OBJECTIVES OF THE STUDY

The objectives of the study were as follows:

- To compare perseverative thinking and five facets of mindfulness among male and female young adults.
- To examine the relationship between perseverative thinking and five facets of mindfulness among young adults.

METHODS

Sample

The convenient sampling method was used for the present study. The sample consisted of 200 young adults from the state of Tamil Nadu in the age range of 18-35 years (mean age: 22 years). Of the 200 young adults, 100 were males (mean age : 23 years) and 100 were females (mean age: 21 years).

Procedure of data collection

Data was collected through an online Google form which was shared to the target population. The purpose of the study was explained through the description on the online form. The subjects were encouraged to participate of their free will. Informed consent was taken through their willingness to participate in the study and confidentiality of the responses was guaranteed.

Research design

The research design was an ex-post facto research.

Instruments

Two instruments were used, they are:

1) Perseverative Thinking Questionnaire (PTQ)

The Perseverative Thinking Questionnaire (PTQ) was developed by Zetsche, Ehring and Ehlers (2009) and it comprises of 15 items. The questionnaire is scored on a 5-point Likert scale ranging from never (0) to almost always (4). Validation studies reported good internal consistency. The scale has adequate psychometric properties.

2) 15-item Five-Facet Mindfulness Questionnaire

The 15-item Five-Facet Mindfulness Questionnaire (FFMQ) was developed by Baer, R. A., Smith, G. T., Lykins, E., Button, D., Krietemeyer, J., Sauer, S., Walsh, E., Duggan, D. & Williams, J. M. G. (2008). It measures five facets: (1) observing ; (2) describing; (3) acting with awareness; (4) non-judging of inner experience and (5) non-reactivity to inner experience which includes three items for each facet. The questionnaire is scored on a 5- point Likert scale ranging from never or very rarely true(1) to very often or always true (5) for direct items and scoring never(5) and very often (1) for reverse-phrased items. Crocker and Algina (2008) studied that the construct validity of this scale is relatively high and stable across cultures and different age groups.

3). Personal Data Sheet

Demographic information such as initials, age, gender, educational qualification and occupation were collected.

Statistical analyses

- Pearson's correlation co-efficient was used to investigate the relationship between perseverative thinking and the five facets of mindfulness.
- Independent samples t-test was used to examine the differences in perseverative thinking and five facets of mindfulness among young adults

RESULTS AND DISCUSSION

Table 1. Means and t-values for perseverative thinking, observing facet, describing facet, aware actions facet, non-judging facet and non-reactivity facet of mindfulness between male and female young adults.

Variable	Gender	N	Means	t-value	Significance levels
Perseverative thinking	Male young adults	10	24.17	-0.90	Not Significant
	Female young adults	10	25.53		
Observing facet	Male young adults	10	10.56	1.85	Not Significant
	Female young adults	10	9.91		
Describing facet	Male young adults	10	9.68	-0.14	Not Significant
	Female young adults	10	9.73		
Aware actions facet	Male young adults	10	10.84	-0.53	Not Significant
	Female young adults	10	11.04		
Non-judging facet	Male young adults	10	9.62	-0.59	Not Significant
	Female young adults	10	9.84		
Non-reactivity facet	Male young adults	10	10.24	-1.36	Not Significant
	Female young adults	10	10.63		

Independent samples t tests were computed to investigate if there were any gender differences in

perseverative thinking and five facets of mindfulness – observing, describing, aware actions, non-judging and non-reactivity facet of mindfulness among male and female young adults. Results indicated that there was no significant gender difference in perseverative thinking between males and females, $t(198) = -0.905$. The mean perseverative thinking score obtained by young male adults ($M=24.17$, $SD=10.005$) did not significantly differ from the mean score obtained by young female adults ($M=25.53$, $SD=11.196$). Similar findings were reported by McEvoy et al. (2019) who investigated repetitive negative thinking as a predictor of anxiety and depressive symptoms among 840 adolescents, they found that repetitive negative thinking was equally related to the variables regardless of their gender or age. Contradictory findings were reported by Johnson & Whisman (2013) who examined the gender distinction in rumination among 14321 adults, they found that women had higher ruminating scores than men; however the impact size in rumination was small. there was no significant difference in observing facet of mindfulness between males and females, $t(198) = 1.85$. The mean observing facet scores obtained by young male adults ($M=10.56$, $SD=2.212$) did not significantly differ from the mean score obtained by young female adults ($M=9.91$, $SD=2.726$). There was no significant difference in describing facet of mindfulness between males and females, $t(198) = -0.143$. The mean describing facet scores obtained by young male adults ($M=9.68$, $SD=2.295$) did not significantly differ from the mean score obtained by young female adults ($M=9.73$, $SD=2.631$). There was no significant gender difference in acting with awareness facet of mindfulness between males and females, $t(198) = -0.536$. The mean scores obtained by young male adults ($M=10.84$, $SD=2.553$) did not significantly differ from the mean score obtained by young female adults ($M=11.04$, $SD=2.718$). There was no significant gender difference in non-judging of inner experience facet of mindfulness between males and females, $t(198) = -0.596$. The mean scores obtained by young male adults ($M=9.62$, $SD=2.585$) did not significantly differ from the mean score obtained by young female adults ($M=9.84$, $SD=2.627$). There was no significant gender difference in non-reactivity facet of mindfulness between males and females, $t(198) = -1.368$. The mean scores obtained by young male adults ($M=10.24$, $SD=1.97$) did not significantly differ from

the mean score obtained by young female adults ($M=10.63$, $SD=2.058$). Contradictory studies were reported by Alispahic & Hasanbegovic-Anic (2017) who investigated age and gender difference in mindfulness among 441 general public of European nation, they found that there was a big gender distinction within the population wherever ladies scored higher within the observant aspect and males scored higher within the acting with awareness aspect of mindfulness.

Table 2. Pearson's Product-Moment Correlations of Perseverative thinking with five facets of mindfulness

Variables	Perseverative thinking
Observing facet	-0.01 NS
Describing facet	-0.15*
Aware actions facet	-0.50**
Non-judging facet	-0.53**
Non-reactivity facet	-0.01NS

Note

NS – Not Significant

* $p < .05$

** $p < .01$

Pearson's product moment correlations were computed to assess the relationships between perseverative thinking and five facets of mindfulness. It was found that the correlation coefficient between observing facet of mindfulness and perseverative thinking was not significant, $r(198) = -0.015$. The results indicated that there was no significant relationship between observing facet of mindfulness and perseverative thinking. This shows that the ability of individuals to see, feel and perceive the internal and external world around them seems to be unrelated when they are ruminating negative thoughts. It was evident from the results that the correlation coefficient between describing facet of mindfulness and perseverative thinking was significant, $r(198) = -0.153$, $p < 0.05$. The results indicated that there was a significant negative relationship between describing facet of mindfulness and perseverative thinking. This shows that individuals who are able to label their experience and express them in proper context tend to show very less ruminative thinking about any negative incidents. Similar findings were reported by Raes & Williams (2010) who investigated the relationship between mindfulness and uncontrollability of ruminative thinking among 164 students, they found that there was a significant negative relationship between mindfulness and ruminative thinking. It was

found that the correlation coefficient between aware actions facet of mindfulness and perseverative thinking was significant, $r(198) = -0.503$, $p < 0.01$. The results indicated that there was a significant negative relationship between aware actions facet of mindfulness and perseverative thinking. This shows that individuals who can act out of quick judgement and are aware of every stimulus around them tend to show lesser ability of over thinking about their negative experiences. Similar findings were reported by Burg & Michalak (2011) who examined the relationship between mindfulness, rumination and repetitive negative thinking employing a newly developed paradigm for the assessment of mindfulness among 48 undergraduates; they found that the flexibility to remain advertently connected with breath was negatively related with the measures of rumination and repetitive negative thinking. It was found that the correlation coefficient between non-judging facet of mindfulness and perseverative thinking was significant, $r(198) = -0.538$, $p < 0.01$. The results indicated that there was a significant negative relationship between non-judging facet of mindfulness and perseverative thinking. This shows that individuals who let their inner critic to take a toll on their happiness and inner state of mind tend to hold a lot of ruminative thoughts. It can be observed from the results that the correlation coefficient between non-reactivity facet of mindfulness and perseverative thinking was not significant, $r(198) = -0.019$. This indicated that there was a no significant relationship between non-reactivity facet of mindfulness and perseverative thinking. This shows that the ability of individuals to actively detach from negative thoughts and emotions so that they choose not to react to them seem to be unrelated to continuous thinking about any negative events in the past or even in the future.

CONCLUSIONS

The study compared perseverative thinking and five facets of mindfulness among male and female young adults. The study also examined the relationship between perseverative thinking and five facets of mindfulness.

There was no significant difference in perseverative thinking between male and female young adults. There was no significant difference in the Observing facet, Describing facet, aware actions facet, non-judging

facet and non-reactivity facet of mindfulness between male and female young adults.

There was no significant relationship between the Observing facet and non-reactivity to inner experience facet of mindfulness with perseverative thinking among young adults. There was a significant negative relationship between the Describing facet, aware actions facet and non-judging facet of mindfulness with perseverative thinking among young adults.

IMPLICATIONS OF THE STUDY

From the conclusions, it can be inferred that individual with higher levels of perseverative thinking tend to have lesser levels of mindfulness. The tendency of lowering one's ruminative thinking can be brought in by practicing mindfulness, exercising growth mind set and being more aware of happenings around them. Guided mindfulness meditation and systematic mindfulness training with a few relaxation techniques may help in bringing down their level in perseverative thinking and thereby prevent excessive worry which might lead to depression.

LIMITATIONS OF THE STUDY

1. The study was conducted only on a sample size 200 male and female young adults.
2. The study was restricted only to people in the age group 18-35 years from Chennai city.

SUGGESTIONS FOR FURTHER RESEARCH

1. A larger sample can be studied.
2. The study can also be carried out on middle and older adults, to study perseverative thinking and mindfulness across all the three age groups.
3. The relationship between rumination, mindfulness and other psychological variables such as anxiety, self-esteem, cognitive reactivity, worry and quality of life can be investigated.

REFERENCES

- [1] Alispahic, S., & Hasanbegovic-Anic, E. (2017). Mindfulness: Age and gender differences on a Bosnian sample. *Psychological Thought*, 10(1), 155–166. <https://doi.org/10.5964/psyc.v10i1.224>
- [2] Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using Self-Report Assessment Methods to Explore Facets of Mindfulness. *Assessment*, 13(1), 27–45. [doi:10.1177/1073191105283504](https://doi.org/10.1177/1073191105283504)
- [3] Banerjee, M., Cavanagh, K., & Strauss, C. (2018). Barriers to Mindfulness: a Path Analytic Model Exploring the Role of Rumination and Worry in Predicting Psychological and Physical Engagement in an Online Mindfulness-Based Intervention. *Mindfulness*, 9(3), 980–992. <https://doi.org/10.1007/s12671-017-0837-4>
- [4] Brosschot, J. F., Gerin, W., & Thayer, J. F. (2006). The perseverative cognition hypothesis: A review of worry, prolonged stress-related physiological activation, and health. *Journal of Psychosomatic Research*, 60(2), 113–124. <https://doi.org/10.1016/j.jpsychores.2005.06.074>
- [5] 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, 822–848.
- [6] Burg, J. M., & Michalak, J. (2011). The healthy quality of mindful breathing: Associations with rumination and depression. *Cognitive Therapy and Research*, 35(2), 179–185. <https://doi.org/10.1007/s10608-010-9343-x>
- [7] Deyo, M., Wilson, K. A., Ong, J., & Koopman, C. (2009). Mindfulness and Rumination: Does Mindfulness Training Lead to Reductions in the Ruminative Thinking Associated With Depression? *Explore: The Journal of Science and Healing*, 5(5), 265–271. <https://doi.org/10.1016/j.explore.2009.06.005>
- [8] Ehring, T., Zetsche, U., Weidacker, K., Wahl, K., Schönfeld, S., and Ehlers, A. (2011). The Perseverative Thinking Questionnaire (PTQ): validation of a content-independent measure of repetitive negative thinking. *J. Behav. Ther. Exp. Psychiatry* 42, 225–232. [doi:10.1016/j.jbtep.2010.12.003](https://doi.org/10.1016/j.jbtep.2010.12.003)
- [9] Goldstein, J. (2002). *One Dharma: The emerging Western Buddhism*. San Francisco: Harper Collins.
- Kabat-Zinn, J. (2000). Indra's net at work: The mainstreaming of Dharma practice in society. In G. Watson & S. Batchelor (Eds.), *The psychology of awakening: Buddhism, science, and our day-to-day lives* (pp. 225-249). North Beach, ME: Weiser.

- [10] Johnson, D. P., & Whisman, M. A. (2013). Gender differences in rumination: A meta-analysis. *Personality and Individual Differences*, 55(4), 367–374. <https://doi.org/10.1016/j.paid.2013.03.019>
- [11] McEvoy, P. M., Salmon, K., Hyett, M. P., Jose, P. E., Gutenbrunner, C., Bryson, K., & Dewhirst, M. (2019). Repetitive Negative Thinking as a Transdiagnostic Predictor of Depression and Anxiety Symptoms in Adolescents. *Assessment*, 26(2), 324–335. <https://doi.org/10.1177/1073191117693923>
- [12] Raes, F., Dewulf, D., Van Heeringen, C., & Williams, J. M. G. (2009). Mindfulness and reduced cognitive reactivity to sad mood: Evidence from a correlational study and a non-randomized waiting list controlled study. *Behaviour Research and Therapy*, 47(7), 623–627. <https://doi.org/10.1016/j.brat.2009.03.007>
- [13] Raes, F., & Williams, J. M. G. (2010). The Relationship between Mindfulness and Uncontrollability of Ruminative Thinking. *Mindfulness*, 1(4), 199–203. <https://doi.org/10.1007/s12671-010-0021-6>
- [14] Ritchie, R. A. (2016). Don't worry, be mindful: mindfulness, perseveration, and heart rate variability. ProQuest Dissertations and Theses, August, 102. https://manchester.idm.oclc.org/login?url=https://search.proquest.com/docview/1828943660?accountid=12253%0Ahttp://manfe.hosted.exlibrisgroup.com/openurl/44MAN/44MAN_services_page?genre=dissertations+%26+theses&atitle=&author=Ritchie%2C+Rolf+A.&volume=&is
- [15] Robinson, M. D., & Cervone, D. (2006). Riding a wave of self-esteem: Perseverative tendencies as dispositional forces. *Journal of Experimental Social Psychology*, 42(1), 103–111. doi:10.1016/j.jesp.2005.02.001
- [16] Thompson, J. S., Jamal-Orozco, N., & Hallion, L. S. (2019, June 15). Differential Relationships of the Five Facets of Mindfulness to Worry, Rumination, and Transdiagnostic Perseverative Thought. <https://doi.org/10.31234/osf.io/kxy67>
- [17] Trick, L., Watkins, E., Winder, S., & Dickens, C. (2016). The association of perseverative negative thinking with depression, anxiety and emotional distress in people with long term conditions: A systematic review. *Journal of Psychosomatic Research*, 91, 89–101. <https://doi.org/10.1016/j.jpsychores.2016.11.004>