Relationship between Rumination, Self- Compassion, & Severity of Depressive Symptoms in Indian Young Adults

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Abstract:

Background: Over the last decade, the mental health of young Indians has seen a steep decline. Stress, anxiety and depression have become commonplace amongst young adults, which has only been exacerbated by Covid-19. The current study explored the relationship between rumination - a theory of depression, self-compassion and severity of depressive symptoms, with the hope to better understand how these variables interact in the young adult population of India.

Material & Methods:92 Indian students between ages 18 and 25, from urban regions responded to 3 questionnaires - Ruminative Responses Scale, Self-Compassion Scale-Short Form, and Patient Health Questionnaire-9 items - measuring Rumination, Self-Compassion and Severity of Depressive Symptoms respectively. Multiple Regression Analysis was done to examine the relationships between these variables.

Results:Significant correlations were found between all 3 variables in the expected directions. Multiple regression analysis revealed that Rumination and Self-Compassion significantly predict Severity of Depressive Symptoms (R2 = 0.545, p < 0.001). Of the two predictors, Self-Compassion was found to predict Severity of Depressive Symptoms better.

Conclusion:It was inferred that Self-Compassion might be a more protective factor against Severity of Depressive Symptoms than Rumination is a facilitator.

Keywords:Self-Compassion, Depression, Rumination, Young adults, Students, Indian cities

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I. Introduction

Rumination refers to the tendency to repeatedly dwell on upsetting experiences and thoughts, or to chew onnegative material again and again (Nolen-Hoeksema, 1991). This specific pattern of thinking is assumed to increase the risk of depression. In fact, the proclivity for rumination has been found to predict onset of episodes of major depression in previously nondepressed individuals (Just & Alloy, 1997; Nolen-Hoeksema, 2000). On the other hand, Self-Compassion is essentially one's ability to extend compassion and understanding to oneself, recognizing one's own struggles and negative emotions, and being kind to oneself in face of said struggle. Proposed by Dr. Kristin Neff (2003), it has gained popularity in recent years, as it emphasises on showing ourselves the same kindness and support that we might show others that we care about. Sadly, mental health in India has not received enough attention until recently. Mental illnesses are not openly discussed even in well-educated families and societies, and seeking professional help is frowned upon. With college students being especially vulnerable to common mental illnesses like depression and anxiety, it is crucial for us to understand the various mechanisms that are involved in the development of these disorders in this demographic, as well as factors that can prove beneficial in preventing and treating them. Keeping the above points in mind, the current study attempts to understand depression in Indian young adults, in the context of the Rumination Theory of depression that explains depressive symptoms as a consequence of brooding over negative events and feelings, and Self-Compassion, which may prove to be protective against such thoughts, and ultimately, depression.

II. Material And Methods

The aim was to study the relationship between Rumination, Self-Compassion & Severity of Depressive Symptoms in Young Adults. This study targeted young adults between the ages 18 and 25 years. Students from metropolitan cities in India were included.

Study Design: Correlational design using the survey method **Study Location**: Mumbai, India

Sample size: N = 92

Subjects & selection method: The non-probability method, purposive sampling and snowball sampling were used to recruit participants into the study, as participants were selected from a specific demographic as defined below, and the questionnaires were circulated at random to potential participants. Originally, data was collected from 106 participants, out of which data for 14 participants had to be discarded, as they did not fit the inclusion criteria.

Inclusion criteria:

- 1. Participants aged 18 to 25 (young adults)
- 2. Students from metropolitan cities across India
- 3. Students currently studying in a metro city in India
- 4. Individuals with basic fluency in English
- 5. Individuals with access to smartphones/laptops and internet

Exclusion criteria:

- 1. Rural population
- 2. Students not currently studying in a metro city
- 3. Students working part-time
- 4. Students pursuing part-time or distance University courses
- 5. Students already seeking professional help and/or medication for existing mental health conditions

Procedure methodology:

The study was conducted online. Purposive and Snowball Sampling were used to select participants as per the criteria specified above. All three questionnaires were administered through Google Forms. Participants from all metropolitan cities pan-India in the age group of 18 to 25 that meet the Inclusion criteria were eligible to respond. Informed Consent and Demographic Details were taken from each participant prior to administration of the form. Instructions for each instrument were given section-wise. The first scale to be filled out was the Ruminative Responses Scale (RSS), followed by the Self-Compassion Scale - Short Form (SCS-SF), and lastly, the Patient Health Questionnaire - 9 (PHQ-9). A Debriefing of the study was attached at the end of the form. Participants were thanked for their time, and proceeded to Submit the form. Forms were circulated online via social media platforms such as WhatsApp, E-mail, text messaging, etc. Data collected was then analysed using relevant statistics. Results and implications of the study are discussed ahead. No incentives were provided to participants.

Statistical analysis:

Data analysis was done using Microsoft Excel (Version 16.54), and Open-Source software JASP 0.14.1. Data collected from 92 participants was analysed (N=92) using Pearson's r correlation and Multiple Regression Analysis.

	Age	RRSScore	SCS-SFScore	PHQ-9Score
Sample	92	92	92	92
Mean	21.207	55.315	3.081	11.370
Std.ErrorofMean	0.247	1.379	0.064	0.749
Std.Deviation	2.370	13.227	0.617	7.182

Table 4.1 states the descriptive statistics for the data. The sample size (N) was 92. The mean age of the sample was 21.2 years (M=21.20, SD=2.37). The mean score for the RRS scale used to measure Rumination was 55.32 (M=55.32, SD=13.23), and the mean score for the SCS-SF scale used to measure Self-Compassion was 3.08 (M=3.08, SD=0.62). The mean score for the PHQ-9 scale used to measure Severity of Depressive Symptoms was 11.37 (M=11.37, SD=7.18).

In case of the RRS and PHQ-9 scores, the data appears to be widely spread. One possible explanation for such a spread is that the range of possible scores on these scales is also relatively large.

	RRSScore	SCS-SFScore	PHQ-9Score
Pearson'sr			
p-value	—		
Pearson'sr	-0.640	_	
p-value	***<.001	_	
Pearson'sr	0.664	-0.672	—
p-value	***<.001	***<.001	_
	p-value Pearson'sr p-value Pearson'sr	Pearson'srp-valuePearson'sr-0.640p-value***<.001	Pearson'srp-valuePearson'sr-0.640p-value***<.001

Table 4.2 Pearson's Correlations for RRS, SCS-SF & PHO-9 Scores

*p<.05,**p<.01,***p<.001

Table 4.2 describes the results of Pearson's *r* correlation between the three variables. As expected, the correlation between RRS scores and PHQ-9 scores was found to be moderate and positive (r = 0.664, p < 0.001); while the correlation between SCS-SF scores and PHQ-9 scores was moderate and negative (r = -0.672, p < 0.001). The correlation between RRS scores and SCS-SF scores was also moderate and negative (r = -0.640, p < 0.001).

It was hypothesized that there will be a significant positive correlation between Rumination and Severity of Depressive Symptoms. As can be seen, there is a significant positive correlation between Rumination and Severity of Depressive Symptoms.

It was also hypothesized that there will be a significant negative correlation between Rumination and Self-Compassion, which was the case.

Lastly, it was hypothesized that there will be a significant negative correlation between Rumination and Self-Compassion. This was also found to be true.

Thus, based on the data described in table 4.2, it can be inferred that all three hypotheses are validated.

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								Durbin	-Watson
Model	R	R ²	AdjustedR ² RMSE	R ² Change FChange	df1 df2	р	Autocorrelation	Statistic	р
H ₀	0.000	0.000	0.0007.182	0.000	0 91		0.178	1.603	0.054
H_1	0.738	0.545	0.5354.900	0.54553.253	2 89	<.001	0.260	1.386	0.002

Table4.3MultipleLine	earRegression-ModelSi	ummary
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Model		SumofSquares		dfMeanSquare	F	р
H ₁	Regression		2556.853	2	1278.42753.253	<.001
Residual			2136.582	89	24.007	
	Total		4693.435	91		

Note. The intercept model is omitted, as no meaning ful information can be shown.

Multiple Linear Regression analysis was done further to determine if Rumination and Self-Compassion significantly predicted Severity of Depressive Symptoms. As can be seen from tables 4.3 and 4.4, the overall model was statistically significant [R2 = 0.545, F(2,89) = 53.253, p < 0.001], with the predictor variables explaining 54.5% of the variance in the outcome variable.

Thus, we can conclude that the model significantly predicts Severity of Depressive Symptoms.

Model	Unstandardized		StandardError	Standardized	t	р
H ₀	(Intercept)	11.370	0.749		15.185	<.001
H1	(Intercept)	14.446	5.580		2.589	0.011
	RRSScore	0.216	0.051	0.397	4.268	<.001
	SCS-SF Scores	-4.869	1.083	-0.418	-4.494	<.001

 Table 4.5CoefficientsforMultipleLinearRegression

It was found that RRS scores significantly predict PHQ-9 scores ($\beta = 0.397$, p < 0.001). It was also found that SCS-SF scores significantly predict PHQ-9 scores ($\beta = -4.494$, p < 0.001). It should be noted that the coefficient for SCS-SF scores is larger than that for RRS scores, i.e. SCS-SF scores predict PHQ-9 scores better than RRS scores.

IV. Discussion

The current study aimed to understand the relationship between Rumination, Self- Compassion and Severity of Depressive Symptoms in Young Adults. As described in previous chapters, Rumination is the tendency to brood over negative experiences and events (Nolen- Hoeksema, 1991), and Self-Compassion is the ability to be kind to oneself (Neff, 2003).

The rationale of the study was that Rumination and Self-Compassion may have an association with Severity of Depressive Symptoms, by virtue of the former having a positive correlation, and the latter having a negative correlation with Severity of Depressive Symptoms. This assumption was based on existing literature cited above that has linked Rumination with increased negative mood, stress, anxiety, amongst other variables (Odou& Brinker, 2014; Samaie& Farahani, 2011; Raes, 2010). Evidence also suggests an association between Self- Compassion and lower levels of depression, stress, and other negative mood states (Lopez, Sanderman&Schroevers, 2018; Noorbala, Borjali&Noorbala, 2013), as well as a link between Self-Compassion and increased positive moods, higher levels of mindfulness, optimism, and reduced rumination (Smeets, Neff, Alberts & Peters, 2014).

The current study adopted a correlational design. The correlations between Rumination, Self-Compassion and Severity of Depressive Symptoms were assessed; these are reported in the previous chapter. A statistically significant, positive correlation was found between Rumination and Severity of Depressive Symptoms, whereas a statistically significant, negative correlation was found between Self-Compassion and Severity of Depressive Symptoms. Thus, it can be inferred that increased Rumination and low Self-Compassion are both linked to increased Severity of Depressive Symptoms. As expected, and in agreement with existing evidence, Rumination and Self-Compassion were found to be negatively correlated, i.e., high levels of rumination could be linked to lower Self-Compassion.

Multiple Regression analysis revealed that Rumination and Self-Compassion significantly predicted Severity of Depressive Symptoms. Interestingly, between both variables, Self-Compassion emerged to be a stronger predictor for Severity of Depressive Symptoms.

These findings suggest that even as Rumination predicts Severity of Depressive Symptoms, Self-Compassion might be more protective against it than was initially anticipated. The negative association between Rumination and Self-Compassion might explain this phenomenon, as Self-Compassion may possibly protect against Depression by lowering Rumination levels in individuals.

Other studies have also suggested this possibility; for example, one study explored the moderating role of Self-compassion on the relationship between rumination and stress, and found that Self-Compassion did, in fact, moderate this relationship. It was implied that it might weaken the link between the two (Samaie& Farahani, 2011). Another study found that teaching Self-Compassion skills to female college students actually served to reduce rumination, compared to a control group that was taught generic time-management skills (Smeets, Neff, Alberts & Peters, 2014).

An experimental study also found that clinically depressed patients exposed to Compassion Focused Therapy (CFT) reported both lower levels of rumination as well as depression post-intervention, compared to the control group that was not exposed to CFT (Noorbala, Borjali&Noorbala, 2013). All of these findings support the idea that Self- Compassion may protect against depression by lowering rumination levels.

V. Conclusion

It was found that Rumination and Self-Compassion significantly predict Severity of Depressive Symptoms, with Self-Compassion being the stronger predictor out of the two.

References

- Abramson, L., Metalsky, G., & Alloy, L. (1989). Hopelessness Depression: A Theory-Based Subtype of Depression. Psychological Review. 96. 358-372. 10.1037/0033-295X.96.2.358.
- [2]. Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Green, J. G., Hasking, P., Murray, E., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Stein, D. J., Vilagut, G., Zaslavsky, A. M., Kessler, R. C., & WHO WMH-ICS Collaborators (2018).
- [3]. WHO World Mental Health Surveys International College Student Project: Prevalence and distribution of mental disorders. Journal of abnormal psychology, 127(7), 623–638. <u>https://doi.org/10.1037/abn0000362</u>
- [4]. Beck, A. T., Ward, C., Mendelson, M., Mock, J., &Erbaugh, J. J. A. G. P. (1961). Beck depression inventory (BDI). Arch Gen Psychiatry, 4(6), 561-571.
- [5]. Brown, S. L., Hughes, M., Campbell, S., & Cherry, M. G. (2020). Could worry and rumination mediate relationships between self- compassion and psychological distress in breast cancer survivors?. Clinical psychology & psychotherapy, 27(1), 1-10.
- [6]. Butz, S., & Stahlberg, D. (2018). Can self-compassion improve sleep quality via reduced rumination?. Self and Identity, 17(6), 666-686.
- [7]. Clark, D. M., Salkovskis, P. M., Hackmann, A., Wells, A., Ludgate, J., & Gelder, M. (1999). Brief cognitive therapy for panic disorder: A randomized controlled trial. Journal of Consulting and Clinical Psychology, 67(4), 583
- [8]. Daly, J. J., Prudic, J., Devanand, D. P., Nobler, M. S., Lisanby, S. H., Peyser, S., &Sackeim, H. A. (2001). ECT in bipolar and unipolar depression: differences in speed of response. Bipolar disorders, 3(2), 95-104.
- [9]. Dennis, B. Y., Charney, M. D., Nelson, J. C., & Quinlan, D. M. (1981). Personality traits and disorder in depression. Am J Psychiatry, 138, 1601.
- [10]. Diener, E. (2003). What is positive about positive psychology: The curmudgeon and Pollyanna. Psychological Inquiry, 14(2), 115-120.
- [11]. Erdur-Baker, Ö., &Bugay, A. (2010). The short version of ruminative response scale: reliability, validity and its relation to psychological symptoms. Procedia-Social and Behavioral Sciences, 5, 2178-2181.
- [12]. Evans-Lacko S, Aguilar-Gaxiola S, Al-Hamzawi A, et al. Socio-economic variations in the mental health treatment gap for people with anxiety, mood, and substance use disorders: results from the WHO World Mental Health (WMH) surveys. Psychol Med. 2018;48(9):1560-1571.
- [13]. Fresnics, A., & Borders, A. (2017). Angry rumination mediates the unique associations between selfcompassion and anger and aggression. Mindfulness, 8(3), 554-564.
- [14]. Gautham, M. S., Gururaj, G., Varghese, M., Benegal, V., Rao, G. N., Kokane, A., &Shibukumar, T. M. (2020). The National Mental Health Survey of India (2016): Prevalence, socio-demographic correlates and treatment gap of mental morbidity. International Journal of Social Psychiatry, 66(4), 361-372.
- [15]. Goetz, J. L., Keltner, D., & Simon-Thomas, E. (2010). Compassion: An evolutionary analysis and empirical review. Psychological Bulletin, 136(3), 351–374. <u>https://doi.org/10.1037/a0018807</u>
- [16]. Hall, C. W., Row, K. A., Wuensch, K. L., & Godley, K. R. (2013). The role of self-compassion in physical and psychological well-being. The Journal of psychology, 147(4), 311-323.
- [17]. Hasking, P., Boyes, M. E., Finlay-Jones, A., McEvoy, P. M., & Rees, C. S. (2019). Common pathways to NSSI and suicide ideation: The roles of rumination and self-compassion. Archives of Suicide Research, 23(2), 247-260.
- [18]. Hergenhahn, B. R., & Henley, T. (2013). An Introduction to the History of Psychology. Cengage Learning.
- [19]. Hilt, L. M., McLaughlin, K. A., & Nolen-Hoeksema, S. (2010). Examination of the response styles theory in a community sample of young adolescents. Journal of abnormal child psychology, 38(4), 545– 556. <u>https://doi.org/10.1007/s10802-009-9384-3</u>
- [20]. Judd, L. L., Akiskal, H. S., Maser, J. D., Zeller, P. J., Endicott, J., Coryell, W., & Keller, M. B. (1998). Major depressive disorder: a prospective study of residual subthreshold depressive symptoms as predictor of rapid relapse. Journal of affective disorders, 50(2-3), 97-108.
- [21]. Just, N., & Alloy, L. B. (1997). The response styles theory of depression: Tests and an extension of the theory. Journal of Abnormal Psychology, 106(2), 221–229. <u>https://doi.org/10.1037/0021-843X.106.2.221</u>
- [22]. Kovacs, M., & Beck, A. T. (1979). Cognitive-affective processes in depression. In Emotions in personality and psychopathology (pp. 415-442). Springer, Boston, MA.

- [23]. Krieger, T., Altenstein, D., Baettig, I., Doerig, N., &Holtforth, M. G. (2013). Self-compassion in depression: Associations with depressive symptoms, rumination, and avoidance in depressed outpatients. Behavior therapy, 44(3), 501-513.
- [24]. Kristin D. Neff & S. Natasha Beretvas (2012): The Role of Self-compassion in Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ- 9: validity of a brief depression severity measure. Journal of general internal medicine, 16(9), 606-613.
- [25]. Lathren, C., Bluth, K., & Park, J. (2019). Adolescent self-compassion moderates the relationship between perceived stress and internalizing symptoms. Personality and individual differences, 143, 36-41.
- [26]. Lee Duckworth, A., Steen, T. A., & Seligman, M. E. (2005). Positive psychology in clinical practice. Annu. Rev. Clin. Psychol., 1, 629-651.
- [27]. López, A., Sanderman, R., &Schroevers, M. J. (2018). A close examination of the relationship between self-compassion and depressive symptoms. Mindfulness, 9(5), 1470-1478.
- [28]. Lorant, V., Deliège, D., Eaton, W., Robert, A., Philippot, P., &Ansseau, M. (2003). Socioeconomic inequalities in depression: a meta-analysis. American journal of epidemiology, 157(2), 98-112.
- [29]. Luminet, O. (2004). 10 Measurement of depressive rumination and associated constructs. Depressive Rumination, 187.
- [30]. Neff, K. (2003). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. Self and identity, 2(2), 85-101.
- [31]. Neff, K. (2004). Self-compassion and psychological well-being. Constructivism in the human sciences, 9(2), 27.
- [32]. Neff, K. D., &Dahm, K. A. (2015). Self-compassion: What it is, what it does, and how it relates to mindfulness. In Handbook of mindfulness and self-regulation (pp. 121-137). Springer, New York, NY.
- [33]. Neff, K. D., &Vonk, R. (2009). Self- compassion versus global self- esteem: Two different ways of relating to oneself. Journal of personality, 77(1), 23-50.
- [34]. Neff, K. D., Tóth-Király, I., Yarnell, L., Arimitsu, K., Castilho, P., Ghorbani, N., Mantios, M. (2019) Examining the Factor Structure of the Self-Compassion Scale using exploratory SEM bifactor analysis in 20 diverse samples: Support for use of a total score and six subscale scores. Psychological Assessment, 31 (1), 27-45.
- [35]. Nolen-Hoeksema, S., & Morrow, J. (1991). A prospective study of depression and posttraumatic stress symptoms after a natural disaster: the 1989 Loma Prieta Earthquake. Journal of personality and social psychology, 61(1), 115.
- [36]. Nolen-Hoeksema, S. (1991). Responses to depression and their effects on the duration of depressive episodes. Journal of abnormal psychology, 100(4), 569.
- [37]. Nolen-Hoeksema, S. (2000). The role of rumination in depressive disorders and mixed anxiety/depressive symptoms. Journal of abnormal psychology, 109(3), 504.
- [38]. Noorbala, F., Borjali, A., &Noorbala, A. A. (2013). The interaction effect between "Self- Compassion" and "Rumination" of depressed patients in "Compassion Focused Therapy".
- [39]. Odou, N., & Brinker, J. (2014). Exploring the relationship between rumination, self- compassion, and mood. Self and Identity, 13(4), 449-459.
- [40]. Peres, J. F., Moreira-Almeida, A., Nasello, A. G., & Koenig, H. G. (2007). Spirituality and resilience in trauma victims. Journal of religion and health, 46(3), 343-350.
- [41]. Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the Self-Compassion Scale. Clinical Psychology & Psychotherapy. 18, 250-255.
- [42]. Raes, F. (2010). Rumination and worry as mediators of the relationship between self- compassion and depression and anxiety. Personality and Individual Differences, 48(6), 757-761.
- [43]. Rashid, T., & Seligman, M. P. (2018). Positive psychotherapy: Clinician manual. Oxford University Press. Romantic Relationships, Self and Identity, DOI:10.1080/15298868.2011.639548
- [44]. Samaie, G., & Farahani, H. A. (2011). Self-compassion as a moderator of the relationship between rumination, self-reflection and stress. Procedia-Social and Behavioral Sciences, 30, 978-982.
- [45]. Sbarra, D. A., Smith, H. L., &Mehl, M. R. (2012). When leaving your ex, love yourself: Observational ratings of self-compassion predict the course of emotional recovery following marital separation. Psychological science, 23(3), 261-269.
- [46]. Seligman, M. E. (2002). Positive psychology, positive prevention, and positive therapy. Handbook of positive psychology, 2(2002), 3-12.
- [47]. Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. American Psychologist, 55(1), 5–14. <u>https://doi.org/10.1037/0003-066X.55.1.5</u>
- [48]. Smeets, E., Neff, K., Alberts, H., & Peters, M. (2014). Meeting suffering with kindness: Effects of a brief self- compassion intervention for female college students. Journal of clinical psychology, 70(9), 794-807.
- [49]. Snyder, C. R. (2004). Hope and depression: A light in the darkness.

- [50]. Spitzer, R. L., Williams, J. B., Kroenke, K., Linzer, M., deGruy, F. V., 3rd, Hahn, S. R., Brody, D., & Johnson, J. G. (1994). Utility of a new procedure for diagnosing mental disorders in primary care. The PRIME-MD 1000 study. JAMA, 272(22), 1749–1756.
- [51]. Svendsen, J. L., Kvernenes, K. V., Wiker, A. S., & Dundas, I. (2017). Mechanisms of mindfulness: Rumination and self-compassion. Nordic Psychology, 69(2), 71-82.
- [52]. Treynor, W., Gonzalez, R., & Nolen-Hoeksema, S. (2003). Rumination reconsidered: A psychometric analysis. Cognitive therapy and research, 27(3), 247-259.
- [53]. Watkins, E. R. (2008). Constructive and unconstructive repetitive thought. Psychological Bulletin, 134(2), 163-206. doi:10.1037/0033-2909.134.2.163
- [54]. Witthöft, M., & Hiller, W. (2010). Psychological approaches to origins and treatments of somatoform disorders. Annual Review of Clinical Psychology, 6, 257-283.
- [55]. Young Adult Development Project. MIT Human Resources https://hr.mit.edu/static/worklife/youngadult/
- [56]. Young, J. E., Rygh, J. L., Weinberger, A. D., & Beck, A. T. (2014). Cognitive therapy for depression. In D. H. Barlow (Ed.), Clinical handbook of psychological disorders: A step-by-step treatment manual (pp. 275–331). The Guilford Press.

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