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Research Paper

Correlation Between Thought Suppression, Defense Styles, and Difficulties in Emotion Regulation in Young Adults

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ABSTRACT

The study examines the relationship between Thought Suppression, Defense Styles, and Difficulties in Emotion Regulation in young adults. A purposive sample of 101 young adults (18-25) was used. The White Bear Suppression Inventory (WBSI), Defense Style Questionnaire - 40 item version (DSQ-40), and Difficulties in Emotion Regulation Scale (DERS-SF) were used. Seven hypotheses have been stated for this study. Descriptive statistics such as Mean and Standard Deviation were computed, and as the data was not normally distributed, non-parametric statistical tests, Spearman Rank Correlation, was used.
The findings revealed that immature defense style was significantly correlated with difficulties in emotion regulation. In contrast, neurotic and mature defense styles did not show a significant correlation with difficulties in emotion regulation. Thought suppression was strongly associated with all three defense styles and was positively correlated with difficulties in emotion regulation. The results suggest that suppressing unwanted thoughts may intensify emotional distress. A significant relationship was found in mature defense style and thought suppression, however, the correlation was positive, contradicting the hypothesis.
The findings support the prior literature and collected data, emphasizing that maladaptive strategies such as thought suppression and immature defense styles play a role in affecting psychological functioning. Overall, the findings showcase the importance of adaptive mechanisms in promoting emotional well-being.

Keywords: *Thought Suppression, Defense Styles, Mature Defense, Immature Defense, Neurotic Defense, Difficulties in Emotion Regulation, Young Adults*

Individuals rely on multiple psychological strategies to cope with distress and unwanted psychological experiences in daily life. Thought suppression being one of them, the deliberate attempt to push unwanted thoughts out of conscious awareness has grabbed attention. Wegner (1989) proposed that these attempts to get rid of distressing thoughts paradoxically increase their frequency. The phenomenon is known as the rebound effect. (Wegner et al., 1987; Najmi & Wegner, 2009; Wang, Hagger, & Chatzisarantis, 2020).

Related to thought suppression are defense mechanism, unconscious strategies that protect individuals from conflict and anxiety. (Freud, 1894; A. Freud, 1936). Vaillant (1971, 1977)

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conceptualized a hierarchical model organizing these mechanisms into styles such as immature, neurotic, and mature, each differentiating in the maladaptiveness, with immature defense style being highly maladaptive, neurotic moderately maladaptive and mature being adaptive. Andrews, Singh, and Bond (1993) utilized this classification in the Defense Style Questionnaire (DSQ-40).

The third construct, emotion regulation, is the ability to monitor, evaluate, and modulate emotional responses in adaptive ways (APA, 2018). A multidimensional model proposed by Gratz and Roemer (2004) says that effective emotion regulation includes emotional awareness, understanding of emotions, acceptance of emotional experiences, impulse control while experiencing negative emotions, and ability to act in compliance with goals. Deficits in these are known as difficulties in emotion regulation.

Existing literature review suggests that immature defense styles predict difficulties in emotion regulation. Among undergraduate students, maladaptive and image distorting defenses were correlated with self-blame and emotion regulation difficulty. (Sala et al., 2015) In another study, immature and neurotic defense styles were linked to psychological vulnerability contradicting the effects of mature defenses. Maladaptive defenses were associated with strategies such as catastrophizing and rumination. (Rastgoo, Zarbakhsh Bahri, & Rahmani, 2023). Thought suppression, a cognitive avoidance-based strategy which prevents individuals from processing thoughts and emotions effectively. It has been linked to emotional distress as well as in sustaining psychopathology. (Purdon, 1999). Amstadter & Vernon (2008) also suggested that thought suppression was a strong predictor of psychopathology and psychological distress. Roxanne Canfield (2018) revealed that immature defense style was the sole predictor of thought suppression and intrusion in contrast, the mature defense style did not significantly predict thought suppression.

Considering the strong association between these three constructs, studies investigating the simultaneous relationship of whether thought suppression, defense styles, and difficulties in emotion regulation are unexplored. The present study is aiming to address the correlational and predictive relationship between thought suppression, defense styles (mature, immature, neurotic) and difficulties in emotion regulation among sample of Indian young adults.

METHODOLOGY

Statement of the Problem

To study the relationship between thought suppression, defense styles, and difficulties in emotion regulation among young adults.

Objectives

1. To study thought suppression in young adults.
2. To study the defense styles in young adults.
3. To study the difficulties in emotion regulation in young adults.
4. To study the relationship between thought suppression and defense styles in young adults.
5. To study the relationship between thought suppression and difficulties in emotion regulation in young adults.
6. To study the relationship between defense styles and difficulties in emotion regulation in young adults.

Rationale & Significance

Thought suppression paradoxically leads to an increase in the frequency of the targeted thought. Mature defenses promote adaptability, while immature or neurotic defenses are associated with distress. Deficits in emotion regulation are linked with further psychological problems. Understanding this interconnection can be critical for applied psychology. If these associations are strongly associated, the findings could help develop targeted interventions and treatment approaches, considering that thought suppression and maladaptive defense styles are conceptualized as avoidance-based approaches. Early patterns of thought suppression and defense style may predict emotion regulation difficulties and later mental health outcomes. Additionally, all these concepts are poorly explored in association with one another in diverse contexts such as non-clinical, Indian culture, etc.

Hypotheses

- **H1.** There will be a positive correlation between immature defense style and difficulties in emotion regulation among young adults.
- **H2.** There will be a positive correlation between neurotic defense style and difficulties in emotion regulation among young adults.
- **H3.** There will be a negative correlation between mature defense style and difficulties in emotion regulation among young adults.
- **H4.** There will be a positive correlation between immature defense style and thought suppression among young adults.
- **H5.** There will be a positive correlation between neurotic defense style and thought suppression among young adults.
- **H6.** There will be a negative correlation between mature defense style and thought suppression among young adults.
- **H7.** There will be a positive correlation between thought suppression and difficulties in emotion regulation among young adults.

Sample

The researchers selected a sample of 101 young adults aged between 18 and 25. Purposive sampling was used and the sample consisted of 47 males (46.5%) and 54 females (53.5%).

Inclusion Criteria:

- Individuals between the ages of 18 and 25
- Students.
- Gender- Male and Female

Exclusion Criteria:

- Part-time or full-time employed
- Individuals living in a hostel, PG, or living away from family.
- If mental health issues were present
- Currently seeking psychological therapy or have received therapy within the last 30 days.

Research Design

A correlational analysis was used to examine the correlation between thought suppression, defense styles, and difficulties in emotion regulation.

Variables under the Study

1. Predictor Variables- Thought Suppression and Defense Styles.
2. Criterion Variable- Difficulties in Emotion Regulation.

Tools

- **White Bear Suppression Inventory (WBSI):** The White Bear Suppression Inventory (WBSI), developed by Daniel M. Wegner and Sophia Zanakos (1994). This instrument is a 15 item self-report scale. In this measure, higher scores indicate greater habitual thought suppression. The WBSI demonstrates strong internal consistency, with Cronbach's alpha typically ranging from 0.84 to 0.89.
- **Defense Style Questionnaire (DSQ-40):** Defense Style Questionnaire – 40 item version (DSQ-40), developed by G. Andrews, M. Singh, and M. Bond (1993). This 40-item self-report scale, where higher scores indicate greater reliance on that particular style. The scale has shown strong test retest reliability over a two-week interval (r = .926) for the overall scale.
- **Difficulties in Emotion Regulation Scale (DERS-SF) :** The Difficulties in Emotion Regulation Scale (DERS-SF), developed by Erin A. Kaufman et al. (2015). This 18-item self-report scale and provides a total score and six subscale scores. Higher scores indicate greater difficulties in emotion regulation. The DERS SF exhibits high reliability with a Cronbach's Alpha of 0.90 and validity of 0.965, indicating excellent construct validity.

Procedure

This research used a mixed-methodological approach, combining a quantitative survey and a qualitative questionnaire. The target population was individuals aged 18-25, with 101 subjects selected through purposive sampling. A questionnaire was used for numeric data, while a qualitative questionnaire was developed for demographic details. Participants were given an informed consent form stating the purpose of the study, their rights to withdraw at any time from the study, and the terms of confidentiality.

Statistical Analysis

For analysis, descriptive statistics- Mean, median, standard deviation, skewness, and kurtosis will be used and for inferential statistics - Correlation will be used.

Descriptive Statistics

Table 1- Showing descriptive statistics for variables.

Statistic	Thought Suppression	Mature defense style	Immature defense style	Neurotic defense style	Difficulties in emotion regulation
Mean	51.97	5.75	5.07	5.36	46.41
Median	53	6	5.12	5.50	47
Std. Deviation	9.334	1.374	1.130	1.256	12.131
Skewness	-.731	-.588	-.157	-.326	.120
Kurtosis	1.853	.155	-.101	-.009	-.335

The above table explores descriptive statistics for thought suppression, mature defense style, immature defense style, neurotic defense style, and difficulties in emotion regulation.

For thought suppression, the scores were high with a mean of 51.97 and median 53. Standard deviation was 9.334. The distribution was negatively skewed at -.731, and kurtosis was 1.853, indicating a leptokurtic distribution suggesting a more peaked shape.

For the mature defense style, the mean was 5.75 and median was 6. The standard deviation was 1.374. A negative skewness of -0.588. The kurtosis value was .155 indicating a mesokurtic distribution indicating a normal curve.

For immature defense style, the mean was 5.07 and median was 5.12. The standard deviation was 1.13. The skewness value was -0.157 indicating a slight negative. Kurtosis value was -0.101, indicating platykurtic distribution.

For neurotic defense style, the mean was 5.36 and median was 5.50. The standard deviation was 1.26. The skewness value is -0.326 indicating a negative skewness. The kurtosis value was -0.009 indicating a mesokurtic distribution suggesting a normal curve.

For difficulties in emotion regulation, the mean was 46.41 and median was 47. The standard deviation was 12.13. The skewness value was 0.120 indicating a slight positive skewness. The kurtosis value was -0.335 indicating a platykurtic distribution suggesting a flatter curve.

Table 1.2- Test of Normality (Shapiro-Wilk)

Variable	Shapiro-Wilk Statistic	df	Sig.
Thought Suppression	0.965	101	0.008
Difficulties in emotion regulation	0.983	101	0.238
Neurotic defense style	0.989	101	0.607
Immature defense style	0.985	101	0.301
Mature defense style	0.967	101	0.013

The Shapiro-Wilk test of normality was conducted to check the normality of the data. The test indicated Difficulties in Emotion Regulation (p=.238), Immature defense style (p=.301) and Neurotic defense style (p=.607) were normally distributed (p> .05) However, Thought Suppression (p= .008) and Mature Defense Style (p=.013) were not normally distributed considering the significance values are below .05. Hence, a non-parametric test, Spearman Rank Correlation was used.

RESULTS AND DISCUSSION

Table 2- Correlation between immature defense style and difficulties in emotion regulation.

		Difficulties in emotion regulation
Immature defense style	Spearman rank order correlation	.341***

In the above table, the correlation between immature defense style and difficulties in emotion regulation can be seen. The correlation coefficient is .341 indicating a significant positive relationship. The findings align with a study by Giovanni Sala et al. (2015), who reported that reliance on immature defense styles tends to exhibit maladaptive emotion regulation patterns, including self-blame, rumination, and catastrophizing. These defense

mechanisms are associated with distorted perceptions of reality and externalization of negative emotions. Morris et al. (2025) also reported in their study regarding attachment styles that immature defenses and emotion regulatory difficulties are associated with immature defenses. Hence, based on the results and empirical findings, the hypothesis stating there will be a positive correlation between immature defense style and difficulties in emotion regulation is accepted.

Table 3- Correlation between neurotic defense style and difficulties in emotion regulation.

		Difficulties in emotion regulation
Neurotic defense style	Spearman rank order correlation	.175

In the above table, the correlation between neurotic defense style and difficulties in emotion regulation can be seen. The correlation coefficient is .175 indicating no statistical significance. Parker et al. (1998) reported that neurotic defenses are only weakly correlated with difficulties identifying and expressing emotions. According to Perry, most individuals use some neurotic defense mechanisms regardless of the other defenses they use. Since these defenses fall in the middle range of adaptiveness in Vaillant's hierarchical model, they do not allow individuals to differentiate in terms of mental health. Deriving support from the personal data sheet questionnaire, this outlook was observed in the present study as a significant amount of participants reported using the neurotic defenses 'sometimes', supporting the empirical evidence. Hence, based on the results and empirical findings, the hypothesis stating there will be a positive correlation between neurotic defense style and difficulties in emotion regulation is rejected.

Table 4- Correlation between mature defense style and difficulties in emotion regulation.

		Difficulties in emotion regulation
Mature defense style	Spearman rank order correlation	-.016

In the above table, the correlation between mature defense style and difficulties in emotion regulation can be seen. The correlation coefficient is -.016, indicating no statistical significance. Vaillant's model categorizes mature defenses as adaptive however, he states that they closely resemble normal adaptive functioning. As opposed to maladaptive defenses such as projection or acting out, the use of mature defenses may not be strongly observable socially or generate significant differences in terms of emotion regulation. Furthermore, a discrepancy was noted in the sample as the mean score for difficulties in emotion regulation was 46.41, suggesting low levels of difficulties however, nearly 40% of participants chose 'emotional numbness' or 'cannot clearly identify' after being asked about the emotion they had felt strongest in the last two weeks. This suggests an inconsistency that may be attributed to a lack of self-awareness in the sample, as emotional awareness is the foundational step for regulation. Hence, based on the results and empirical findings, the hypothesis stating there will be a negative correlation between mature defense style and difficulties in emotion regulation is rejected.

Table 5- Correlation between immature defense style and thought suppression.

		Immature defense style
Thought Suppression	Spearman rank order correlation	.309**

In the above table, the correlation between thought suppression and immature defense style can be seen. The correlation coefficient is .309 indicating a significant positive relationship. Newman et al. (1997) found that thought suppression increases accessibility of unwanted traits, which further leads to defensive projection. In their study, participants asked to suppress thoughts about unfavorable traits later projected these traits onto others. This indicates that thought suppression may lead to the use of immature defenses, such as projection, which is considered immature or maladaptive in Vaillant's model. Hence, based on the results and empirical findings, the hypothesis stating that there will be a positive correlation between immature defense style and thought suppression is accepted.

Table 6- Correlation between neurotic defense style and thought suppression.

		Neurotic defense style
Thought Suppression	Spearman rank order correlation	.285**

In the above table, the correlation between thought suppression and neurotic defense style can be seen. The correlation coefficient is .285 indicating a significant positive relationship. Roxanne Canfield (2018) studied clinical and non-clinical populations and found that undergraduate students (non-clinical) using neurotic and immature, maladaptive defense mechanisms reported higher levels of thought suppression and thought intrusion. The results suggested that thought suppression may function as a maladaptive coping strategy, as the association with maladaptive defenses indicates that it may contribute to persistence in intrusive thoughts rather than reducing them. Hence, based on the results and empirical findings, the hypothesis stating that there will be a positive correlation between neurotic defense style and thought suppression is accepted.

Table 7- Correlation between mature defense style and thought suppression.

		Mature defense style
Thought Suppression	Spearman rank order correlation	.275**

In the above table, the correlation between thought suppression and mature defense style can be seen. The correlation coefficient is .275 indicating a significant relationship. However, the relationship was positive, contradicting the hypothesized direction. The result of moderate mean scores of each defense style (Mature- 5.75, Immature- 5.07, Neurotic- 5.36) suggests that the sample is distributed rather than inclined towards a single defense style. Pitil & Ghazali (2021) received similar results in their study and concluded that the distribution may be due to the non-clinical nature of the sample, as clinical populations often show more prominent scores. This conclusion is further supported as participants undergoing psychological issues or therapy in the last 30 days were specifically excluded from the current study. Hence, based on the results and empirical findings, the hypothesis stating that there will be a positive correlation between neurotic defense style and thought suppression is accepted. Hence, based on the results and empirical findings, the hypothesis stating that there will be a negative correlation between mature defense style and thought suppression is rejected.

Table 8- Correlation between thought suppression and difficulties in emotion regulation.

		Difficulties in emotion regulation
Thought Suppression	Spearman rank order correlation	.207*

In the above table, the correlation between thought suppression and difficulties in emotion regulation can be seen. The correlation coefficient is .207 indicating a significant positive relationship. Wegner's (1994) theory suggested that thought suppression increases emotional reactivity and rebound effect. Amstadter & Vernon (2008) also concluded that after studying all modulations thought suppression was the strongest predictor of psychopathology. This avoidance-based regulation plays an important role in psychological distress and difficulties in emotion regulation. Hence, based on the results and empirical findings, the hypothesis stating that there will be a positive correlation between thought suppression and difficulties in emotion regulation is accepted.

CONCLUSION

- There is a significant positive correlation between immature defense style and difficulties in emotion regulation. Hence, H1 is accepted.
- There is no significant positive correlation between neurotic defense style and difficulties in emotion regulation. Hence, H2 is rejected.
- There is no significant negative correlation between mature defense style and difficulties in emotion regulation. Hence, H3 is rejected.
- There is a significant positive correlation between immature defense style and thought suppression. Hence, H4 is accepted.
- There is a significant positive correlation between neurotic defense style and thought suppression. Hence, H5 is accepted.
- There is no significant negative correlation between mature defense style and thought suppression. Hence, H6 is rejected.
- There is a significant positive correlation between thought suppression and difficulties in emotion regulation. Hence, H7 is accepted.

Implications

- The strong correlation between thought suppression and difficulties in emotion regulation indicates a need to reduce suppression and use acceptance-based approaches in therapy.
- Therapy can also focus on building healthier coping strategies as thought suppression was associated with maladaptive defenses, immature and neurotic.
- Considering the discrepancy in scale scores and personal emotional experiences about emotion regulation, interventions can be implemented to enhance emotional awareness.
- Developing healthy coping strategies, emotional literacy, identifying potential risk factors for broader psychological concerns can all be implemented for preventive interventions.

Limitations

- As self-report scales were used, socially desirable responses, errors in self-perception may have affected the validity of the data.

- Neuroticism is a personality trait and has potential to influence the results of defense styles and emotion regulation, however, it was not assessed in study.
- As the sample solely consisted of students, situational factors such as academic stress, varying well-being were not measured or controlled.
- Respondent fatigue was noticed at the time of data collection as item numbers in questionnaire were relatively high.

Suggestions for Further Study

- To categorize defense styles, averages were used, which showed distribution in the sample. However, individual scores showed inclination towards specific defense styles. Further studies can focus on individual analysis of defense styles rather than relying on averages.
- Differences between clinical and non-clinical populations can also be explored in further researches.
- Further studies may explore diverse sample based on age groups, cultural backgrounds, educational settings.

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Conflict of Interest

The author(s) declared no conflict of interest.

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