Research Article

Meghana Gowda*, Ruchi Gautam

Examining the Link: Resilience Interventions and Creativity Enhancement among Undergraduate Students

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Abstract

Background – Resilience, a dynamic and adaptable process, is defined as the ability to maintain or enhance creativity and think in a creative manner. However, thus far, no non-randomised controlled trials (n-RCTs) have examined the effect of resilience interventions on creativity among university students. This experimental study aims to determine the effect of resilience therapy on creativity among undergraduate students. To achieve this purpose, a n-RCT was carried out with the intervention arm receiving Resilient Therapy (RT) (n = 21), and a control group (n = 20). For eight weeks, the intervention group received the RT intervention. Questionnaires on demographics, the Wagnild and Young (1993. Development and psychometric. *Journal of Nursing Measurement*, 1(2), 165–178) Resilience Scale (RS-25), and the Creativity assessment were used to gather data before and after the RT session.

Results – The pre-test resilience and creativity scores did not show significant differences between the intervention and control groups. However, the post-test resilience score in the intervention group was notably higher than in the control group. Additionally, a comparison between the pre-test and post-test scores revealed a significant increase in both resilience and creativity scores.

Conclusion – RT significantly enhanced creativity. Further research is needed to address inquiries regarding the implementation and evaluation of resilience treatments. Future studies should encompass larger sample sizes and incorporate follow-up assessments. Analysing the assessment of functioning in clinical settings can provide insights into the impact of the RT program on clinical populations.

Keywords: resilience, resilient therapy, creativity, under graduate students, non-randomized control trail

1 Introduction

Resilience is similar to bouncing back, not necessarily returning to the exact starting point but rather adapting to impacts and charting a new course forward. It refers to the capacity to effectively adjust and respond to difficult circumstances, such as adversity, tragedy, trauma, threats, or substantial stressors (American Psychological Association, 2014). Research indicates that resilience positively correlates with mental health indicators like life satisfaction, positive emotions, and subjective well-being, while it negatively correlates with mental illness markers such as depression, anxiety, and negative emotions (Hu, Zhang, & Wang, 2015). Creativity is a multifaceted concept with varying interpretations. While often linked to artistic endeavours, it broadly encompasses the human capability to generate innovative, adaptable, and effective ideas, insights, and solutions (Runco & Jaeger, 2012). Creativity is crucial for navigating change, fostering innovation, and managing the complexities of contemporary society (Kapoor & Kaufman, 2020). It is increasingly recognised as essential for success in the 21st century, prompting colleges and universities to focus on cultivating and enhancing students' creative abilities (Parker-Bell, 2010). Resilience supports adaptive behaviour in the face of challenging, adverse, and traumatic circumstances (Masten & Wright, 2010). It enables individuals to manage negative emotions, find positive meaning in difficult situations, and cope with evolving external pressures throughout life (Xu et al., 2021). Creativity contributes to resilience, with both resilient and creative individuals exhibiting traits such as resourcefulness, flexibility, and adaptability, as well as benefiting from environmental factors like community and family support (López-Aymes, Acuña, & Ordaz Villegas, 2020; Martínez &

*** Corresponding author: Meghana Gowda,** Sharda School of Humanities and Social Sciences, Department of Humanities, Sharda University, Greater Noida, Uttar Pradesh, India,
e-mail: 2021363516.meghana@dr.sharda.ac.in
Ruchi Gautam: Chitkara School of Psychology and Counselling, Chitkara University, Punjab, India

Lozano, 2010; Metzl & Morrell, 2008; Thomson, 2020). Creativity can serve as a mechanism for resilience by helping individuals manage the stress and anxiety associated with adolescence and early adulthood (Barbot & Heuser, 2017). Promoting creative expression can reframe these stressors in more adaptive ways (Barbot & Lubart, 2012). Resilience is an on-going developmental process that enhances adaptive responses to challenging and stressful experiences (Wagnild & Young, 1993). Traits such as inventiveness, flexibility, adaptation, and resourcefulness are common in both resilient and creative individuals (Cohn, 2011), with community involvement and family support bolstering both qualities (Luthar, Cicchetti, & Becker, 2000). Essentially, creativity can serve as a mechanism of resilience, enabling individuals to navigate the stress and anxiety associated with the challenges of adolescence and early adulthood (Tugade & Fredrickson, 2004).

Studies have shown that resilience programs encourage the creation of defensive measures and preventative elements on both personal and social levels, aiding in the positive and adaptive management of socio-emotional problems. Developing youth resilience through activities that engage them in both formal and informal learning situations has been shown to be relevant (Masten, 2001; Ungar, 2011). The field of resilience is gaining popularity amidst researchers and investors, there is considerable interest in its capacity to diminish mental disorders and promote well-being. Numerous studies have demonstrated that resilience predictors, including realistic optimism, goal setting, and life purpose and meaning, are associated with the prevention and treatment of mental illness (Babić et al., 2020; PeConga et al., 2020). Despite the emphasis on resilience research, there are significant gaps, particularly in intervention studies (Chmitorz et al., 2018; Luthar et al., 2000). Implementing brief resilience interventions among college-based cohorts appears to be an effective method for developing protective factors that enhance resilience (Kadian, Sharma, Singh, & Singh, 2022). Resilience-based programs have been implemented using various theoretical methods, with cognitive-behavioural therapy being the most commonly used approach (Burton, Pakenham, & Brown, 2010; Herbert & Manjula, 2022; Songprakun & McCann, 2012). Other intervention strategies include mindfulness-based programs (Dawson et al., 2020; Steinhardt & Dolbier, 2008), resilience and coping techniques (First, Houston, Mieseler, & Richardson, 2018), acceptance and commitment therapy (Grégoire, Lachance, & Bouffard, 2018), internal family systems therapy, rational-emotive therapy (Conley, Travers, & Bryant, 2015), and skills training programs (Steinhardt & Dolbier, 2008). One such intervention, "Experiencing positive emotions and achieving high levels of performance," was established and implemented in India, focusing on promoting well-being and productivity through activities like applying strengths, pursuing goals, and managing emotions. This intervention successfully enhanced self-efficacy, well-being, and alleviated distress (Mehrotra, 2013). Resilience interventions have resulted in notable enhancements in various aspects including resilience, self-efficacy, positive emotions, self-esteem, effective coping strategies, quality of life, cognitive adaptability, attitudes, explanatory styles, social connectedness, social support, life satisfaction, reduced decreased perceived stress, depression and anxiety, self-compassion, improved mindfulness, overall well-being and flourishing, reduced negative emotions (Long, France, Dawson, Bretherick, & Mallan, 2020). Despite research indicating a high frequency of mental health disorders and rising levels of distress among college students, most resilience initiatives have been designed with children in mind. Personal relationships are among the most common issues faced by college students, although they have received less attention in existing mental health programs (Herbert & Manjula, 2017). The majority of study programmes have prioritised the improvement of social aspects, namely by emphasising the enhancement of family and school ties. There is a limited number of research studies that have examined how personal characteristics and digital health interventions can improve the resilience and coping abilities of young individuals (Greenberg, Domitrovich, & Bumbarger, 2001). Further investigation is required to ascertain the efficacy of based on evidence resilience initiatives have been shown to effectively improve the mental well-being of young individuals, both in the short and long term (Rutter, 2012). Resilience therapy interventions often incorporate the cultivation of positive emotions, such as happiness. According to Fredrickson's Broaden-and-Build Theory (2001), experiencing positive emotions can broaden one's range of thoughts and actions, leading to more original ideas and solutions to problems. Recipients of resilience treatment often exhibit enhanced emotional regulation and reduced stress levels, both of which are crucial skills in the creative process (Fletcher & Sarkar, 2013). Using creativity to reframe stressors can offer a different perspective on adversity. Creative individuals frequently reinterpret stressors in more adaptable and positive ways. Incorporating artistic components into resilience therapies has shown promise. Specifically, art therapy has been used as an adjunctive approach to traditional resilience treatment. A study by MacIntyre and Moran (2015) demonstrated that participants' creative problem-solving abilities and overall well-being were enhanced through art-based therapies used in resilience therapy.

Despite the crucial role resilience plays in creativity literature, significant gaps remain in understanding the specific impact of resilience therapy interventions on

creativity, particularly at the graduate level (Xu et al., 2021). Resilience helps individuals manage negative emotions, provide positive meaning to complex experiences, and adjust to changing external stressors throughout life (López-Aymes et al., 2020). Creativity fosters resilience (Metzl & Morrell, 2008; Thomson, 2020), and resilient and creative people frequently possess traits like originality, flexibility, resourcefulness, and adaptability (Metzl & Morrell, 2008). However, existing findings have yet to indicate the effect of resilience therapy as an intervention on creativity at the graduate level. The connection between creativity and resilience is increasingly recognised, but research investigating how resilience therapy interventions impact creativity, especially among university students, remains scarce. This study aims to address this gap by examining the impact of resilience therapy on creativity within the undergraduate education setting. To achieve this goal, the present study will explore how resilience treatment influences the creativity of undergraduate students, potentially enhancing their ability for original thought and problem-solving. Through an eight-week Resilient Therapy (RT) program, the effects of the intervention on students' creativity and resilience will be investigated using a non-randomised controlled trial (n-RCT) approach. Detailed descriptions of the study's procedures, resources, participants, protocols, and RT intervention will be provided in the methodology section. Furthermore, the findings of this study will elucidate the effects of the intervention on both resilience and creativity. The conclusion will emphasise the significance of the data obtained and offer recommendations for future research directions in the realms of resilience and creativity.

2 Methodology

2.1 Participants

Members of the intervention were chosen at random from Sharda University in Greater Noida. In the end, 41 individuals (N = 41) were enlisted, all of whom were college students. The participants' ages ranged from 18 to 22 years old. The Research Committee gave its permission for this investigation. Each volunteer gave written informed consent, gave their free will to the experiment, and was rewarded with a little gift.

2.2 Procedure

A convenience sample was used in a non-randomised controlled study. After being chosen at random to take part in the study, students were subsequently allocated at random to either the intervention or control groups. Each participant filled out a pre-intervention scale (baseline) to gauge their creativity and resilience before the intervention (Gough, 1979; Wagnild & Young, 1993). The control group did not undergo any intervention throughout the subsequent eight-week intervention period that was implemented for the intervention group.

All participants completed the same scale to evaluate the impact of the intervention after it had finished. Pre- and post-tests were administered, and the entire intervention procedure was thoroughly observed by the investigator.

2.2.1 Intervention Group

Resilient Therapy

RT is an unwavering pursuit of strategies to assist children and young individuals in rebounding when faced with extremely challenging circumstances in life. According to Hart (1997), this technique prevents the labelling of children as pathological, focuses on understanding the functioning of resilient mechanisms in complicated situations, and prioritises the development of resilience at the individual, family, organisational, and community levels. This is the fundamental concept of RT.

Hart, Blincow, and Thomas present a system driven by five basic principles: Basic requirements (meeting basic needs like health and safety), Belonging (establishing supportive relationships and community connections), Learning (instilling growth mindsets and problem-solving skills), Coping (developing effective stress management techniques and adaptive strategies), and Core Self (improving self-awareness, self-esteem, and meaningful life).

In addition, we included our observations into the session designs, as well as some home activities. These frameworks are intended to explore several aspects of resilience in order to provide a more practical, comprehensive approach to fostering resilience in children and young people. Thus, we have combined these concepts with activities that ensure that their resilience-building process is robust enough to deal with the various issues that today's adolescents encounter (Table 1).

Table 1: Participants in the RT intervention followed a modified and shortened version of the typical 8-week RT regimen along with the home activity

Sessions	Description
Session 1 – Understanding The concept of resilience	Understanding our resilience baseline for either individual students or school communities is necessary for this. Therefore, understanding their strengths and weaknesses in terms of resilience is crucial to preventing future issues
Session 2 – Survive during difficulties	Strengthen the individual resilience through the activity- take something in nature which survive in hard circumstances or situations
Session 3 – Accepting	Which entails focusing on what must be done and moving forward rather than complaining about how we wish things were different (although any staff room will undoubtedly have some of this going on, we all need to vent a little, but maybe just a little?) not all day long)
Session 4 – Setting the Goal	The phenomenon wherein a door closes, another door opens. The goal of this exercise is twofold. Initially, the practice can help clients understand that every ending also marks the start of something new. Not only is it bad when something good ends, but it can also make place for something good to start a new
Session 5 – Colour your emotions	With a blank canvas before us, we wield brushes laden with emotion. Bold strokes of crimson speak of passion and fervour, while serene blues whisper tranquillity. The golden hues radiate joy, and deep purples unveil introspection. In each swirl and dab, we unlock the mysteries of our inner selves. Emotions, once concealed, bloom in a riot of colours, painting our truths and vulnerabilities for the world to see. This is a therapy of the soul, where we find healing, connection, and freedom in the masterpiece of our emotions
Session 6 – Conserving	Many positive events that occurred in students' lives can be forgotten, especially when things are not going well. It is crucial to keep those nice things around, to notice them, and occasionally even to dig deep and bring them back to life. A key rule to remember in this situation is that there should not be any admiration without any deconstruction, as doing so only serves to nag students (and staff/parents) and make them feel worse about themselves than they currently do
Session 7 – Commitment	You can always start working on some quick victories. Promoting resilience is not usually a quick fix, though. See how committed you are to using this strategy. You can identify who is in it for the long haul and who is only there for a short period by keeping commitment as a crucial principle in mind. It will be helpful if you are clear about this as well, so that students won't be taken by surprise about who will be hanging around
Session 8 – Enlisting	Some students could require additional support, and you might need to specifically recruit individuals to help you reach some clearly stated resilience objectives. Naturally, some of the students at the top of our pyramid of needs may have an excessive number of individuals working with them. Administrative promiscuousness the phrase we employ to denote the concept is of too many various administrations being involved in students' lives for too little time. It's important to consider when we might not be enough on our own and need to ask help, as well as when we might be taking on too much

2.2.2 Control Group

The research team did not provide any assistance to the control group. They finished both the baseline pre-intervention and post-intervention measures at the same time as the intervention group alone.

2.3 Measures

2.3.1 Resilience Scale

The Wagnild and Young (1993) developed Resilience Scale (RS-25) has been extensively used in numerous investigations. The RS-25 is a unidimensional measure that uses a Likert scale with a range of 1 (strongly disagree) to 7 points (strongly agree). providing a comprehensive measure of an individual's resilience. Participants were instructed to rate based on their experiences and feelings for each statement. To calculate the overall resilience score, the ratings for each of the 25 items are summed. Greater resilience is indicated by higher overall scores which indicate greater resilience, suggesting that the individual possesses a stronger in managing stress and overcoming challenges. The Cronbach's alpha coefficient for our three surveys ranged from 0.83 to 0.87.

2.3.2 Personality Creativity Scale

The Gough Personality Creativity Scale to measure creativity (Gough, 1979). On 30 adjectives related to creativity, the participants gave their answers to the dichotomous items as either 1 (yes) or 0 (no). Each participant's Creativity score is calculated by adding their replies to all 30

items. Because each item is rated as 1 or 0, the overall score might range from 0 to 30. Higher levels of creativity are indicated by higher Creativity scores as well as a stronger identification with the scale's creative traits. Cronbach alpha was 0.71 (Gough, 1979).

2.4 Statistical Analyses

The effect of resilience treatment on creativity in undergraduate students was evaluated by comparing the scores of the experimental and control groups using an independent sample *t*-test. In order to ascertain whether the therapy had a noteworthy impact on creativity, this statistical analysis was selected. This will provide insightful information about possible improvements for the undergraduate student population.

3.1 Resilient Therapy (RT): Duration: 8 weeks

3.1.1 Assigned Registration

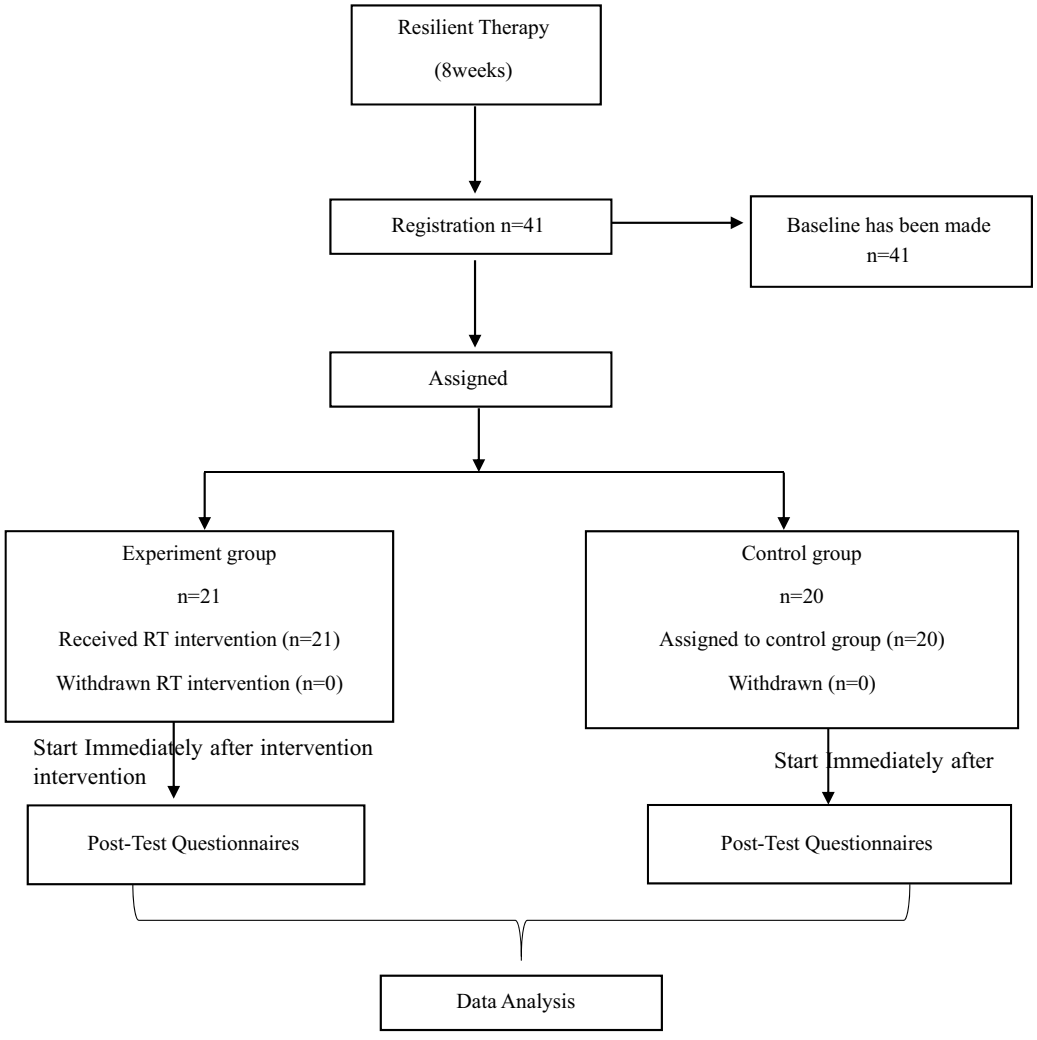
All 41 participants have been assigned registration, indicating that they have been officially included in the study and have undergone the necessary registration process.

3.1.2 Baseline Assessment

Baseline has been made for both the experiment and control groups. This likely means that initial assessments or measurements were taken before the intervention or control conditions were implemented. Baseline measurements provide a reference point for comparing changes over time.

3 Results

Figure of How Sample Collection Taken Place



3.1.3 Experiment Group (RT Intervention)

Participants (n = 21): There are 21 individuals in the experiment group who received the RT intervention.

Withdrawn from RT intervention (n = 0): None of the participants in the experiment group withdrew from the RT intervention during the study period.

3.1.4 Control Group

Participants (n = 20): There are 20 individuals in the control group.

Withdrawn from control group (n = 0): No participants in the control group withdrew from the study during the 8-week period.

3.1.5 Total Participants

The total number of participants considered in the study is 41 (n = 41). This is the sum of participants in the experiment and control groups.

3.2 Baseline of Resilience and Creativity among UG Students

The provided statistics offer a comprehensive overview of two distinct groups focusing on "resilience" and "creativity." In the resilience mean score of 98.43 provides insight into the central tendency of resilience levels, while the standard deviation of 24.965 sheds light on the variability among these scores. The standard error mean of 5.448 indicates the precision of the mean estimate. Similarly, in creativity, the mean of 151.50 signifies the central tendency of creativity levels, with a standard deviation of 20.638 demonstrating the extent of variability. The standard error mean of 4.615 reflects the precision of the mean estimate for creativity. These statistics collectively provide valuable insights into the average levels, variability, and precision of resilience and creativity scores within their respective groups. This information enables a nuanced comparison between the two constructs, facilitating a deeper understanding of their relationship.

Table 2: Group summary of resilience and creativity among UG students

Measures	*N*	Mean	Std. deviation	Std. error mean
Resilience	41	98.43	24.965	5.448
Creativity		151.50	20.638	4.615

3.3 Effect of Resilience on Creativity

The provided information outlines the outcomes of an independent samples t-test, conducted to determine any significant disparities in means between two separate groups. When assuming equal variances, Levene's Test for Equality of Variances yields a non-significant p-value (0.749), showing that there is no significant difference in variances between the groups. However, the t-test for Equality of Means produces a highly significant result (p = 0.000) with a t-value of −7.398. This finding suggests a substantial difference in means, with the first group exhibiting a significantly lower mean (−53.071) compared to the second group. Furthermore, the 95% confidence interval (−67.581 to −38.562) reinforces the significance of the result, as it excludes zero.

Table 3: Independent samples test

	Levene's test for equality of variances		*t*-test for equality of means						
	F	Sig.	*t*	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% Confidence interval of the difference	
								Lower	Upper
Equal variances assumed	0.104	0.749	−7.398	39	0	−53.071	7.173	−67.581	−38.562
Equal variances not assumed			−7.433	38.263	0	−53.071	7.14	−67.522	−38.621

3.4 Pre-Test of Creativity with Control Group

The pre-test results are compared between an experimental group (N = 21) and a control group (N = 20) using the group statistics that are provided. The pre-test creative mean score of the control group is 171.60, with a standard deviation of 29.51 and a mean standard error of 6.60. In contrast, the pre-test creativity mean score of the experimental group is slightly lower at 153.57, with a smaller standard deviation of 22.24 and a smaller standard error of the mean of 4.85. The average creative levels before any intervention may be observed from the mean scores of 171.60 for the control group and 153.57 for the experimental group. These mean scores indicate participants considered for RT have an average of less creativity as compared to control groups. Rationale behind this is to understand how RT intervention can affect even when basal creativity is lower among undergraduate students.

Table 4: Pre-test-creativity group statistics

Group	*N*	Mean	Std. deviation	Std. error mean
Control	20	171.60	29.51253	6.59920
Experiment	21	153.57	22.24314	4.85385

3.5 Pre-test before RT on Creativity with Control Group

The non-significant p-value (0.126) obtained from the F-statistic of 2.451 suggests that there is no discernible variation in variances between the groups. The equality of means t-test that followed, however, yielded a t-value of 2.216, indicating a significant difference in means (p = 0.033) between the groups. The estimated mean difference was 18.03, with a standard error of 8.14, and a 95% confidence interval covering the range of 1.57–34.48.

Even with identical mean difference and confidence interval values, the t-test revealed a significant mean difference (t = 2.201, p = 0.034) in the case where equal variances are not assumed. The confidence interval offers a range of reasonable values for the genuine difference, The results indicate a significant difference in pre-test scores between the groups. The choice between equal and unequal variances assumptions did not substantially affect the significance of the findings.

3.6 Post-Test of Creativity

The provided group statistics compare the creativity scores between a control group (N = 20) and an experimental group (N = 21). For the control group, the mean creativity score is 171.35, with a standard deviation of 26.82 and a standard error of the mean of 5.997. On the other hand, the experimental group shows a marginally lower average creativity score of 145.76, along with a smaller variability of 12.39 and a measure of the precision of the average of 2.70. These data provide information about the average, spread, and accuracy of the creativity scores for each category. The control group appears to have a higher mean and greater variability compared to the experimental group, suggesting potential differences in creativity levels between the two groups. This provides a basis for further analysis to assess any potential differences or trends resulting from the experimental intervention.

Table 6: Creativity group statistics

Group	*N*	Mean	Std. deviation	Std. error mean
Control	20	1.7135×10^2	26.82158	5.99749
Experiment	21	1.4576×10^2	12.38913	2.70353

Table 5: Independent samples test

		Levene's test for equality of variances		*t*-test for equality of means						
		F	Sig.	*t*	Df	Sig. (2-tailed)	Mean difference	Std. error difference	95% Confidence interval of the difference	
									Lower	Upper
Pre-test	Equal variances assumed	2.451	0.126	2.216	39	0.033	18.02857	8.13576	1.57245	34.4847
	Equal variances not assumed			2.201	35.303	0.034	18.02857	8.19203	1.40297	34.65418

Table 7: Independent samples test

		Levene's test for equality of variances		*t*-test for equality of means						
		F	Sig.	*t*	Df	Sig. (2-tailed)	Mean difference	Std. error difference	95% Confidence interval of the difference	
									Lower	Upper
Creativity	Equal variances assumed	13.063	0.001	3.953	39	0	25.5881	6.47279	12.49564	38.68055
	Equal variances not assumed			3.89	26.468	0.001	25.5881	6.57867	12.07706	39.09913

3.7 After RT on Creativity with Control Group

The creativity scores of the two groups are compared using the independent samples *t*-test that is offered, which looks at both the situations with and without equal variances assumed. A substantial variance difference is shown by Levene's Test for Equality of Variances (F = 13.063, p = 0.001), indicating unequal variability between groups. The *t*-test for equality of means, assuming equal variances, finds a significant mean difference (t = 3.953, p = 0.000) with a mean difference of 25.59. The *t*-test is still significant (t = 3.890, p = 0.001) with comparable mean difference and confidence interval values when equal variances are not assumed.

The experimental group exhibited a high mean creativity score post-intervention, indicating a potential impact of resilience therapy. The independent samples *t*-test in Table 7 confirmed a significant difference in post-test creativity scores, supporting the notion that resilience therapy influenced creativity (Figure 1).

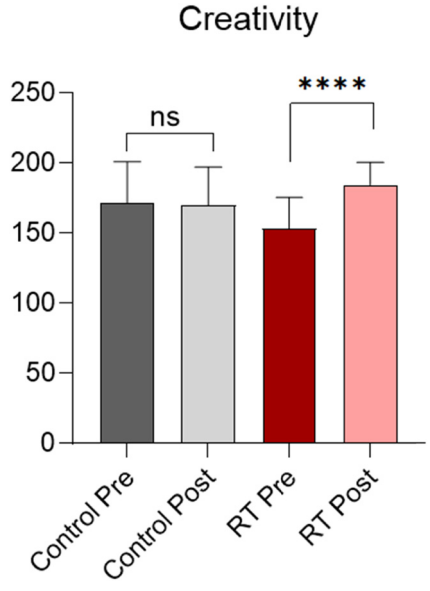


Figure 1: Creativity before and after RT.

4 Discussion

The presented research aimed to investigate the effect of resilience therapy on creativity scores, utilising pre-test and post-test measures in both control and experimental groups. Table 2 illustrates baseline characteristics, with the control group exhibiting a mean resilience score of 98.43, while the experimental group had a mean creativity score of 151.50. Table 3 details the independent samples *t*-test results for resilience and creativity scores, indicating a significant difference in means between groups. The control group demonstrated significantly lower resilience scores compared to the experimental group, suggesting a positive impact of resilience therapy on this construct. Moving to Table 4, the pre-test analysis before the intervention showed no significant difference in creativity scores between the control and experimental groups. However, Table 5, assessing the impact of resilience therapy on creativity pre-test scores, reveals a significant difference. This finding suggests that the intervention influenced creativity scores, as evidenced by the significant mean difference and confidence intervals. Tables 6 and 7 present post-test creativity scores for the control and experimental groups, respectively. The experimental group exhibited a high mean creativity score post-intervention, indicating a potential impact of resilience therapy. The independent samples *t*-test in Table 7 confirmed a significant difference in post-test creativity scores, supporting the notion that resilience therapy influenced creativity.

Overall, the study's findings suggest that resilience therapy had a positive impact on both resilience and creativity scores. The significant improvements in resilience and the subsequent influence on creativity align with existing literature on the interplay between psychological creative thinking and resilience (López-Aymes et al., 2020;

Thomson, 2020). Additionally, resilience therapy has been shown to improve areas such as reduced negative emotions, increased resilience, and better problem-solving skills, with strong retention rates among college students (Kadian et al., 2022). Due to its status as a developing discipline and a subjective phenomenon, it is necessary to integrate various components, including establishing a unified concept, in order to facilitate further empirical investigations in the future. While the study provides valuable insights, further research with larger samples and diverse populations is recommended to enhance generalisability. Moreover, the majority of intervention projects originate in Western countries. The usefulness of culturally appropriate therapies is becoming more and more clear. Adding cultural elements to the initiative increases its acceptability and practicality while also improving the opinions of stakeholders. Therefore, a college student intervention strategy needs to be suited to their culture (Faregh, Norcross, & Ghassemzadeh, 2019; Zubieta, Agüero, Brunner, & Castro, 2020).

5 Conclusion

In conclusion, the study demonstrates a positive impact of resilience therapy on both resilience and creativity scores among undergraduate students. The aim of this n-RCT was to investigate how undergraduate students' creativity was affected by RT. Following the 8-week intervention, resilience and creativity scores significantly increased compared to the control group, indicating the beneficial effects of RT. The findings underscore the importance of conducting future studies with larger sample sizes, follow-up evaluations, and exploration of the effects of RT in clinical settings. This study sheds light on the potential advantages of resilience interventions in fostering creative thinking among university students and provides valuable insights into the dynamic relationship between resilience and creativity.

Author contributions: Meghana Gowda and Ruchi Gautam conceptualized and designed the study. Meghana Gowda conducted the data collection and analysis. Ruchi Gautam provided critical feedback and contributed to manuscript preparation. Both authors reviewed, edited, and approved the final manuscript.

Conflict of interest: The authors state no conflict of interest.

Data availability statement: The data supporting the findings of this study are available upon reasonable request from the corresponding author, Meghana Gowda.

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