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#### ARTICLE

# Self-Efficacy and Resilience: A Relative Study among College NSS and Non-NSS Students

Shikha Verma <sup>\* 🗅</sup> , Reshma Zafari

Department of Psychology, Acharya Narendra Dev Nagar Nigam Mahila Mahavidyalaya Affiliated to CSJM University, Kanpur 208012, Uttar Pradesh, India

#### ABSTRACT

The present study explores the relationship between self-efficacy and resilience among college students, with a particular focus on comparing National Service Scheme (NSS) volunteers and non-NSS students. The study utilized a cross-sectional design involving 147 students (71 NSS volunteers and 76 non-NSS students) from different colleges of Kanpur Nagar. MDRS - H, which stands for the Multi-dimensional scale of Resilience in Hindi, was established by Singh and Khullar. It is utilised for the purpose of measuring resistance and the Hindi version of the General Self-Efficacy Scale developed by Sud, Schwarzer, and Jerusalem was administered to measure self-efficacy. Results indicated that NSS students exhibited higher levels of both self-efficacy and resilience compared to their non-NSS counterparts. Self-efficacy significantly positively correlated with Resilience in NSS students and non-NSS students. Regression analyses suggested that resilience was a strong predictor of self-efficacy in both students NSS and non-NSS. However, the association was most likely stronger for NSS students because they were exposed to more resilience-building activities. The study contributes to the growing body of literature on the positive impact of extracurricular activities on students' psychological well-being and provides insights into how participation in such programs may enhance both resilience and self-efficacy in college students. *Keywords:* Self-Efficacy; Resilience; NSS College Students; Non-NSS College Students

#### \*CORRESPONDING AUTHOR:

Shikha Verma, Department of Psychology, Acharya Narendra Dev Nagar Nigam Mahila Mahavidyalaya Affiliated to CSJM University, Kanpur 208012, Uttar Pradesh, India; Email: shikhaverma\_kn18@csjmu.ac.in

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# 1. Introduction

Self-efficacy and resilience are two critical psychological constructs that influence an individual's ability to face challenges, adapt to adversity, and achieve personal goals. Self-efficacy, a concept introduced by Albert Bandura<sup>[1]</sup>, refers to the belief in one's ability to perform specific tasks or behaviors necessary to achieve desired outcomes. Resilience, on the other hand, is the capacity to recover from stress, adversity, or setbacks<sup>[2]</sup>. Together, these constructs play a crucial role in shaping a person's mental health, well-being, and overall success, especially in demanding environments such as academic settings.

College students, especially those involved in National Service Scheme (NSS) activities, often encounter situations that test their self-efficacy and resilience. NSS programs are designed to promote community service, leadership, and social responsibility among students. Participation in NSS provides students with unique opportunities to develop essential life skills, which may enhance their self-efficacy and resilience compared to their non-NSS counterparts. By engaging in community service, leadership roles, and teamwork, NSS students may develop a stronger sense of efficacy in their abilities to impact both their communities and their personal lives.

This study aims to explore the differences in selfefficacy and resilience between college students who participate in NSS and those who do not. Understanding these differences can provide valuable insights into the benefits of service-oriented programs and inform interventions to promote psychological well-being in academic settings.

# 2. Literature Review

Resilience, generally understood as the capacity to recover from stress, adversity, failure, or challenges, is a critical psychological construct. It is often posited that resilience plays a predictive role in the development of self-efficacy, which is defined by Bandura as an individual's belief in their capability to execute behaviours necessary<sup>[3]</sup> to produce specific performance attainments<sup>[1]</sup>. This theoretical link can be explained through several psychological frameworks.

#### 2.1. Theoretical Explanation:

- Social Cognitive Theory: Albert Bandura's Social Cognitive Theory emphasizes that self-efficacy is developed through personal experiences, vicarious experiences, verbal persuasion, and physiological states. Resilience fosters self-efficacy by enhancing an individual's ability to cope with challenges effectively. For instance, people with higher resilience are more likely to interpret setbacks as learning opportunities rather than failures, thus reinforcing their belief in their ability to overcome difficulties<sup>[1]</sup>.
- Broaden-and-Build Theory: Fredrickson's Broadenand-Build Theory suggests that positive emotions expand cognitive and behavioural tendencies, which in turn build personal resources, including resilience. Resilient individuals experience positive emotions even in the face of adversity, which can broaden their perspective, encouraging a sense of mastery and control. This broadened perspective increases their belief in their capabilities, directly contributing to higher self-efficacy<sup>[3]</sup>.
- 3. Psychological Capital: Luthans et al. describe resilience as one of the key components of Psychological Capital, along with hope, optimism, and selfefficacy. Resilience enables individuals to persist in the face of setbacks, thereby contributing to a stronger sense of self-efficacy. Overcoming adversity with resilient attitudes reinforces self-belief, further enhancing self-efficacy levels<sup>[4]</sup>.
- 4. Learned Optimism: Resilience can also be connected to learned optimism. Those with resilient mindsets are more likely to maintain optimistic outlooks even when confronted with difficulties. This optimism is crucial for the development of self-efficacy, as it allows individuals to view challenges as surmountable and within their control, fostering a belief in their ability to achieve success<sup>[5]</sup>.

Resilience helps individuals to frame challenges in a way that fosters persistence and belief in their abilities. As a result, resilient individuals are more likely to develop strong self-efficacy, as they repeatedly experience and perceive their capacity to manage and succeed despite difficulties.

#### 2.2. Self-Efficacy in College Students

Over the past decade, research has consistently highlighted the significance of self-efficacy in determining academic success and psychological well-being among college students. A meta-analysis by Honicke and Broadbent<sup>[6]</sup> found that self-efficacy was a strong predictor of academic performance, emphasizing its role in motivating students to engage in learning tasks and persevere in the face of challenges. Similarly, Schunk and DiBenedetto<sup>[7]</sup> noted that self-efficacy fosters academic persistence, encouraging students to set higher goals and exert more effort in achieving them.

#### 2.3. Resilience in College Students

Resilience has also gained significant attention in the academic literature as a crucial factor in coping with stress and adversity. According to Hartley<sup>[8]</sup>, resilience serves as a protective factor that helps college students manage stressors and maintain academic performance despite challenges. Furthermore, a study by Grit et al.<sup>[9]</sup> found that resilience positively influenced students' mental health, reducing the likelihood of anxiety and depression during stressful periods.

#### 2.4. The Impact of Service Programs on Psychological Well-being

Participation in service-learning programs such as NSS has been linked to increased self-efficacy and resilience. A study by McMenamin et al.<sup>[10]</sup> demonstrated that students who engaged in community service activities reported higher levels of self-efficacy and a greater sense of purpose compared to non-participants. The researchers attributed this to the leadership and problem-solving skills developed through service activities. Similarly, a study by Bowen<sup>[11]</sup> found that students involved in service-learning programs exhibited higher resilience levels, as these experiences exposed them to real-world challenges and required adaptive coping strategies.

#### 2.5. NSS Participation and Student Development

The National Service Scheme (NSS) in India has been instrumental in fostering personal and social development

among college students. Singh and Kumar<sup>[12]</sup> found that NSS volunteers exhibited higher levels of self-efficacy and resilience compared to non-participants. The study high-lighted that the structured nature of NSS activities — emphasizing teamwork, leadership, and community engagement—was seen as instrumental in cultivating these psychological strengths.

# 2.6. Comparative Studies between NSS and Non-NSS Students

Comparative studies between NSS and non-NSS students have further supported the notion that service participation enhances self-efficacy and resilience. For instance, a study by Sahoo et al.<sup>[13]</sup> reported that NSS volunteers with non-NSS students in terms of their psychological well-being and found that NSS students scored significantly higher on measures of self-efficacy and resilience. This difference was attributed to the experiential learning opportunities provided by NSS, which encouraged students to step out of their comfort zones and develop a sense of achievement.

#### 2.7. The Role of Social Support in Building Resilience

Social support plays a critical role in fostering resilience among college students. Rutter<sup>[14]</sup> emphasized that social relationships and support networks contribute to an individual's ability to bounce back from adversity. NSS programs, which emphasize teamwork and community engagement, provide students with a sense of belonging and social support, which may contribute to higher resilience levels. Likewise, a study by Liu et al.<sup>[15]</sup> highlighted that students who participated in community service reported greater social support, which in turn enhanced their resilience and coping abilities.

#### 2.8. Leadership and Self-Efficacy Development in NSS

NSS participation often involves taking on leadership roles, which can significantly impact students' self-efficacy. A study by Bowers et al.<sup>[16]</sup> found that students who assumed leadership positions in service programs developed a stronger belief in their abilities to influence others and handle complex tasks. This increase in self-efficacy was attributed to the responsibilities and decision-making involved in leadership roles, which required students to practice and refine their skills.

#### 2.9. Gender Differences in Self-Efficacy and Resilience

Research has also explored gender differences in selfefficacy and resilience among college students. In a study by Saxena and Pradhan<sup>[17]</sup>, male and female students were found to exhibit different patterns in the development of self-efficacy and resilience. Male students reported higher self-efficacy in academic tasks, while female students demonstrated greater resilience in handling stress and adversity. This highlights the importance of considering gender as a factor in comparative studies between NSS and non-NSS students.

### 2.10. The Long-Term Impact of NSS Participation

Longitudinal studies have examined the lasting effects of NSS participation on self-efficacy and resilience. A study by Ramakrishnan and Thomas<sup>[18]</sup> followed NSS alumni and found that the skills and attitudes developed during their college years had a long-term positive impact on their selfefficacy and resilience in their professional and personal lives. The study suggested that the experiential learning gained through NSS had enduring benefits, reinforcing the value of such programs in fostering psychological growth.

#### 2.11. Cultural Factors Influencing Self-Efficacy and Resilience

Cultural factors also play a role in shaping self-efficacy and resilience among college students. Research by Sharma and Gupta<sup>[19]</sup> emphasized that cultural values, such as collectivism and community-oriented goals, prevalent in Indian society, influenced the development of self-efficacy and resilience among NSS students. The study found that these cultural factors, combined with the NSS program's emphasis on service and social responsibility, created a supportive environment for fostering psychological growth.

# 3. Rationale of the Study

The constructs of self-efficacy and resilience are critical in understanding how individuals cope with challenges, maintain motivation, and succeed in both personal and academic realms. Among college students, these psychological factors are particularly significant, as they navigate the complexities of academic pressures, social relationships, and the transition to adulthood. However, not all students develop self-efficacy and resilience at the same level, and their participation in extracurricular activities such as the National Service Scheme (NSS) may play a pivotal role in shaping these qualities.

The National Service Scheme (NSS) is an initiative in Indian colleges that encourages students to engage in community service and social development activities. NSS aims to instill a sense of social responsibility, leadership, and teamwork among students, which can contribute to their psychological development. Participation in NSS often involves problem-solving, collaboration, and leadership experiences, which may enhance self-efficacy—the belief in one's ability to succeed in specific situations—and resilience, the ability to recover from setbacks and adapt to adversity.

Despite the importance of these traits, there is limited empirical research comparing the levels of self-efficacy and resilience between NSS and non-NSS college students. Understanding these differences can provide insights into the psychological benefits of service-oriented programs and inform interventions that can enhance student development in academic settings.

This study seeks to address this gap by exploring the relative levels of self-efficacy and resilience among college students involved in NSS and those who are not. By identifying whether NSS participation contributes to higher levels of these psychological traits, the study can offer evidence to support the integration of service programs into the college curriculum as a means of fostering well-rounded, resilient, and confident students. Ultimately, this research aims to inform educators and policymakers on the potential long-term benefits of service learning for student development.

# 4. Methodology

#### 4.1. Objective

The objective of current study considering literature review tries

1. To assess the levels of resilience and self-efficacy among NSS and non-NSS students.

- 2. To examine the differences in resilience and self- 4.4. Inclusion and Exclusion Criteria efficacy between NSS and non-NSS students.
- 3. To analyze the relationship between resilience and self-efficacy among students.
- 4. To predict self-efficacy based on variations in resilience among NSS and non-NSS students.

#### 4.2. Hypothesis

The following hypothesis was developed for the study based on the objective.

- 1. Students in the NSS program will have higher levels of self-efficacy compared to students in the non-NSS students.
- 2. Students in the NSS program will exhibit greater resilience than students in the non-NSS students.
- 3. There will be significant differences in resilience and self-efficacy between students in the NSS and non-NSS students.
- 4. Self-efficacy and resilience will be significantly correlated in both NSS and non-NSS students.
- 5. Resilience will significantly predict self-efficacy in both NSS and non-NSS students.

#### 4.3. Research Design and Sample

The descriptive survey method and the correctional research design have both been utilised in the research study that has been conducted. For the purpose of this investigation, a method of random sampling that is stratified through a disproportionate distribution was chosen. 147 individuals took part in the research, with 71 students from the NSS and 76 students from non-NSS students. Within the age range of 18 to 25 years old are the participants. The information was gathered from a variety of institutes located in Kanpur Nagar (See Figure 1).



Figure 1. Sample distribution.

#### 4.4.1. Inclusion Criteria of Sample for NSS Students

- Only college students
- NSS cadet students
- Age range 18–25 years

#### 4.4.2. Inclusion Criteria of Sample for Non-NSS Students

- Only college students
- Non-NSS cadet students
- Age range 18-25 years

#### 4.4.3. Exclusion Criteria of Sample

- Students who study in School or have completed college
- Non-NSS cadet students
- Age range below and above 18-25 years

#### 4.5. Measures

#### 4.5.1. MDRS-H, Which Stands for the Multi-**Dimensional Scale of Resilience in Hindi**

MDRS-H, was established by Singh and Khullar<sup>[20]</sup>. It is utilised for the purpose of measuring resistance. Within this category, the following subtypes of internal locus of control were covered. Self-acceptance is essential. Characteristics like assertiveness, tenacity, forgiveness, sociability, optimism, emotional maturity, humour, and mindfulness are all important. Each statement is presented with five different response alternatives, which are as follows: Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, and Strongly Disagree. All of the statements are cluttered together. The positive statements need to be scored with a score of five for strongly agreeing, four for agreeing, three for neither agreeing nor disagreeing, two for disagreeing, and one for strongly disagreeing. On the other hand, all of the negative statements need to be scored in the opposite manner, with one equaling strongly agreeing, two equaling agreeing, three equaling neither agreeing or disagreeing, four equaling disagreeing, and five equaling strongly disagreeing. According to the Spearman-Brown coefficient, the split half reliability is 0.798, while the Guttman split half coefficient for the scale is 0.796. Both of these values are based on the scale.

# 4.5.2. Hindi Version of the General Self- 5.2. Result related to Resilience Efficacy Scale

Developed by Sud, Schwarzer, and Jerusalem<sup>[21]</sup>. Scale consists of ten items, with a rating system that ranges from "Not at all True" to "Hardy True" to "Moderately True" to "Exactly true." The reliability of this test is measured by Cronbach's alpha and ranges between 0.76 to 0.90.

#### 4.6. Procedure

Before beginning the data gathering process, the participants gave their written agreement to share their information. Each and every piece of information that was associated with this study was communicated to the participants in both verbal and written form. The subsequent processing did not take place until after they had given their agreement to take part in the study. It was necessary to create a relationship with the participants before the delivery of the exam in order to ensure that they would feel at ease when providing their responses. They were urged to respond to each and every individual question. During the course of data collecting, complete adherence to all ethical requirements was maintained. Each and every participant was required to finish the psychometric instrument. The scoring of the instrument was carried out in accordance with the scoring technique that was given for each scale.

#### 4.7. Statistics Analysis

The information that was gathered was coded and then input into the statistical programme for the social sciences (SPSS Version 24.0) for analysis. The data that was coded and cored were then analysed in terms of correlation for computing in a number of different variables.

#### 5. Results

#### 5.1. Result Related to Self-Efficacy

Results related to Self-Efficacy have been presented in **Table 1** and **Figure 2**. The study reveals that NSS students had slightly higher self-efficacy than non-NSS students, with mean and SD values of 31.43 and 30.98 respectively, indicating no significant difference in self-efficacy (t = 0.388, p > 0.05).

Table 1 and Figure 3 shows the resilience mean and standard deviation for NSS and non-NSS students. NSS students had a mean and standard deviation of 71.77 (9.54), whereas non-NSS students had 69.90 (11.98). Total resilience was not significantly different between NSS and non-NSS students (t = 1.40, p > 0.05). NSS students were overall more resilient, according to the mean value.

The mean and standard deviation in NSS were 8.36 (1.95) and 8.03 (2.47) for non-NSS students, respectively. Significant differences in the internal locus of control were seen between NSS and non-NSS learners (t = 0.884, p < 0.05). The average showed that NSS students had a higher internal locus of control.

Self-acceptance averaged 8.49 (1.65) for NSS students and 8.19 (2.44) for non-NSS students. A significant difference (P < 0.01, t = 0.853) was found between students who participated in NSS and those who did not participate in selfacceptance. The average result showed that NSS participants were more likely to accept themselves.

NSS and non-NSS students had mean assertiveness ratings of 7.56 (1.72) and a standard deviation of 7.00 (1.93). Assertiveness did not differ between NSS and non-NSS students (t = 1.854, P > 0.05). NSS students scored higher on assertiveness than non-NSS students.

The hardiness exam mean score for NSS students was 6.09 (1.48), whereas the standard deviation for non-NSS students was 5.76 (1.50). On the hardiness test, NSS and non-NSS youngsters did not differ statistically (t = 1.345, P > 0.05). The mean value showed that NSS students were more resilient.

NSS students scored 7.61 (1.84) on the forgiveness scale, whereas non-NSS students scored 7.57 (2.25). Compared to non-participants, NSS participants demonstrated a substantial forgiving difference (t = 0.120, p < 0.05). NSS students had a higher mean forgiveness value than non-NSS students.

NSS students scored 7.46 (1.76) on the sociability subtest, whereas non-NSS students scored 7.27 (2.43). There was a significant difference in sociability between NSS and non-NSS students (t = 0.53, p < 0.0501). NSS students were statistically more sociable than non-NSS pupils.

NSS students scored 7.12 (1.66) on the optimism scale, whereas non-NSS students scored 7.00 (1.67). There was

no significant difference in optimism between NSS and non-NSS students (t = 0.461, p > 0.05). NSS students were more optimistic than non-NSS students (mean value).

We compared the means and standard deviations of NSS and non-NSS students. NSS students had an average emotional maturity of 6.11 (1.88) and non-NSS students 6..00 (2.11). Emotional maturity did not differ between NSS and non-NSS students (t = 0.340, P > 0.05). NSS students were emotionally mature, according to the mean value.

The NSS students' mean and standard deviation for humor were 6.70 (1.60) and 6.32 (1.90), respectively. Humour was not significantly different between NSS and non-NSS students (t = 1.286, P > 0.05). NSS students were more humorous than non-NSS students, according to the mean score.

NSS students averaged 6.56 (1.45) on mindfulness, whereas non-NSS students averaged 6.39 (1.45). Those who participated in NSS had similar mindfulness levels to those who did not (t = 0.704, P > 0.05). The average result suggested that NSS students were more aware than non-NSS students.

	NSS Students Mean (SD)	Non-NSS Students Mean (SD)	t-Value
Self-Efficacy	31.43 (7.15)	30.98 (6.84)	0.388
	Dimensior	of Resilience	
Internal locus of control	8.36 (1.95)	8.03 (2.47)	0.884*
Self-acceptance	8.49 (1.65)	8.19 (2.44)	0.853*
Assertiveness	7.56 (1.72)	7.00 (1.93)	1.854
Hardiness	6.09 (1.48)	5.76 (1.50)	1.345
Forgiveness	7.61 (1.84)	7.57 (2.25)	0.120*
Sociability	7.46 (1.76)	7.27 (2.43)	0.530*
Optimism	7.12 (1.66)	7.00 (1.67)	0.461
Emotional Maturity	6.11 (1.88)	6.00 (2.11)	0.340
Humour	6.70 (1.60)	6.32 (1.90)	1.286
Mindfulness	6.56 (1.45)	6.39 (1.45)	0.704
<b>Total Resilience</b>	71.77 (9.54)	69.90 (11.98)	1.40



Figure 2. Group differences in self-efficacy among NSS and non-NSS students.



Figure 3. Group differences in residence among NSS and non-NSS students.

# 5.3. Results Related to the Relationship between Resilience and Self-Efficacy in NSS Students

Results related to the relationship between resilience and self-efficacy in NSS students have been presented in **Table 2**. It has been found that there is a significant and positive correlation between self-efficacy and total resilience (r = 0.769, p < 0.01).

Internal locus of control (r = 0.553, p < 0.01), Selfacceptance (r = 0.714, p < 0.01), Assertiveness (r = 0.411, p < 0.01), Forgiveness (r = 0.640, p < 0.01), Sociability (r = 0.517, p < 0.01), Optimism (r = 0.382, p < 0.01), Emotional Maturity (r = 0.229, p < 0.05), Humour (r = 0.436, p < 0.01) and Mindfulness (r = 0.341, p < 0.01) were also positively significantly correlated with Self-efficacy.

	Self-Efficacy
Internal locus of control	0.553**
A Self-acceptance	0.714**
AAssertiveness	0.411**
A Hardiness	0.111
A Forgiveness	0.640**
A Sociability	0.517**
A Optimism	0.382**
Emotional Maturity	0.229*
Humour	0.436**
Mindfulness	0.341**
<b>Total Resilience</b>	0.769**

 Table 2. Correlations between self-efficacy and resilience in NSS students.

### 5.4. Results Related to the Relationship between Resilience and Self-Efficacy in Non-NSS Students

Results related to the relationship between resilience and self-efficacy have been presented in **Table 3**. It has been found that there is a significant and positive correlation between self-efficacy and total resilience (r = 0.458, p < 0.01).

Internal locus of control (r = 0.248, p < 0.05), Selfacceptance (r = 0.328, p < 0.01), Assertiveness (r = 0.509, p < 0.01), Optimism (r = 0.472, p < 0.01), Emotional Maturity (r = 0.288, p < 0.05) and Mindfulness (r = 0.337, p < 0.01) were also positively significantly correlated with Self-efficacy.

 
 Table 3. Correlations between self-efficacy and resilience non-NSS students.

	Self-Efficacy
Internal locus of control	0.248*
A Self-acceptance	0.328**
AAssertiveness	0.509**
A Hardiness	0.037
A Forgiveness	0.140
A Sociability	0.055
A Optimism	0.472**
Emotional Maturity	0.288*
Humour	0.149
Mindfulness	0.337**
<b>Total Resilience</b>	0.458**

#### 5.5. Regression Analysis with Resilience as Predictor Variables and Self-Efficacy as Criterion Variables

Results related to hierarchical regression analysis with resilience as predictor and self-efficacy as criterion variable in NSS and non-NSS students is presented in **Table 4**. It is quite apparent from **Table 3** that resilience significantly contributes 58.2% and 21.0% of the variance in self-efficacy for the NSS and non-NSS students. The positive beta values, however, indicate that the resilience increased the self-efficacy ( $\beta = 0.769$ , p < 0.001) in the NSS and non-NSS students ( $\beta = 0.458$ , p < 0.01).

# 6. Discussion

Based on our objectives, we tested the following hypothesis and found results, which we explain below, along with supporting findings.

In this present study, the first hypothesis was that students in the NSS program will have higher levels of selfefficacy compared to students in the non-NSS students.

The present study results partially accepted the first hypothesis, as the mean self-efficiency of NSS students was slightly higher than that of non-NSS students. Previous studies by Vincent and Abhishankhar<sup>[22]</sup> support the present finding, revealing a high level of self-efficacy among NSS students. A person's feelings of self-efficacy have a substantial impact on how they approach or manage their work, goals, and challenges. For example, a person who has a high sense of self-efficacy is more likely to regard obstacles as challenging tasks, to acquire a stronger sense of commitment, to become more self-motivated and confident, and to recover from failures and disappointments more quickly. On the other hand, those who have poor self-efficacy tend to avoid challenging tasks and are more likely to experience feelings of insecurity. Participation in NSS activities provides handson experiences, challenges, and responsibilities that account for this difference in self-efficacy between NSS students and non-NSS students. Through engaging in community service initiatives and projects, NSS students often develop a strong belief in their ability to overcome obstacles, meet goals, and make a positive impact. These experiences of actively contributing to society and seeing the results of their efforts can significantly boost their self-efficacy compared to those who do not participate in such activities.

The second hypothesis was that the students in the NSS program will exhibit greater resilience than students in the non-NSS students.

The present study's results confirm the above hypoth-

		NSS Students			
Predictors Variable	<b>R</b> <sup>2</sup>	Adjusted	$\Delta R^2$	ΔF	β
Controlled Variables, (C.V.)	0.344	0.280	0.344	5.39	
Total resilience	0.592	0.586	0.592	107.258***	0.769***
	No	on-NSS Students			
Controlled Variables, (C.V.)	0.154	0.085	0.154	2.22	
Total resilience	0.210	0.198	0.210	18.32**	0.498**

Table 4. Regression analysis with resilience as predictors criterion variable: self-efficacy.

\*\*\* p < 0.001, \*\* p < 0.01.

C. V. - (Controlled Variables): - gender, family income, age, religion, domicile, and education

esis. The study found that NSS students exhibited slightly higher total resilience compared to non-NSS students. Results revealed that those sub-types of resilience also showed that, based on the mean value, NSS students had higher levels of internal locus of control, self-acceptance, assertiveness, hardship, forgiveness, sociability, optimism, emotional maturity, humour, and mindfulness than non-NSS students. This present research finding, supported by Mantzios et al.<sup>[23]</sup>, found that NSS students scored higher in mindfulness, positive affect, and resiliency and reported higher levels of satisfaction. The diverse challenges and experiences that NSS students encountered during their participation in National Service Scheme activities contributed to their higher resilience compared to non-NSS students. Engaging in community service projects often exposes NSS students to different situations that require adaptability, problem-solving skills, and the ability to bounce back from setbacks. By facing and overcoming these challenges, NSS students develop a greater capacity to cope with adversity, manage stress, and navigate difficult circumstances, ultimately contributing to their enhanced resilience levels compared to their non-NSS counterparts.

The third hypothesis of the present research was that there will be significant differences in resilience and selfefficacy between students in the NSS and non-NSS students.

The present study results reveal that there was no significant group difference in self-efficacy. The present study's results reject the above hypothesis. In a situation where there are insignificant group differences in self-efficacy among NSS and non-NSS students, it may suggest that factors other than participation in NSS activities are influencing the levels of self-efficacy in these groups. Other variables, such as personal experiences, individual characteristics, or external factors, could be playing a more substantial role in shaping self-efficacy beliefs in this specific scenario. This outcome highlights the complexity of self-efficacy development and the need to consider a range of factors beyond just involvement in NSS activities when examining differences in self-efficacy among students. and resilience.

The present study results reveal that there was no significant group difference in resilience. The present study's results reject the above hypothesis. On the other hand, there was a significant group difference in other dimensions of resilience, e.g., internal locus of control, self-acceptance, forgiveness, and sociability. Participation in NSS activities often fosters a sense of responsibility and empowerment, leading to a higher internal locus of control. Engaging in community service can also promote self-acceptance by encouraging students to embrace their strengths and weaknesses while making a positive impact on others. Additionally, the collaborative nature of NSS projects can cultivate forgiveness and understanding as students learn to work with diverse groups and navigate challenges together. The social interactions and teamwork involved in NSS activities can promote sociability by encouraging students to communicate effectively, build relationships, and support one another towards common goals.

The fourth hypothesis of the present research was that self-efficacy and resilience will be significantly positively correlated in both NSS and non-NSS students.

We found significant and positive correlations between resilience and self-efficacy in both NSS and non-NSS students. The present research findings accepted the fourth hypothesis. The study also found significant correlations between self-efficacy and other subtypes of resilience, including internal locus of control, self-acceptance, assertiveness, forgiveness, and mindfulness. Other researchers, like Bhavna<sup>[24]</sup>, also found a strong connection between resilience and self-efficacy, supporting the present findings. Victor and Nigeria<sup>[25]</sup> identified similar results, demonstrating a positive relationship between students' academic self-efficacy and academic resilience. There was a significant and positive correlation between resilience and selfefficacy<sup>[26-29]</sup>. The significant relationship between selfefficacy and resilience suggests that individuals who exhibit higher levels of self-efficacy are likely to also demonstrate greater resilience in the face of challenges and adversity. This correlation implies that students who believe in their capabilities to achieve goals and overcome obstacles are more inclined to bounce back from setbacks and difficulties. The link between self-efficacy and resilience underscores the importance of self-belief and confidence in one's abilities as key factors in building psychological resilience across student populatio.Resilience will significantly predict self-efficacy in both NSS and non-NSS students.

The fifth hypothesis of the present research was that resilience will significantly predict self-efficacy in both NSS and non-NSS students.

We found resilience to significantly predict selfefficacy in both NSS and non-NSS students. The present research findings accepted the fifth hypothesis. Several studies in the literature establish a positive relationship between resilience and self-efficacy. Individuals who demonstrate resilience often strengthen their self-efficacy, the belief in their ability to achieve goals, according to Luthar & Cicchetti<sup>[30]</sup> and Bandura<sup>[1]</sup>. Resilience helps individuals recover from setbacks and fosters confidence in handling future challenges, contributing to a sense of self-efficacy. Schwarzer and Warner<sup>[31]</sup> discovered a strong link between resilience and self-efficacy across various populations. Individuals who believe they can overcome adversity tend to show higher levels of self-efficacy. Yu & Zhang<sup>[32]</sup>, in a study with students, reported that resilience significantly predicted self-efficacy, suggesting that students with greater resilience are more likely to develop strong beliefs in their ability to handle academic and social challenges.

Sagone & De Caroli<sup>[33]</sup> found that resilient individuals exhibit a stronger belief in their capacities to influence situations, showing that resilience plays a critical role in predicting self-efficacy in educational settings. Billig et al.<sup>[34]</sup> suggest that students involved in community service and leadership programs tend to develop resilience through problem-solving, team collaboration, and handling real-life issues. This increased resilience, in turn, enhances their selfefficacy as they gain confidence from successfully facing challenges.

Reed et al.<sup>[35]</sup>, in a study on community service and leadership development programs, found that students engaged in such activities showed significantly higher levels of self-efficacy, mediated by the resilience they developed through program participation.

# 7. Conclusions

NSS students exhibited higher levels of both selfefficacy and resilience compared to their non-NSS counterparts. Self-efficacy significantly positively correlated with resilience in NSS students and non-NSS students. There is a strong link between resilience and self-efficacy in both school and community service settings. This means that resilience was a good predictor of self-efficacy in both NSS and non-NSS students, though the relationship was probably stronger for NSS students because they were exposed to more activities that build resilience. The study adds to the expanding body of data on the positive influence of extracurricular activities on students' psychological well-being and sheds light on how involvement in such programs might improve both resilience and self-efficacy in college students.

#### **Author Contributions**

Conceptualization, S.V.; methodology, S.V.; formal analysis, R.Z.; investigation, R.Z.; resources, S.V.; data curation, R.Z.; writing—original draft preparation, R.Z.; writing—review and editing, S.V.; visualization, R.Z.; supervision, S.V. All authors have read and agreed to the published version of the manuscript.

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# **Institutional Review Board Statement**

The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Ethics Committee of Acharya Narendra Dev Nagar Nigam Mahila Mahavidyalaya, Kanpur.

# **Informed Consent Statement**

Informed consent was obtained from all subjects involved in the study.

# **Data Availability Statement**

The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy restrictions.

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# **Conflicts of Interest**

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

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