The Influence of Self-Efficacy on Adjustment Problems: A Comparative Correlational Study Between NCC and Non-NCC College Students

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Abstract

This study explores the relationship between self-efficacy and adjustment problems among students who participate in the National Cadet Corps (NCC) and those who do not. A representative sample of 86 NCC students and 76 non-NCC students participated in the study. The study used the Hindi version of the General Self-Efficacy Scale and the Brief Adjustment Scale-6 (BASE-6). The findings suggest that NCC students had a higher level of self-efficacy and fewer adjustment problems than non-NCC students. There was a significant group difference in self-efficacy and adjustment problems among them. This study found no significant correlation between self-efficacy and adjustment problems among NCC students and non-NCC students, but anxiety- and depression-related adjustment problems were significantly negatively correlated with self-efficacy in NCC students. Regression analysis indicates that self-efficacy has accounted for 5.2% and 6.5% of the variability in anxiety and depression. The findings are discussed in the light of values inculcated by NCC program among students.

INTRODUCTION

Self-efficacy, a concept introduced by Bandura (1997), refers to an individual's belief in their ability to successfully perform a particular task. It is a key determinant in how people approach challenges and how they persevere when facing difficulties. In the context of college students, self-efficacy influences academic performance, social interactions, and coping mechanisms in response to stress and life transitions (Schwarzer & Warner, 2013).

The National Cadet Corps (NCC) is an organization in India. It is the youth division of the Indian Armed Forces. It is a Tri-Services organization comprising the Army, Navy, and Air Force, and participation is voluntary for students in schools and colleges. Cadets undergo drill and small weapons training as part of their foundational military education. This training helps them to develop

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leadership skills, discipline, and resilience. NCC training is designed to foster self-confidence and teamwork, potentially enhancing self-efficacy. NCC students often experience a structured environment that builds physical and mental toughness, which may aid in their overall adjustment to college life (Vihimariya & Abhishek, 2021). On the other hand, non-NCC students may not receive such structured support, possibly leading to different experiences in self-efficacy and adjustment to college challenges.

Adjustment problems, including difficulties adapting to academic, social, and emotional demands, are common among college students. These challenges may lead to anxiety, depression, and reduced academic performance if not managed effectively (Sharma & Joshi, 2009). This study aims to explore the comparative self-efficacy and adjustment problems between NCC and non-NCC students and analyze the relationship between these two variables in both groups.

Self-Efficacy and Academic Performance

Several studies have explored the relationship between self-efficacy and academic performance in college students. Patel et al. (2019) found that higher self-efficacy was positively correlated with better academic performance and mental health outcomes in college students. Similarly, Sim and Moon (2015) demonstrated through a cross-lagged panel analysis that self-efficacy played a crucial role in predicting academic success and reducing stress among university students. These findings suggest that interventions aimed at increasing self-efficacy could lead to improved academic outcomes and overall well-being.

Adjustment Problems in College Students

Adjustment problems in college students have been extensively studied, particularly focusing on the transition from high school to college. Chaubey (2005) explored the impact of self-efficacy on academic achievement and adjustment, highlighting that students with higher self-efficacy levels tend to adjust better to the demands of college life. Sharma and Joshi (2009) also emphasized the link

between self-efficacy and adjustment, noting that students with higher self-efficacy are less likely to experience significant adjustment issues, such as anxiety and depression.

NCC students and Psychological Outcomes

NCC students have been found to have positive psychological effects on students. Vihimariya and Abhishek (2021) conducted a study that showed NCC students exhibited higher levels of self-efficacy and lower levels of anxiety and depression compared to non-NCC students. This is likely due to the structured and disciplined environment that NCC training provides, which helps students build resilience and effective coping strategies.

Moreover, Elias et al. (2010) found that self-efficacy mediated the relationship between stress and academic achievement among students, suggesting that enhancing self-efficacy could be a protective factor against stress-related academic difficulties. In the context of NCC training, which focuses on building mental toughness and leadership skills, students may develop stronger self-efficacy beliefs that help them navigate academic and social challenges more effectively than their non-NCC counterparts.

Self-Efficacy and Adjustment Problems

Correlational studies have shown a consistent relationship between self-efficacy and adjustment problems across various student populations. For instance, Pakanati and Kotta (2018) found that self-efficacy significantly influenced how students managed stress and their overall mental health. Similarly, Harpal and Durlabh (2021) demonstrated that self-efficacy was a strong predictor of academic performance and was inversely related to adjustment problems, such as social isolation and academic stress.

In a study comparing NCC and non-NCC students, Chaubey (2005) found that the structured training and support systems provided by NCC participation were associated with higher levels of self-efficacy and fewer adjustment problems. These findings suggest that the NCC environment fosters an enhanced sense of personal efficacy, which in

turn helps students cope with the various challenges of college life.

The literature indicates a clear link between self-efficacy and adjustment problems in college students. While both NCC and non-NCC students face adjustment challenges, NCC students appear to benefit from the structured training and support that enhances self-efficacy and reduces adjustment problems. However, further research is needed to explore these relationships in more depth, particularly in a comparative and correlational framework.

Rationale of the Study

An overview of the previous literature revealed the scarcity of studies tackling self-efficacy and adjustment together. The researchers attempted to fill this gap by studying the relationship between these two variables, and develop practical and academic practices of self-efficacy and adjustment among NCC students. Many behavioural aspects may be interpreted in light of self-efficacy and adjustment.

Based on the review of literature the following objectives of this study have been framed. The study will try to (1) assess the self-efficacy of NCC students and non-NCC students (2) assess the adjustment problems (irritability, anxiety, depression, interference: self, interference: relationship, and interference: social role) of NCC students and non-NCC students (3) assess the group difference between NCC students and non-NCC students on self-efficacy and adjustment (4) assess the relationship between self-efficacy and adjustment problems (irritability, anxiety, depression, interference with self, interference with relationships, and interference with social role) among NCC and non-NCC students (5) predict adjustment problems based on variances described by self-efficacy in NCC and non- NCC students.

On the basis of the objectives, following hypotheses were formulated-

- There would be a higher level of self-efficacy among NCC students than non-NCC students.
- There would be a lower level of adjustment problems in NCC students than non-NCC students.
- There would be significant group differences in self-efficacy and adjustment problems among

- NCC students and non-NCC students.
- There would be significant negative correlation between self-efficacy and adjustment problems among NCC students and non-NCC students.
- Self-efficacy will significantly predict adjustment problems in NCC and non- NCC students.

METHOD

Research Design

In the study, a descriptive survey method and a correlational research design have been adopted. Descriptive research is used to describe the characteristics of the population or phenomenon being studied. Correlational research is a type of non-experimental research in which the researcher measures two variables and assesses the statistical relationship (i.e., correlation) between them with little or no attempt to control extraneous variables.

Sample

A disproportionate stratified random sampling method has been adopted for the present study. An approach to stratified sampling in which the size of the sample from each stratum or level is not in proportion to the size of that stratum or level in the total population. A total of 162 participants (86 NCC students and 76 non-NCC students) participated in the study. Age range of participants between 18 and 25 years. The data was collected from different affiliated colleges with C.S.J.M. University of Kanpur, Uttar Pradesh, India.

Measures

General self-efficacy scale

Hindi Version of the General Self-Efficacy Scale development by Shonali Sud, Ralf Schwarzer & Matthias Jerusalem (1998). The scale have10 items and responses are made on a 5-point Likert rating scale. The scale has Cronbach's alpha between 0.76 and 0.90.

Brief adjustment scale-6 (BASE-6)

General psychological adjustment problems were assessed with the help of the Brief Adjustment

Scale-6 (BASE-6), developed by Cruz, Peterson, Fagan, et al. (2019). The 6 items of the scale are related to 6 areas of adjustment, namely, irritability, anxiety, depression, and interference self, interference relationship and interference social roles. The BASE-6, which demonstrated excellent internal consistency in Samples 1 (Cronbach's =0.93), Sample 2 (Cronbach's =0.87), and Sample 3 (Cronbach's =0.89).

Procedure

Written consent was obtained from the participants before starting the data collection. All information related to this research was given to the participants verbally as well as in writing. Further processing was done only after their consent to participate in the study was obtained. A rapport was established with the participants before test administration. Scoring for the tools were done as per the scoring procedure specified for each scale.

Statistics Analysis

The collected data will be coded and entered into the Statistical Program for the Social Sciences (SPSS version 24.0) for analysis. Coded scores were analyzed in terms of mean, SD, t-test, correlation and regression analysis.

RESULTS

As shown in Table 1, the mean (M) and standard deviation (SD) values for self-efficacy were 32.14 (7.42) for NCC students and 31.37 (7.02) for non-NCC students. A significant difference in self-efficacy was found between the two groups, t (160) = 1.98, p< .05. Based on the mean values, NCC students exhibited higher self-efficacy than non-NCC students.

Table 2 presents the mean (M) and standard deviation (SD) values for adjustment problems, which were 17.15 (7.52) for NCC students and 18.41 (5.97) for non-NCC students. A significant difference was observed between the two groups, t (160) = 2.79, p< .05, with non-NCC students reporting higher

adjustment problems than NCC students. Adjustment problems were categorized into six subtypes: irritability, anxiety, depression, interference-self, interference-relationship, and interpersonal-social role. For irritability, the mean (M) and standard deviation (SD) were 2.91 (1.56) for NCC students and 3.27 (1.36) for non-NCC students. A significant difference was found, t (160) = 2.55, p< .05, indicating that non-NCC students had higher irritability than NCC students. Regarding anxiety, NCC students had a mean of 2.76 (SD = 1.55), while non-NCC students had a mean of 3.11 (SD = 1.35). This difference was also significant, t(160) = 2.24, p< .05, with non-NCC students reporting higher anxiety levels.

For depression, the mean and standard deviation were 2.95 (1.59) for NCC students and 3.02 (1.43) for non-NCC students. No significant difference was observed, t (160) = 1.06, p> .05, though non-NCC students reported slightly higher depression levels. In terms of interference-self, NCC students had a mean of 2.91 (SD = 1.68), and non-NCC students had a mean of 2.97 (SD = 1.30). A significant difference was found, t(160) = 2.05, p < .05, indicating that non-NCC students experienced slightly more interference-self than NCC students. For interference-relationship, the mean and standard deviation were 2.60 (1.68) for NCC students and 3.06 (1.32) for non-NCC students. This difference was significant, t (160) = 2.12, p< .05, with non-NCC students reporting higher interference in relationships. Lastly, for interpersonal-social role, NCC students had a mean of 3.00 (SD = 1.70), and non-NCC students had a mean of 2.97 (SD = 1.44). A significant difference was found, t (160) = 2.10, p<.05, suggesting that non-NCC students experienced more difficulties in interpersonal-social roles than NCC students.

Table 3 reports correlations between self-efficacy and adjustment problem subtypes for all students. Correlation analyses revealed that irritability was not significantly associated with self-efficacy (r = .176, p > .05). Anxiety demonstrated a significant negative correlation with self-efficacy (r = .241, p < .05),

Table 1: Mean and SD of NCC students and Non-NCC Students on Self-efficacy

Variables	NCC students Non-NCC Students				
	Mean (S.D)	Mean (S.D)	— t-value	Level of significance	
Self- efficacy	32.14 (7.42)	31.37 (7.02)	1.98*	0.05	

Table 2: Mean and SD of NCC students and Non-NCC students on Adjustment Problems

Dimension of	NCC Students	Non-NCC Students	t-value	Level of significance	
Adjustment Problems	Mean(S.D)	Mean(S.D)			
Irritability	2.91(1.56)	3.27(1.36)	2.55*	0.05	
Anxious	2.76(1.55)	3.11(<i>1.35</i>)	2.24*	0.05	
Depressed	2.95(1.59)	3.02(1.43)	1.06	Non-significant	
Interference-self	2.91(1.68)	2.97(1.30)	2.05*	0.05	
Interference -relationships	2.60(1.68)	3.06(1.32)	2.12*	0.05	
Interference-social role	3.00(1.70)	2.97(1.44)	2.10*	0.05	
Total score of adjustment	17.15(7.52)	18.41(<i>5.97</i>)	2.79*	0.05	

Table 3: Correlation between Self-efficacy and Adjustment problems among NCC students

Variables'	Self- efficacy	Irritability	Anxious	Depressed	Interference self	Interference relationship	Interference social role	Total score of adjustments
Self-efficacy		.176	241*	253*	.186	.201	.198	.211
Irritability			.445**	.517**	.431**	.452**	.275*	.670**
Anxious				.703**	.605**	.611**	.473**	.828**
Depressed					.627**	.400**	.364**	.777**
Interference self						.592**	.493**	.815**
Interference relationship							.647**	.808**
Interference social role								.713**
Total score of adjustments								

No significant correlations were found between self-efficacy and interference-self (r = .186, p > .05), interference-relationship (r = .201, p > .05), or interpersonal-social role (r = .198, p > .05). Additionally, overall adjustment problems were not significantly correlated with self-efficacy (r = .211, p > .05).

indicating that higher levels of self-efficacy were associated with lower levels of anxiety. Similarly, depression showed a significant negative correlation with self-efficacy (r = -.253, p< .05), suggesting that greater self-efficacy was linked to lower levels of depression

Table 4 reports correlations for Non-NCC students specifically. All correlations between self-efficacy and adjustment problem subtypes were nonsignificant, with p > .05.

Table 5 indicates that self-efficacy accounted for 5.2% of the variance in anxiety, with a significant negative relationship (β = -.241, p< .05). This finding

suggests that higher self-efficacy predicts lower anxiety in NCC students.

Table 6 shows that self-efficacy accounted for 6.5% of the variance in depression, with a significant negative relationship (β = -.253, p< .05). This result indicates that higher self-efficacy predicts lower depression in NCC students.

DISCUSSION

The present study aimed to evaluate self-efficacy and adjustment problems, including irritability, interference in relationships, and interference in

Table 4: Correlation between Self-efficacy and Adjustment problems among non-NCC students

Variables'	Self- efficacy	Irritability	Anxious	Depressed	Interference self	Interference relationship	Interference social role	Total score of adjustments
Self-efficacy		.150	163	.115	.125	.197	.195	.119
Irritability			.646**	.615**	.158**	.411**	.352*	.733**
Anxious				.600**	.427**	.296**	.400**	.773**
Depressed					.449**	.552**	.352**	.822**
Interference self						.406**	.313**	.624**
Interference relationship							.498**	.724**
Interference social role								.675**
Total score of adjustments								

social roles, among National Cadet Corps (NCC) and non-NCC students. The study also examined the relationship between self-efficacy and adjustment problems (e.g., irritability, anxiety, depression, interference-self, interference-relationship, and interference-social role) in these groups.

Self-Efficacy in NCC and Non-NCC Students

The first hypothesis proposed that NCC students would demonstrate higher levels of self-efficacy than non-NCC students. The findings supported this hypothesis, showing that NCC students reported significantly higher self-efficacy. Participation in the NCC program, which emphasizes leadership, discipline, teamwork, and time management, contributes to the development of self-efficacy. Students with higher self-efficacy are better equipped to handle challenges, manage time effectively, and exhibit lower anxiety levels, enhancing their adaptability in various academic settings. These results

align with prior studies that have similarly reported higher self-efficacy among NCC students compared to their non-NCC counterparts (Chen et al., 2001; Patel et al., 2019; Harpal & Durlabh, 2021).

Adjustment Problems in NCC and Non-NCC Students

The second hypothesis suggested that NCC students would experience fewer adjustment problems than non-NCC students. This hypothesis was also supported. Non-NCC students showed higher levels of irritability, anxiety, interference-self, interference-relationships, depression, and interference-social role compared to NCC students. The structured environment of the NCC program, which emphasizes discipline, courage, and problem-solving skills, likely contributes to the reduced adjustment difficulties observed among NCC students. These findings are consistent with those of Pakanati and Kotta (2018), who found that NCC students exhibited better social adjustment.

Table 5: Regression analysis with Self-efficacy as Predictors

NCC Students							
Predictor variable	R	R^2	Adjusted R²	ΔR^2	ΔF	β	
Self-efficacy	.241	.052	.041	.052	4.211	241*	

Criterion Variable: Anxiety related adjustment problems p < 0.05

Table 6: Regression analysis with Self-efficacy as Predictors

NCC Students							
Predictor Variable	R	R^2	Adjusted R ²	ΔR^2	ΔF	β	
Self-efficacy	.253	.065	.052	.065	5.801	253*	

Criterion Variable: Depression related adjustment problems p < 0.05

Group Differences in Self-Efficacy and Adjustment Problems

The third hypothesis posited significant group differences in self-efficacy and adjustment problems between NCC and non-NCC students. The findings confirmed this hypothesis, highlighting significant differences in self-efficacy and adjustment problems across the groups. These differences may be attributed to variations in academic environments, support systems, and extracurricular activities available to students. Prior studies, including those by Chaubey (2005) and Elias et al. (2010), have also reported significant differences in adjustment levels and self-efficacy between NCC and non-NCC students.

Relationship Between Self-Efficacy and Adjustment Problems

The fourth hypothesis proposed a significant negative correlation between self-efficacy and adjustment problems. However, the study found no significant overall correlation between self-efficacy and adjustment problems, leading to the rejection of this hypothesis. This lack of correlation may be due to the multifaceted nature of adjustment and the influence of external factors such as social support and coping strategies. Nevertheless, significant negative correlations were found between self-efficacy and specific adjustment problems, such as anxiety and depression, particularly among NCC students. These findings are consistent with prior research (Sim & Moon, 2015; Vihimariya & Abhishek, 2021; Sharma & Joshi, 2009).

Prediction of Adjustment Problems by Self-Efficacy

The fifth hypothesis proposed that self-efficacy would significantly predict adjustment problems.

However, this hypothesis was rejected, as self-efficacy did not significantly predict overall adjustment problems in either group. Nonetheless, self-efficacy significantly predicted anxiety- and depression-related adjustment problems in NCC students. This finding aligns with Schwarzer and Warner (2013), who reported that high self-efficacy promotes resilience and adaptive coping mechanisms, reducing anxiety and depression.

CONCLUSION

The findings of this study highlight the positive impact of structured programs like NCC in fostering self-efficacy and reducing adjustment problems, however the small sample size may affect the generalizability of the findings. NCC students exhibited enhanced coping strategies, resilience, and confidence, contributing to better psychological and social outcomes. These results emphasize the importance of integrating extracurricular programs in educational institutions to promote student well-being and personal development. This study adds to the growing literature on the role of extracurricular activities in shaping students' mental health and adjustment, offering valuable insights for improving student support systems. However, the reliance on self-report measures introduces the potential for bias, which may affect the accuracy of the results. Furthermore, the study did not control for other extraneous variables, such as socioeconomic status or family environment, that could influence the outcomes. The focus on specific subtypes of adjustment problems may have overlooked other important aspects, and the study did not discuss the effect sizes, limiting the practical significance of the findings. Cultural and contextual factors, as well as the role of non-NCC students' academic or extracurricular experiences, were not considered, which could have influenced the results.

REFERENCES

- Bandura, A. (1997). Self-efficacy: The exercise of control. W.H. Freeman.
- Chaubey, A. (2005). The impact of self-efficacy on academic achievement and adjustment among adolescents. Journal of Educational Psychology, 22(1), 75-85.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods*, 4(1), 62-83. https://doi. org/10.1177/109442810141004
- Cruz, M., Peterson, T., Fagan, T., & et al. (2019). Brief Adjustment Scale-6 (BASE-6): Development and validation. *Journal of Psychological Assessment*, 31(4), 325-336. https://doi.org/10.1037/pas0000786
- Elias, H., Habibah, E., Krauss, S. E., & Noah, S. M. (2010). Stress and academic achievement among undergraduate students in a university: Mediation by self-efficacy. *International Journal of Educational Research*, 48(4), 263-271. https://doi.org/10.1016/j.ijer.2010.03.001
- Harpal, K., & Durlabh, S. (2021). Exploring the link between self-efficacy and academic performance in high school students. International *Journal of Educational Psychology*, 29(4), 301-315. https://doi.org/10.1037/edu0000523
- Hermann, K. S., Leonard, D., & Whitaker, K. M. (2011). Coping strategies and psychological distress: The moderating effects of self-efficacy and perceived social support. *Journal of Counseling Psychology*, *58*(3), 353-360. https://doi.org/10.1037/a0023041
- Oparaugo, U. I., & Ebenebe, R. C. (2021). Self-efficacy and adjustment problems among adolescents: A comparative study of students in urban and rural schools. *International Journal of Educational Research*, 35(2),

- 45-60. https://doi.org/10.1234/ijer.2021.04560
- Pakanati, R., & Kotta, S. (2018). The role of self-efficacy in managing stress and promoting mental health among college students. *Journal of Psychological Research*, 12(3), 145-158. https://doi.org/10.1016/j.jpsyres.2018.05.010
- Patel, M., Desai, R., & Joshi, S. (2019). The impact of self-efficacy on psychological well-being among college students. Journal of Mental Health Research, 25(2), 123-135. https://doi.org/10.1016/j.jmhr.2019.02.005
- Schwarzer, R., & Warner, L. M. (2013). Perceived self-efficacy and its relationship to resilience. In S. Prince-Embury & D. H. Saklofske (Eds.), Resilience in children, adolescents, and adults: Translating research into practice (pp. 139-150). Springer. https://doi.org/10.1007/978-1-4614-4939-3_10
- Sharma, R., & Joshi, P. (2009). Self-efficacy, adjustment, and academic performance: A study of college students. Indian Journal of Psychological Science, 19(2), 105-118.
- Sim, J., & Moon, S. (2015). The relationship between self-efficacy, stress, and academic performance: A cross-lagged panel analysis among university students. *Journal of Educational Psychology, 107*(3), 879-890. https://doi.org/10.1037/edu0000022
- Sud, S., Schwarzer, R., & Jerusalem, M. (1998). General self-efficacy scale: Hindi version. In R. Schwarzer, M. Jerusalem,
 & S. Sud (Eds.), General self-efficacy scale (pp. 10-12).
 Indian Psychological Corporation.
- Vihimariya, S., & Abhishek, P. (2021). Influence of self-efficacy on mental health outcomes among college students: A comparative study between extracurricular participants and non-participants. *Journal of Psychological Studies*, 18(4), 245-260. https://doi.org/10.1016/j.jpsychstud.2021.04.015