

Evaluating the Impact of a Structured Educational Intervention on Resilience, Stress, and Academic Integration for First-Year Nursing Students in Uttar Pradesh: A Quasi-Experimental Study

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Abstract: *Many individuals perceive the transition from senior secondary school to college as a crucial milestone in their development from adolescence to adulthood. For many first-year college students, the first day of classes can be a stressful experience. The objective of this study was to evaluate the effectiveness of a structured teaching program designed to address adaptation problems and coping strategies among first-year nursing students at selected colleges in Noida. A pre-experimental one-group pre-test and post-test design was employed for the study. A total of 40 students were selected using a simple random sampling method to complete a self-structured questionnaire. Descriptive and inferential statistics were utilized for data analysis. The majority of first-year students faced serious academic problems, with 60% reporting severe social problems, 50% experiencing mild emotional problems, 60% struggling with moderate financial problems, and 50% lacking adequate coping mechanisms. The mean pre-test and post-test scores of first-year nursing students differed significantly, according to the results. An efficient way to increase understanding of adaption problems and coping mechanisms was through the use of a structured teaching program.*

Keywords: Effectiveness, Structured teaching program, Adaptation problems, Coping strategies, Nursing students

1. Introduction

Adolescence is a time for adapting to new social norms and life patterns. It's a time when people attempt to settle down and deal with several challenges while attempting to fit in with their new way of life. The issue of adaptation is crucial for everyone, but it is especially important for students, who need assistance in establishing effective adaption skills in addition to their academic development.

The psychological mechanisms used to cope, adjust, and manage the problems associated with the style of living are known as adjustment. Adjustment for university students can be a complex process that can be broken down into four distinct components: educational, social, personal-emotional adjustment, and university connection. In 2022, Barbayannis et al. conducted a study involving 843 students to examine the effects of educational pressure on their mental wellness. The findings showed a substantial correlation between the mental well-being of the students who responded to the survey and educational tension in college.

Restoring balance within the system or among its constituent parts results in an adaptive situation. This scenario is common to all forms of human adaptation, which are viewed in contemporary psychology as intentional, proactive conflict resolution processes that stem from engagement with the new social or natural environment. A shift in surroundings is the releasing mechanism for adaptation, which makes routine behavioural norms less efficient and necessitates overcoming the challenges faced. A problem-focused coping technique is more proactive and consists of planned activities against stressors as well as logical reactions centred on knowledge. In addition to being a passive technique, coping with focal emotion entails eradicating the feelings that arise in response

to stressors. The notion of stress was initially established in the scientific community by physicist Robert Hook, who defined it as an interaction between an adaptable thing and an external force acting on it.

2. Objectives

- 1) To assess the adaptation problems among first-year nursing students of selected colleges of Noida.
- 2) To assess the coping strategies used for adaptation problems by first-year nursing students of selected colleges of Noida.
- 3) To evaluate the effectiveness of a structured teaching program on adaptation problems and coping strategies among first-year nursing students by comparing with pre-test and post-test scores.

3. Materials and methods

Research approach:

The research approach is a strategy and plan that includes introducing presumptions into particular data gathering, analysis, and interpretation procedures. As a result, it is based on the type of data research issue being handled. Hence, a quantitative research approach was considered for this study.

Research design:

A research project's framework or blueprint is known as the research design. It outlines the procedures required to gather the information required to address the research question. Hence, a pre-experimental research design was adopted in this study.

Variables

Dependent variables: The conditions or traits that arise, vanish, or alter as the researcher adds, subtracts, or modifies the independent variables are known as dependent variables. In this study, adaptation problems and coping strategies are the dependent variable.

Independent variables: The condition or attribute that the researcher modifies or controls to determine its relevance to the phenomenon being observed is known as independent variables. Hence, a structured teaching program was an independent variable.

Target population:

The target population includes B.Sc. Nursing 1st sem. and GNM 1st year students of selected college of Noida, U.P.

Sample:

The sample was B.Sc. Nursing 1st sem. and GNM 1st year students of selected college of Noida, U.P.

Sample size:

The sample size was 40 students of B.Sc. Nursing 1st sem. and GNM 1st year.

Sampling technique:

A simple random sampling technique was adopted.

Tool

Tool I: Demographic proforma

Tool II: A rating scale for adaptation problems

Tool III: A rating scale for coping strategies

Description of the data collection tools and techniques

Tool I (Demographic Proforma): It consists of 08 questions containing demographic variables such as Age, Gender, Religion, Marital status, Place of stay, occupation of father, Monthly income, and Percentage of higher secondary marks.

Tool II (Likert scale for adaptation problems)

A 5-point Likert scale was used to assess the level of adaptation problems among first-year nursing students. It consists of 4 sub-categories: academic, social, financial and emotional which includes a total of 30 items.

Tool II (Likert scale for coping strategies)

A 5-point Likert scale was used to assess the level of coping strategies among first-year nursing students. It consists of a total of 20 items.

Content validity of the tool

In this study content validity was used, for the content validity of tools. The tools with request letters and rating scales were submitted to the five experts from the field of the nursing department along with the scoring sheet for validation. There were a few corrections which were made and incorporated.

Ethical consideration

Ethical approval was obtained from the ethical committee of the selected college of Noida for conducting the research study. The written informed consent form was prepared for

the study subjects regarding their willingness to participate in the research project and the purpose for carrying out the research project was explained to the members.

Data collection procedure

The tools were administered among 40 nursing students from selected colleges. The average time taken by the first-year nursing students to fill out the questionnaire was 10-15 minutes. The data-gathering process was concluded by expressing gratitude to each participant for their cooperation and kind involvement.

4. Findings

Section- A

Table 1: Frequency and percentage distribution of first-year students based on demographic characteristics, (N=40)

S. No.	Demographic variable	Frequency (f)	Percentage (%)
1	Age		
	a) 17-20	2	5%
	b) 21-24	38	95%
	c) 25-28	0	0%
2	Gender		
	a) Male	5	87%
	b) Female	35	13%
3	Religion		
	a) Hindu	6	15%
	b) Muslim	5	13%
	c) Christian	29	72%
4	Marital status		
	a) Unmarried	2	5%
	b) Married	38	95%
	c) Widow	0	0%
5	Place of stay		
	a) Hostel	35	87%
	b) Home	5	13%
	c) PG	0	0%
6	Occupation of Father		
	a) Private	15	38%
	b) Government	25	62%
	c) Self-employed	0	0%
7	Monthly Income		
	a) 20,000-40,000	8	20%
	b) 50,000-70,000	18	45%
	c) 80,000-1,00,000	14	35%
8	Percentage of higher secondary marks		
	a) 51-60%	15	37%
	b) 61-70%	24	60%
	c) 71-80%	1	3%
	d) Above 80%	0	0%

Table no. 1 depicts that, the majority (56%) of the students were male in the age group of 21-23 years, most of the students (90%) were Hindu, (94%) of students were single, (80%) students were living in a nuclear family, (50%) of students were in GNM and (50%) in B.Sc. In nursing, (63%)

of students have undergone clinical demonstration, (44%) of students have sources of information through the institute, (and 40%) of students only observe antenatal examination.

Section B

Table 2: Frequency and percentage distribution of pre-test adaptation problems and coping strategies among first-year nursing students, (N=40)

Adaptation Problems	Level	Score	(f)	(%)
Academic	Mild	14-18	14	35%
	Moderate	13-09	24	60%
	Severe	08-04	2	5%
Social	Mild	14-18	4	10%
	Moderate	13-09	15	38%
	Severe	08-04	21	52%
Emotional	Mild	11-15	20	50%
	Moderate	10-06	14	35%
	Severe	05-01	06	15%
Financial	Mild	14-18	10	25%
	Moderate	13-09	24	60%
	Severe	08-04	06	15%
Coping Strategies	Good	25-30	06	15%
	Fair	19-24	14	35%
	Poor	14-18	20	50%

Table no. 2 depicts that most of the first-year students (60%) were having moderate academic problems (60%), (52%) were having severe social problems, (50%) were having mild emotional problems, (60%) were having moderate financial problems and (50%) were using poor coping strategies.

Section C

Table 3: Frequency and percentage distribution of post-test adaptation problems and coping strategies among first-year nursing students, (N=40)

Adaptation Problems	Level	Score	(f)	(%)
Academic	Mild	14-18	8	20%
	Moderate	13-09	32	80%
	Severe	08-04	0	0%
Social	Mild	14-18	6	15%
	Moderate	13-09	30	75%
	Severe	08-04	4	10%
Emotional	Mild	11-15	4	10%
	Moderate	10-06	34	85%
	Severe	05-01	2	5%
Financial	Mild	14-18	2	5%
	Moderate	13-09	26	65%
	Severe	08-04	2	5%
Coping Strategies	Good	25-30	4	10%
	Fair	19-24	34	85%
	Poor	14-18	2	5%

Table no. 3 depicts that most of the first-year students (80%) were having moderate academic problems, (75%) were having moderate social problems, (85%) were having moderate emotional problems, (65%) were having moderate financial problems and (85%) were using fair coping strategies.

Section D

Table 4: z-test value showing Mean of pre-test and post-test scores of adaptation problems and coping strategies.

(N=40)					
Adaptation Problems	Mean	Median	MD	SD	"Z" Value
Pre-test	66.46	93.5	2.52	10.50	2.34
Post-test	63.94	93		10.10	

Table no. 4 depicts that the mean pre-test score of first-year nursing students is higher than the mean post-test score, with a mean difference of 2.52. The obtained mean difference was found to be statistically significant as evident from the "z" value of (2.34) at 0.05 significance which is greater than the table value (2.0).

5. Conclusion

The results of this research led to the subsequent deductions. First-year nursing students' mean pre-test score is greater than their mean post-test score. 2.52 is the mean difference. Given that the "z" value of (2.34) at 0.05 significance is higher than the table value (2.0), the computed mean difference was determined to be statistically significant. It may be concluded that a structured teaching program was a useful approach for coping mechanisms and adaption issues.

6. Discussion

Accommodation and adjustment are frequently used interchangeably with adaptation. It is used to highlight how difficult it is for each person to cope with or survive in the social and physical aspects related to adjusting to college, such as anxiety, depression, anger, tension, vulnerability, and mental disease are signs of poor adaptation. When these issues come together, they cause major adaptation issues that will prevent students from finishing their education. Coping mechanisms are utilized to address psychological problems such as adaptability. A person's continuously shifting cognitive and behavioural attempts to manage particular internal and external challenges are known as coping strategies.

A study was conducted in June 2017 to determine the prevalence of adjustment issues among college students in Katni, India. According to the results, 25.6% had low adjustment values, 36% had medium adjustment values, and 38.6% had high. 33% of girls exhibit high adjustment, compared to 45% of boys. Adolescent college students are capable of the most adjustment due to their numerous aspirations, commitments, flexibility, and wishes to realize them. They are psychologically ready to adapt to achieve their objective. According to a survey conducted in Sultanpur City, 46% of respondents had an average level of home adjustment, 66% had an average level of health adjustment, 53% had a good social adjustment, and 46% had a good emotional adjustment.

7. Recommendations

The following suggestions are offered in light of the study's findings:

- A comparable investigation with a bigger sample size might be carried out for improved generalization.
- A planned teaching program on coping techniques can be used to conduct a study.

References

- [1] Aspinwall, L.G., & Taylor, S.E.(1992). Modelling Cognitive Adaptation: A longitudinal investigation of the impact of individual differences and coping on college adjustment and performance. *Journal of Personality and Social Psychology*, page no. 63,989-1003.
- [2] Barbayannis, G., Bandari, M., Zheng, X., Baquerizo, H., Pecor, K. W., & Ming, X. (2022). Academic Stress and Mental well-being in College Students. *Frontiers in Psychology*,13. doi: 10.3389/fpsyg.2022.886344
- [3] Nyamayaro PC C. S. The relationship between adjustment and negative emotional states among first-year medical students. *Asian Journal of Social Sciences and Humanities*. 2013;2(3):270–278.]
- [4] Nagorkina, O.V. (2006). *Sotsialno-psikhologicheskaya adaptatsiya studentov v vuze v usloviyakh razvitiya studencheskogo samoupravleniya* [Social and psychological adaptation of students at university under conditions of the development of student self-government]. Samara, Russia: Samborski gosudarstvennyy pedagogicheskiy universitet. <http://search.rsl.ru/ru/record/01003273246>
- [5] Nalchajyan, A.A. (2010). *Psikhicheskaya adaptatsiya: mekhanizmy i strategii* [Psychological adaptation: mechanisms and strategies]. Moscow: Eksmo.
- [6] Vollrath, M...& Torgersen.S. (2000). Personality types and coping. *Personality and Individual Differences* .29, 367-378.
- [7] Dunkley, D.M., Blankstein, K.R., Haisall, J. Williams, M., & Winkworth, G. (2000). The relation between Perfectionism and Distress: Hassles, Coping, and Perceived social support as mediators and moderators. *Journal of Counseling Psychology*, page no. 47, 437-453.
- [8] Chang, E.C. (2000). Perfectionism as a predictor of positive and negative psychological outcomes: Examining a mediation model in younger and older adults. *Journal of Counselling Psychology*. page no. 47, 437-453.