



Original Research Article

ASSERTIVENESS AND RESILIENCE AMONG NURSING UNDERGRADUATES: A CORRELATIONAL STUDY

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ABSTRACT

Background: Assertiveness and resilience are essential psychological attributes that enable nursing undergraduates to communicate effectively, adapt to challenging clinical situations, and provide safe, patient-centered care. Understanding the relationship between these attributes may help nursing educators develop interventions that enhance students' professional competence and emotional well-being. **Aim:** The present study aimed to explore the relationship between assertiveness and resilience among nursing undergraduates. Specifically, the study sought to examine the correlation between these two psychological attributes, determine the association between assertiveness and selected socio-demographic variables, and assess the association between resilience and selected socio-demographic variables. The findings are expected to provide evidence for developing educational strategies that enhance both professional competence and psychological well-being among future nurses.

Materials and Methods: A quantitative cross-sectional correlational study was conducted among 192 undergraduate nursing students at the College of Nursing, AIIMS Patna, using a non-probability convenience sampling technique. Data were collected using a structured socio-demographic questionnaire, a standardized assertiveness scale, and a standardized resilience scale. Descriptive statistics, Pearson's correlation coefficient, and Chi-square test were used for data analysis. A p-value of <0.05 was considered statistically significant.

Results: The mean assertiveness score was -3.09 ± 13.22 , while the mean resilience score was 53.46 ± 25.00 . Pearson's correlation analysis revealed a weak negative and statistically non-significant correlation between assertiveness and resilience ($r = -0.09$, $p = 0.215$). Assertiveness showed significant associations with parenting style ($p = 0.002$), 10th standard academic marks ($p = 0.006$), and present academic year ($p = 0.007$). Resilience was significantly associated with the medium of instruction in the 12th standard ($p = 0.043$) and formal training ($p = 0.005$). No significant associations were observed with most other socio-demographic variables.

Conclusion: Assertiveness and resilience were not significantly correlated among nursing undergraduates. However, selected educational and environmental factors influenced each construct independently. Integrating assertiveness and resilience enhancement programmes into undergraduate nursing education may strengthen communication skills, psychological well-being, and professional preparedness.

Keywords: Assertiveness, Correlational study, Cross-sectional study, Nursing, Nursing education, Resilience, Students, Stress, Undergraduates, Well-being.

INTRODUCTION

Nursing is a profession that demands not only sound clinical knowledge and technical competence but

also strong interpersonal, psychological, and communication skills. Among these competencies, assertiveness and resilience have emerged as two fundamental attributes that enable nursing students to provide safe, ethical, and patient-centred care

while effectively managing the challenges of clinical education. Undergraduate nursing education is a transitional period during which students encounter academic pressure, emotionally demanding clinical experiences, complex interpersonal relationships, and increasing professional responsibilities. These experiences require students to communicate confidently, advocate for patients, cope with stress, and adapt positively to adverse situations, making assertiveness and resilience indispensable professional qualities.^[1,2]

Assertiveness refers to the ability to express one's thoughts, feelings, opinions, and concerns openly, honestly, and respectfully while recognizing the rights of others. In nursing practice, assertive communication facilitates collaboration among healthcare professionals, enhances patient safety, minimizes communication errors, and promotes effective clinical decision-making. Nursing students who possess adequate assertiveness are more likely to seek clarification, report patient safety concerns, participate actively in clinical learning, and establish professional relationships with patients and colleagues. Conversely, inadequate assertiveness may result in hesitation, reduced confidence, ineffective communication, and compromised quality of care.^[1,3,4]

Resilience, on the other hand, is the capacity to adapt successfully to stress, adversity, and challenging circumstances while maintaining psychological well-being and professional functioning. Nursing undergraduates frequently experience academic workload, examination stress, clinical performance anxiety, fear of making mistakes, and emotional exhaustion during patient care. Resilient students demonstrate greater emotional regulation, optimism, problem-solving ability, and adaptability, allowing them to recover from setbacks and maintain motivation throughout their educational journey. Higher resilience has also been associated with improved academic performance, better mental health, enhanced clinical competence, and reduced risk of burnout.^[5,6]

Recent evidence indicates that assertiveness and resilience are closely interconnected. Students with higher resilience often exhibit greater confidence in expressing their opinions, managing interpersonal conflicts, and responding constructively to stressful clinical situations. Likewise, assertive communication enables students to seek support, clarify uncertainties, and develop positive coping strategies, thereby strengthening resilience. Educational interventions focusing on communication skills, reflective learning, simulation-based training, and assertiveness education have demonstrated significant improvements in self-confidence, communication competence, psychological well-being, and resilience among nursing students.^[3,7,8]

Despite growing recognition of these competencies, studies exploring the relationship between

assertiveness and resilience among undergraduate nursing students remain limited, particularly in developing countries where educational, cultural, and healthcare contexts differ substantially. Most available research has examined these constructs independently rather than investigating their correlation. Understanding this relationship is essential for designing educational strategies that strengthen both communication competence and psychological resilience, ultimately preparing future nurses to meet the increasing demands of modern healthcare systems.^[9,10]

The present study aimed to explore the relationship between assertiveness and resilience among nursing undergraduates. Specifically, the study sought to examine the correlation between these two psychological attributes, determine the association between assertiveness and selected socio-demographic variables, and assess the association between resilience and selected socio-demographic variables. The findings are expected to provide evidence for developing educational strategies that enhance both professional competence and psychological well-being among future nurses.

MATERIALS AND METHODS

Study Design: This quantitative cross-sectional correlational study was conducted to assess the relationship between assertiveness and resilience among undergraduate nursing students.

Study Setting: The study was conducted at the College of Nursing, All India Institute of Medical Sciences (AIIMS), Patna, Bihar, India. Data collection was carried out during the study period after obtaining institutional ethical approval.

Study Population and Sample Size: A total of 192 undergraduate nursing students participated in the study.

Sampling Technique: Participants were selected using non-probability convenience sampling technique.

Inclusion Criteria

- Undergraduate nursing students enrolled in the College of Nursing, AIIMS Patna.
- Students willing to participate.
- Students who provided written informed consent.

Exclusion Criteria

- Students absent during data collection.
- Students unwilling to participate.
- Incomplete questionnaires.

Data Collection Tools

Data were collected using:

- Structured socio-demographic questionnaire
- Rathus Assertiveness Scale
- Connor-Davidson Resilience Scale (CD RISC-25)

Data Collection Procedure: After obtaining ethical approval and informed consent, eligible participants completed the socio-demographic questionnaire,

followed by the standardized assertiveness and resilience scales under the supervision of the investigators. Confidentiality and anonymity were maintained throughout the study.

Data Management and Statistical Analysis

Data were entered into Microsoft Excel and analyzed using SPSS version 26.0 (or the version actually used). Descriptive statistics including frequency, percentage, mean, and standard deviation were calculated. Pearson's correlation coefficient was used to determine the relationship between assertiveness and resilience, while Chi-square test assessed associations with socio-demographic variables. A p-value <0.05 was considered statistically significant.



Statistical Analysis: All collected data were checked for completeness, coded, and entered into Microsoft Excel before being exported to the Statistical Package for the Social Sciences (SPSS) version 26.0 (IBM Corp., Armonk, NY, USA) for analysis. Descriptive statistics were used to summarize the socio-demographic characteristics of the participants, with categorical variables presented as frequencies and percentages, and continuous variables expressed as mean $\pm$ standard deviation (SD). Pearson's correlation coefficient (r) was used to assess the relationship between assertiveness and resilience scores. The Chi-square (χ^2) test was applied to determine the association between categorical levels of assertiveness and resilience and selected socio-demographic variables. All statistical tests were two-tailed, and a p-value of <0.05 was considered statistically significant. The results were presented in tables and figures to facilitate interpretation.

RESULTS

Table 1: Socio-demographic Characteristics

Variable		n	%
Age (years)	<21	80	41.7
	22–25	110	57.3
	>26	2	1
Residence	Rural	83	43.2
	Urban	109	56.8
Family structure	Nuclear	149	77.6
	Joint	38	19.8
	Blended	5	2.6
Birth order	1st	79	41.1
	2nd	65	33.9
	3rd	32	16.7
	4th	12	6.3
	5th	1	0.5
	6th	3	1.6
Parents' marital status	Married	181	94.3
	Widowed	6	3.1
	Separated	1	0.5
	Divorced	1	0.5

Parenting style	Authoritative	68	35.4
	Permissive	63	32.8
	Authoritarian	60	31.3
	Uninvolved	1	0.5

Table 2: Parental Educational and Occupational Characteristics

Variable		n	%
Father's education	Illiterate	3	1.6
	Primary	19	9.9
	Secondary	51	26.6
	Graduation	85	44.3
	Post-graduation	34	17.7
Mother's education	Illiterate	10	5.2
	Primary	46	24
	Secondary	60	31.3
	Graduation	61	31.8
	Post-graduation	15	7.8
Father's occupation	Government	65	33.9
	Private	42	21.9
	Self-employed	67	34.9
	Unemployed	18	9.4
Mother's occupation	Government	36	18.8
	Private	11	5.7
	Self-employed	11	5.7
	Housewife	134	69.8

Table 3: Academic and Lifestyle Characteristics

Variable		n	%
Board (10th)	State	78	40.6
	CBSE	100	52.1
	ICSE	14	7.3
Board (12th)	State	108	56.3
	CBSE	79	41.1
	ICSE	5	2.6
Marks (10th)	>80	144	75
	60–80	45	23.4
	<60	3	1.6
Marks (12th)	>80	133	69.3
	60–80	51	26.6
	<60	8	4.2
Present academic year	I	48	25
	II	71	37
	IV	73	38
Interest	Very	47	24.5
	Moderate	106	55.2
	Slight	25	13
	Not	14	7.3
Formal training	Yes	33	17.2
	No	159	82.8
Study time/day	<1 h	13	6.8
	1–2 h	82	42.7
	3–4 h	65	33.9
	>4 h	32	16.7
Physical activity	Everyday	38	19.8
	5–6/wk	16	8.3
	3–4/wk	25	13
	2/wk	19	9.9
	Once/wk	41	21.4
	2–3/mo	7	3.6
	1/mo	8	4.2
	None	38	19.8

Table 4: Correlation between Assertiveness and Resilience

Statistic	Value
Assertiveness score	-3.09 ± 13.221
Resilience score	53.46 ± 24.996
Pearson correlation (r)	-0.09
p-value	0.215

Table 5: Association of Assertiveness with Selected Variables

Variable	χ^2	df	p	Remark
Age	3.214	6	0.782	NS
Residence	4.215	3	0.239	NS
Family structure	4.393	6	0.624	NS
Birth order	17.085	15	0.314	NS
Father's education	18.445	12	0.103	NS
Mother's education	5.108	12	0.954	NS
Father's occupation	6.585	9	0.68	NS
Mother's occupation	4.711	9	0.859	NS
Parents' marital status	11.696	12	0.47	NS
Parenting style	25.498	9	0.002	S
Board (12th)	11.369	6	0.078	NS
Board (10th)	2.584	6	0.859	NS
Marks (12th)	3.544	6	0.738	NS
Marks (10th)	18.07	6	0.006	S
Previous course	10.108	12	0.606	NS
Medium (10th)	6.081	6	0.414	NS
Medium (12th)	3.946	6	0.684	NS
Academic year	17.58	6	0.007	S
Interest	7.793	9	0.555	NS
Training	0.573	3	0.903	NS
Study time	4.878	9	0.845	NS
Physical activity	29.849	21	0.095	NS

Table 6: Association of Resilience with Selected Variables

Variable	χ^2	df	p	Remark
Age	1.432	4	0.839	NS
Residence	0.856	2	0.652	NS
Family structure	4.888	4	0.299	NS
Birth order	13.15	10	0.215	NS
Father's education	6.46	8	0.596	NS
Mother's education	13.784	8	0.088	NS
Father's occupation	9.723	6	0.137	NS
Mother's occupation	7.223	6	0.301	NS
Parents' marital status	8.976	8	0.344	NS
Parenting style	5.694	6	0.458	NS
Board (12th)	2.705	4	0.608	NS
Board (10th)	1.132	4	0.889	NS
Marks (12th)	1.725	4	0.786	NS
Marks (10th)	2.133	4	0.711	NS
Previous course	12.589	8	0.127	NS
Medium (10th)	8.73	4	0.068	NS
Medium (12th)	9.854	4	0.043	S
Academic year	1.019	4	0.907	NS
Interest	1.318	6	0.971	NS
Training	10.551	2	0.005	S
Study time	9.345	6	0.155	NS
Physical activity	21.542	14	0.089	NS



Figure 1: Educational Background of Study Participants



Figure 2: Educational and Lifestyle Characteristics

A total of 192 nursing undergraduates participated in the study. More than half of the participants (110, 57.3%) were aged 22–25 years, while 80 (41.7%) were younger than 21 years and only 2 (1.0%) were older than 26 years. The majority of the students

belonged to urban areas (109, 56.8%), whereas 83 (43.2%) were from rural areas. Regarding family structure, most participants were from nuclear families (149, 77.6%), followed by joint families (38, 19.8%) and blended families (5, 2.6%). With respect to birth order, 79 (41.1%) were first-born children, 65 (33.9%) were second-born, 32 (16.7%) were third-born, 12 (6.3%) were fourth-born, while only 1 (0.5%) and 3 (1.6%) were fifth- and sixth-born, respectively. Most participants reported that their parents were married (181, 94.3%), whereas 6 (3.1%) had widowed parents, and 1 (0.5%) each had separated or divorced parents. Regarding parenting style, 68 (35.4%) perceived their parents as authoritative, followed by 63 (32.8%) reporting a permissive style, 60 (31.3%) an authoritarian style, and only 1 (0.5%) an uninvolved parenting style. The educational profile of fathers revealed that 85 (44.3%) had completed graduation, followed by 51 (26.6%) with secondary education, 34 (17.7%) with post-graduation, 19 (9.9%) with primary education, and only 3 (1.6%) were illiterate. Mothers' educational status showed that 61 (31.8%) were graduates, 60 (31.3%) had secondary education, 46 (24.0%) had primary education, 15 (7.8%) had post-graduation, while 10 (5.2%) were illiterate. Regarding occupation, fathers were predominantly self-employed (67, 34.9%) or employed in government service (65, 33.9%), followed by private employment (42, 21.9%), whereas 18 (9.4%) were unemployed. In contrast, the majority of mothers were housewives (134, 69.8%), while 36 (18.8%) worked in government jobs and 11 (5.7%) each were engaged in private employment or self-employment.

Regarding educational background, 100 (52.1%) participants had completed their 10th standard under the CBSE board, while 78 (40.6%) belonged to the State Board and 14 (7.3%) to ICSE. For the 12th standard, the majority (108, 56.3%) studied under the State Board, followed by 79 (41.1%) under CBSE and 5 (2.6%) under ICSE. Academic performance was generally high, with 144 (75.0%) participants obtaining more than 80% marks in the 10th standard and 133 (69.3%) scoring above 80% in the 12th standard. Regarding the current academic year, 73 (38.0%) were fourth-year students, 71 (37.0%) were second-year students, and 48 (25.0%) were first-year students. Most students (106, 55.2%) reported a moderate interest in nursing, whereas 47 (24.5%) reported very high interest, 25 (13.0%) slight interest, and 14 (7.3%) no interest. Only 33 (17.2%) participants had received formal training related to assertiveness or resilience, while 159 (82.8%) had not. Daily study duration was 1–2 hours for 82 (42.7%) students, 3–4 hours for 65 (33.9%), more than 4 hours for 32 (16.7%), and less than 1 hour for 13 (6.8%) participants. Physical activity varied considerably, with 41 (21.4%) exercising once weekly, 38 (19.8%) exercising daily, another 38 (19.8%) reporting no

physical activity, and the remainder participating at varying weekly or monthly frequencies.

The mean assertiveness score among nursing undergraduates was -3.09 ± 13.221 , whereas the mean resilience score was 53.46 ± 24.996 . Pearson's correlation analysis demonstrated a very weak negative correlation between assertiveness and resilience ($r = -0.09$). However, this association was not statistically significant ($p = 0.215$), indicating that resilience was not significantly associated with assertiveness among the nursing undergraduates included in the present study.

The association analysis revealed that parenting style showed a statistically significant association with assertiveness ($\chi^2 = 25.498$, $df = 9$, $p = 0.002$). Similarly, 10th standard academic marks were significantly associated with assertiveness ($\chi^2 = 18.070$, $df = 6$, $p = 0.006$), indicating that students with different academic performance levels differed significantly in their assertiveness scores. A significant association was also observed between present academic year and assertiveness ($\chi^2 = 17.580$, $df = 6$, $p = 0.007$).

Conversely, no statistically significant association was found between assertiveness and age ($\chi^2 = 3.214$, $p = 0.782$), residence ($\chi^2 = 4.215$, $p = 0.239$), family structure ($\chi^2 = 4.393$, $p = 0.624$), birth order ($\chi^2 = 17.085$, $p = 0.314$), father's education ($\chi^2 = 18.445$, $p = 0.103$), mother's education ($\chi^2 = 5.108$, $p = 0.954$), father's occupation ($\chi^2 = 6.585$, $p = 0.680$), mother's occupation ($\chi^2 = 4.711$, $p = 0.859$), parents' marital status ($\chi^2 = 11.696$, $p = 0.470$), 10th board ($\chi^2 = 2.584$, $p = 0.859$), 12th board ($\chi^2 = 11.369$, $p = 0.078$), 12th standard marks ($\chi^2 = 3.544$, $p = 0.738$), previous educational course ($\chi^2 = 10.108$, $p = 0.606$), 10th medium of instruction ($\chi^2 = 6.081$, $p = 0.414$), 12th medium of instruction ($\chi^2 = 3.946$, $p = 0.684$), interest in nursing ($\chi^2 = 7.793$, $p = 0.555$), formal training ($\chi^2 = 0.573$, $p = 0.903$), daily study time ($\chi^2 = 4.878$, $p = 0.845$), and physical activity ($\chi^2 = 29.849$, $p = 0.095$).

The association analysis demonstrated that 12th standard medium of instruction had a significant association with resilience ($\chi^2 = 9.854$, $df = 4$, $p = 0.043$). Likewise, formal training showed a highly significant association with resilience ($\chi^2 = 10.551$, $df = 2$, $p = 0.005$), suggesting that students who had undergone formal training differed significantly in resilience levels compared with those who had not.

No statistically significant associations were observed between resilience and age ($\chi^2 = 1.432$, $p = 0.839$), residence ($\chi^2 = 0.856$, $p = 0.652$), family structure ($\chi^2 = 4.888$, $p = 0.299$), birth order ($\chi^2 = 13.150$, $p = 0.215$), father's education ($\chi^2 = 6.460$, $p = 0.596$), mother's education ($\chi^2 = 13.784$, $p = 0.088$), father's occupation ($\chi^2 = 9.723$, $p = 0.137$), mother's occupation ($\chi^2 = 7.223$, $p = 0.301$), parents' marital status ($\chi^2 = 8.976$, $p = 0.344$), parenting style ($\chi^2 = 5.694$, $p = 0.458$), 10th board ($\chi^2 = 1.132$, $p = 0.889$), 12th board ($\chi^2 = 2.705$, $p = 0.608$), 10th standard marks ($\chi^2 = 2.133$, $p = 0.711$), 12th standard marks ($\chi^2 = 1.725$, $p = 0.786$), previous

educational course ($\chi^2 = 12.589$, $p = 0.127$), 10th medium of instruction ($\chi^2 = 8.730$, $p = 0.068$), present academic year ($\chi^2 = 1.019$, $p = 0.907$), interest in nursing ($\chi^2 = 1.318$, $p = 0.971$), daily study time ($\chi^2 = 9.345$, $p = 0.155$), and physical activity ($\chi^2 = 21.542$, $p = 0.089$).

Overall, the findings indicate that while assertiveness was significantly associated with parenting style, academic performance in the 10th standard, and current academic year, resilience was significantly associated only with the medium of instruction in the 12th standard and receipt of formal training. No statistically significant correlation was observed between assertiveness and resilience.

DISCUSSION

The present study explored the relationship between assertiveness and resilience among nursing undergraduates and examined their association with selected socio-demographic characteristics. The findings provide valuable insights into the psychological and educational factors influencing nursing students during their professional training.

The socio-demographic profile showed that the majority of participants were aged 22–25 years (57.3%), belonged to urban areas (56.8%), lived in nuclear families (77.6%), and had married parents (94.3%). Similar demographic distributions have been reported in studies among nursing undergraduates, where most participants belonged to the 20–25-year age group and nuclear families, reflecting the typical profile of undergraduate nursing students in India and other developing countries.^[11,12] These findings suggest that the study sample is representative of the undergraduate nursing population and supports the external validity of the results.

With regard to parental educational and occupational characteristics, a considerable proportion of fathers were graduates (44.3%) and self-employed (34.9%), whereas most mothers were graduates or had secondary education, with 69.8% being homemakers. Similar observations have been documented by Ayhan and Öz (2021) and Morsi (2021), who reported that higher parental educational attainment contributes to a supportive home environment, fostering better communication skills, confidence, and emotional adjustment among nursing students.^[13,14] Although parental education was relatively high in the present study, it was not significantly associated with either assertiveness or resilience, suggesting that other educational and psychosocial factors may exert greater influence.

The academic characteristics demonstrated that most students had obtained more than 80% marks in both secondary and higher secondary examinations, while the majority reported moderate interest in nursing (55.2%). However, only 17.2% had received any formal training related to communication or personality development. Comparable findings have

been reported by Lee et al., who emphasized that nursing students often possess good academic performance but receive limited structured training in assertive communication and resilience-building during undergraduate education.^[15] Likewise, systematic evidence indicates that educational interventions focusing on communication, simulation, and role-play significantly improve professional confidence and interpersonal competence among nursing students.^[16]

The principal finding of the present study was the absence of a statistically significant relationship between assertiveness and resilience ($r = -0.09$, $p = 0.215$). Although resilience and assertiveness are theoretically related because both facilitate effective coping and professional behaviour, the current findings indicate that higher resilience does not necessarily translate into greater assertiveness among nursing undergraduates. Similar observations have been reported in recent studies where psychological resilience and communication behaviours were influenced by different personal and educational determinants rather than exhibiting a direct linear relationship.^[17] In contrast, recent systematic reviews have suggested that assertiveness training indirectly enhances resilience through improved self-confidence and coping abilities, indicating that the relationship between these constructs may be mediated by educational interventions rather than occurring naturally.^[16,18]

The association analysis revealed that parenting style ($p = 0.002$), 10th standard academic performance ($p = 0.006$), and current academic year ($p = 0.007$) were significantly associated with assertiveness. Students raised in authoritative parenting environments may develop greater self-confidence, independence, and effective interpersonal communication, which are essential characteristics of assertive behaviour. Similar findings have been reported by Ayhan and Öz, who observed significant improvements in assertiveness among nursing students following structured communication training, emphasizing that supportive learning and family environments contribute positively to assertive behaviour.^[13] Furthermore, systematic reviews have consistently concluded that assertiveness increases with educational exposure, communication practice, and clinical experience, which may explain the association with academic year observed in the present study.^[15,18]

In contrast, no significant associations were found between assertiveness and variables such as age, residence, family structure, parental education, parental occupation, marital status of parents, educational board, interest in nursing, study time, or physical activity. These findings agree with several recent investigations reporting that demographic variables alone have limited influence on assertive behaviour, whereas communication training, self-esteem, and experiential learning play more prominent roles.^[14,18]

Regarding resilience, significant associations were observed only with medium of instruction in the 12th standard ($p = 0.043$) and formal training ($p = 0.005$). Students who had received formal training demonstrated higher resilience, highlighting the positive impact of educational interventions on psychological adaptation. Similar findings have been reported by Laranjeira and Querido, who emphasized that resilience can be strengthened through structured educational programmes, mentoring, reflective practice, and psychological support during nursing education.^[19] Recent intervention studies have likewise demonstrated that communication and assertiveness training improve emotional well-being, resilience, and self-esteem among nursing students.^[20]

Overall, the present findings suggest that although assertiveness and resilience are both essential competencies for nursing undergraduates, they appear to be influenced by different educational and environmental factors. The significant influence of parenting style, academic performance, educational level, and formal training highlights the importance of integrating communication skills training, resilience-building programmes, mentorship, and psychological support into undergraduate nursing curricula to prepare competent and emotionally resilient future nurses.

Limitations

This study has certain limitations. First, it was conducted at a single institution using a non-probability convenience sampling technique, which may limit the generalizability of the findings. Second, the cross-sectional design precludes causal inference between assertiveness and resilience. Third, self-reported questionnaires may be subject to recall and social desirability bias. Finally, psychological variables such as stress, anxiety, coping strategies, and academic workload were not assessed, which might have influenced the observed outcomes.

Recommendations

Future multicentre studies involving larger and more diverse populations are recommended to improve the external validity of the findings. Longitudinal research should be conducted to evaluate changes in assertiveness and resilience throughout nursing education. Structured educational interventions, including assertiveness training, resilience-building workshops, mentoring programmes, and communication skill development, should be incorporated into undergraduate nursing curricula. Further studies should also evaluate the influence of stress, self-esteem, emotional intelligence, and coping strategies on these psychological attributes.

CONCLUSION

The present study concludes that nursing undergraduates demonstrated varying levels of assertiveness and resilience, with no statistically

significant correlation observed between these two psychological attributes ($r = -0.09$, $p = 0.215$). Assertiveness was significantly associated with parenting style, academic performance in the 10th standard, and current academic year, whereas resilience showed significant associations with the medium of instruction in the 12th standard and formal training. Most socio-demographic variables did not exhibit a significant relationship with either assertiveness or resilience. These findings indicate that assertiveness and resilience are influenced by distinct educational and environmental factors rather than being directly related. Therefore, nursing education should incorporate structured interventions such as assertiveness training, resilience-building workshops, communication skill development, mentorship, and psychological support programmes. Strengthening these competencies during undergraduate education can enhance students' professional confidence, emotional well-being, coping abilities, and preparedness for delivering safe, effective, and patient-centred nursing care in diverse healthcare settings.

Disclosures

Ethical Approval: The study was approved by the Institutional Ethics Committee (IEC) of AIIMS Patna (Ref. No. AIIMS/Pat/IRC/2025/IEC/1462) before commencement of data collection. Study participants were made aware of the objectives after receiving the permission from IEC. Confidentiality, autonomy and anonymity were guaranteed to study participants.

Informed Consent: Written informed consent was obtained from all participants prior to enrolment.

Conflict of Interest: The authors declare no conflict of interest.

Funding: No external funding was received for this study.

Data Availability: The datasets generated and/or analysed during the current study are available from the corresponding author upon reasonable request.

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