

Abstract

The role of classroom learning environment in building resilience among Indian Undergraduates: A Correlation Analysis

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Abstract

The purpose of present study is to examine the association of classroom learning environment in terms of Student Cohesiveness, Teacher Support, Involvement, Investigation, Task Orientation, Cooperation and Equity with resilience among Indian undergraduates. Random sampling technique will be used to collect data from undergraduates. Ex-Post facto research design will be used. Connor Richardson short form scale (Connor & Davidson, 2003) and What is happening in this class questionnaire (Fraser, Fisher & McRobbie, 1996) will be used to measure resilience and learning environment respectively. Pearson correlation will be computed to gauge the relationship between learning environment and resilience among undergraduates. t-test will also be employed to explore gender differences in (i) resilience level among undergraduates and (ii) learning environment and its associated components among Indian undergraduates. Statistical analysis of the data revealed that there exists no gender differences in learning environment, its subscales and resilience among Indian Undergraduates. Correlational analysis suggested that learning environment and its sub-scales i.e. Student Cohesiveness, Teacher Support, Involvement, Investigation, Task Orientation, Cooperation and Equity are positively and significantly correlated with resilience among Indian undergraduates. Education implications for the educators and policy makers were discussed.

Introduction

Nowadays, Education system has created an atmosphere for the students to achieve high and have high motivation in performing the task. (Hussain & Thakur., 2018). An adolescent is the age where students face various difficulties in focusing on one given task. The undergraduate students of the university come under the age of adolescence in which students are dealing with various ups and downs of life. These students are required

special attention by the teachers and parents as well to make them consistent in their behavior and attitude. The three major aspects which constitute the process of learning, i.e. learning of the learner, teaching of the students and the Learning Environment (Kapadi,2009). For deep transformative learning, the learning environment is required to influence the attitude of the students. Classrooms can be models of cohesiveness or exemplar of friction, Prototype of goal direction or paragons of disorganization. It is a teacher who establishes the environment of the classroom according to the needs of the students which makes the environment competitive, cooperative and in line with the individuals. The atmosphere of the classroom influenced the attitude of the students. The efficient teacher designed their classroom full of positive energy so that the students may be encouraged to understand the concepts and be able to take the onus on their shoulders for their learning. To make the learner efficient, resilience makes the students able to stand firmly in achieving success despite many adversities (Rabia, 2022). Resilience can be defined as the process which has changed with time and can be influenced by the environment (Molinero. et.al. 2018). However, resilience brings back the student from trauma and stress. Everybody can realize the intensity and gravity of the situation but how effectively the people deal with the situation makes the students more resilient (Choudhary & Sharma,2019).

It is a well known fact that human personality is a product of heredity and environment. Human passes throughout his life to different social institutions like home, school, neighborhood, religious places that have different environmental characteristics, which in turn influence their personality. Review of the literature disclosed that the learning environment of the individual has a marked influence on different psychological traits. The Learning environment is considered to be an influential element that participates in stimulating the learning outcomes which affect the academic performance of the students (Dhanapala,2021). However, it also consists of the entire sum of activities and components which affect the learning of the students. It is a set of internal and external occurrences in which surroundings influence and impact the learning of the students. It is created in such a way that ensures the academic success of the students not only focussing on the behavior of the students inside the classroom. It incorporates the characteristics that have given prominence to the learning of the students which includes, the involvement of the students in what is being taught in the classroom, the involvement in the classroom with a sense of belongingness and well being. It also integrates the interaction with the teachers (kaur,2017).

The learning environment is not confined to the classroom only but it has an effect on the day- to – day life of the students. Conducive learning environment helps in developing energetic, optimistic, intelligent, disciplined and truthful individuals (Kumar,2016). Past research documented that the learning environment affects the capacity building of the students to deal with adverse situations in life. But, the question here arises that what should be the constituent elements of a learning environment, if the objective is to develop resilient individuals. The objective is to uncover the characteristics of such a learning environment that would develop the ability of the students to face the downs of life in an efficient manner. The undergraduate students are so chosen as they are in their late adolescent or early adulthood period and are at greater risk of falling out for diverse challenges like making decisions in various fields like being in academics ,personal and social life, choosing future career paths, peer pressures, unrealistic expectations and many more. Moreover, there are only a handful of studies that examine the relationship between learning environment and resilience among students. So, to fill in this research gap it would be worthwhile to study the association of the learning environment (if any) with resilience among Indian undergraduates.

Review of Literature

Shrestha et.al. (2019) revealed that the perception of the learning environment among students was positive. Learner centered approach used by the teacher has a significant influence on the learning of the students.

Rizvia & Malik (2018) revealed that the subscales, 'Involvement', 'Personal relevance', 'Emphasis on understanding', were major predictors contributing towards classroom learning environment and students' academic

achievement whereas subscales 'Investigation' and 'Autonomy' have negative effect on students' academic achievement.

Dangara & Geraldine (2019) revealed that the school climate, discipline and physical facilities have significant influence on academic achievement of students. Environmental factors (appropriate coloring, lighting of educational environments and schools' open space) have an impact on learning and academic achievement of students.

Choudhary & Sharma (2019) study investigated that the students from Government schools are higher in the level of resilience than the students of private schools and also there is significant difference in comparison of their level of resilience. On the other hand, in the dimension of emotional intelligence, the students of private schools were found to be on the higher side than the students of government schools, but there is no significant difference in the comparison of emotional intelligence between the students of both the school types .

Lucero (2021) revealed through research study that there is a significant relationship between Resilience and Emotional Intelligence among 49 helping professionals. Well-being was found to be a good predictor to the Helping Professionals Emotional Intelligence as well as Resilience .

Hussain & Thakur (2019) documented that resilience and mindfulness are highly correlated among male and female students. Resilience and academic stress are highly negatively correlated among male and female students. Furthermore, academic stress and mindfulness are found to be highly negatively correlated.

Pidgeon et al.(2014) revealed that perceived social support, campus connectedness, and psychological distress accounted for a significant proportion (36%) of the variance between the high and low resilience groups of university students. University students with low levels of resilience reported significantly lower levels of perceived social support, campus connectedness, and higher levels of psychological distress, in comparison to university students with high levels of resilience.

Narwhal (2021) investigated the resilience, the satisfaction and life quality in athletes. Analysis of the data disclosed that both the life quality and resilience of athletes are positively correlated with each other.

Hannah (2013) revealed that the physical structure of the classroom and other non- physical aspects like sound, temperature, seating arrangement have a significant effect on the academic achievement of the students.

Singh (2020) studied the big five personality traits along with resilience. Results showed that women are more conscientious and neurotic as compared to men whereas no significant difference was established on the basis of gender in extraversion, agreeableness, openness to experience and resilience. It was also found that all the subdimensions of personality are associated with resilience ranging from having a weak positive correlation to having a strong positive correlation.

Objectives of the research study

1. The research paper aimed to investigate the relationship (if any) of the learning environment with resilience among Indian undergraduates.
2. The researcher aimed to explore the gender differences in learning environment and resilience among Indian undergraduates.

Hypotheses of the research study

1. There will be no significant relationship between the learning environment and resilience among Indian undergraduates.
2. There will be no significant relationship between learning environment sub scales i.e. student cohesiveness, teacher support, involvement, investigation, task orientation, cooperation and equity and resilience among Indian undergraduates.
3. There will be no significant gender differences in learning environment and its subscales i.e. student cohesiveness, teacher support, involvement, investigation, task orientation, cooperation and equity among Indian undergraduates.
4. There will be no significant gender differences in resilience levels among Indian undergraduates.

Methodology:

a) Study design and setting

Descriptive approach of research with ex-post-facto design was used to obtain objectives of the research paper.

(b) Universe and Sample

The universe of study consisted of undergraduate students of Indian Universities. The tools were randomly distributed to the undergraduates via google forms. The researcher received the responses from 98 students out of which responses of 18 students were excluded due to incomplete filling of psychological tools. The final sample of 79 Indian undergraduate students who fall in the age range from 17-21 years were selected from a private University of Talwandi Sabo which is situated in Bathinda district. The general demographic characteristics of the sample reflect that 19% are male and 81% are female students. Further, 35% of the Indian undergraduates belong to joint families and the remaining 65% reside in nuclear families.

(c) Tools used

1. **Connor Richardson short form scale (Connor & Davidson, 2003).** was used to assess resilience. This is a 5 point Likert Scale with options Not true at all, Rarely True, Sometimes True, Often True, true nearly at all the time. The items are scored on a scale from 0 (not true at all) to 4 (true nearly all the time)
2. **What is happening in this class questionnaire (Fraser, Fisher & McRobbie, 1996)** has been used for measuring the Learning Environment. The 'Preferred' column used and the items are scored on this scale from 1 (Almost Never) to 5 (Almost always).

(d) Data collection

Prior to data collection, permission from the Heads of the respective departments were sought. An informal consent was received from the participants for their participation in the research study after informing them about the purpose of the present study. Participants were assured by the researcher about the confidentiality of the data and its usage for research purposes only. Research tools were distributed to the students by creating Google forms with crystal clear instructions for each research tool used.

(e) Statistical treatment of data

For statistical treatment of collected data, descriptive statistics i.e. percentages, mean, standard deviation was computed. To study the relationship between learning environment and resilience among Indian undergraduates, Pearson Product moment correlation was employed on collected data.

Data analysis and interpretations

The descriptive analysis and correlation analysis of the data is examined for the present research study which is tabulated in different sections (I) Descriptive Analysis of the Data (II) t-test analysis of the data and (III) Correlation Analysis of the data.

(I) **Descriptive Analysis of the Data:** The calculated mean, standard deviation of the sample for all variables is presented in Table 1.

Table 1

Variables	Mean	SD
Learning environment (WIHIC Scale)		
Student Cohesiveness	33.29	4.27
Teacher Support	29.38	5.54
Involvement	28.16	5.70
Investigation	34.01	4.32
Task Orientation	30.24	5.50
Cooperation	33.72	5.00
Equity	35.52	6.81
Learning environment scores	220.15	27.52
Learning environment scale	Maximum score= 280	Minimum Score = 155
Resilience	68.73	15.29
Resilience scores	Maximum score=100	Minimum score=26

Table 1, reveals that mean for student cohesiveness, teacher support, involvement, investigation, task orientation, cooperation and equity is 33.29, 29.38, 28.16, 34.01, 30.24, 33.72 and 35.52 respectively. The mean of learning environment scores for the participants are 220.15 and the standard deviation is 27.52. The standard deviation for WIHIC learning environment scales varies from 4.27 to 6.81. The value of mean and SD for resilience scores is 68.73 and 15.29 respectively.

(II) t-test analysis of the data

Table 2 representing t-test statistics for the WIHIC scales and resilience scale among Indian undergraduates w.r.t. gender

Variables	Male (N=15)		Female (N=64)		t
	Mean	SD	Mean	SD	
Student Cohesiveness	31.93	6.22	33.61	3.67	1.01 ^{NS}
Teacher Support	28.67	4.81	29.55	5.72	0.62 ^{NS}
Involvement	29.87	5.83	27.77	5.64	1.27 ^{NS}
Investigation	33.80	4.00	34.06	4.42	0.22 ^{NS}
Task Orientation	31.40	5.17	30.00	5.58	0.93 ^{NS}
Cooperation	33.60	5.36	33.75	4.94	0.09 ^{NS}
Equity	35.83	6.27	34.20	8.93	0.82 ^{NS}
Learning environment (Total)	219.45	30.69	220.31	26.90	0.09 ^{NS}
Resilience	68.60	15.22	68.77	15.42	0.04 ^{NS}

NS- not significant at 0.05 level and 0.01 level of significance.

It can be seen from Table 2, the mean scores of both males and females undergraduates on learning environment and resilience scales. Female undergraduates have higher mean scores on Student cohesiveness, teacher support, investigation, cooperation sub scales whereas their male counterparts have higher mean scores on involvement, task orientation and equity. However, these differences across gender in different subscales of the learning environment found to be statistically insignificant at 0.05 level of significance. Table 2 further reveals that the mean scores of male and female undergraduates in the learning environment is 219.45 and 220.31 respectively. The differences in these mean scores are not statistically significant at 0.05 level of significance. Therefore, no gender differences exist among Indian undergraduates on how they perceive the learning environment. So,

Hypothesis 3, “There will be no significant gender differences in learning environment and its sub-scales i.e. student cohesiveness, teacher support, involvement, investigation, task orientation, cooperation and equity among Indian undergraduates' ' stands accepted.

Table 2 further displays that the mean scores of male and female undergraduates on resilience is 68.60 and 68.77 respectively. The calculated t-value for resilience scale across gender is 0.04 which is not significant at 0.05 level of significance. So, no gender differences exist among Indian undergraduates in terms of resilience levels.

Hypothesis 4, “There will be no significant gender differences in resilience levels among Indian undergraduates” stands accepted.

(III) Correlation Analysis of the data

Table 3 representing Inter-correlation of WIHIC scales (Student Cohesiveness, Teacher Support, Involvement, Investigation, Task Orientation, Cooperation and Equity) and Resilience among Indian undergraduates (N=79)

Table 3

Variables	Student Cohesiveness	Teacher Support	Involvement	Investigation	Task Orientation	Cooperation	Equity	Total learning environment
Resilience	r=0.322*	r=0.300**	r=0.474**	r=0.570**	r=0.602**	r=0.490**	r=0.595**	r=0.642**

****significant at 0.01 level of significance**

Statistical analysis of the data suggests that Student Cohesiveness, Teacher Support, Involvement, Investigation, Task Orientation, Cooperation and Equity are positively and significantly correlated with resilience among Indian Undergraduates. Table 3 further depicts that the value of Pearson correlation coefficient ranges from 0.300 for teacher support to 0.602 for task orientation sub scale of WIHIC questionnaire respectively. Therefore, correlation analysis of the data suggested that with increase in cohesiveness among students, support from the teacher, involvement in task, investigation, enhanced task orientation, cooperation and equity in classroom environment positively increases the resilience among undergraduates.

Table 3 represents that the correlation coefficient between learning environment and resilience among undergraduates is 0.642, which is positive and significant at 0.01 level of significance. So, the learning environment has significant correlation with resilience among Indian undergraduates.

Hypothesis 1 “There will be no significant relationship between learning environment and resilience among Indian undergraduates” stands rejected.

Hypothesis 2, “There will be no significant relationship between learning environment sub scales i.e. student cohesiveness, teacher support, involvement, investigation, task orientation, cooperation, equity and resilience among Indian undergraduates” stands rejected.

Results and Discussions :

Female Indian undergraduates constitute the majority of the sample of the research study. The results shed light on the fact that male and female Indian undergraduates do not differ on student cohesiveness, teacher support, involvement, investigation, task orientation, cooperation, equity dimensions of learning environment. Analysis of the results discloses that female undergraduates perceive the learning environment more in terms of Student cohesiveness, teacher support, investigation, cooperation as compared to their male counterparts. Male undergraduates perceive the learning environment more in terms of involvement, task orientation and equity when compared with their female peers. However, these differences have no statistical significance which reflects that both genders do not show any differences as to how they perceive their learning environment. This result is not in consonance with the previous research (Goh & Fraser, 1995; Wahyudi and Treagust, 2004; Koul and Fisher, 2006) which documented significant gender differences among students.

t-test analysis of the data disclosed that gender wise differences in resilience do not exist among Indian Undergraduates. This study is in line with the study conducted by (Narwal,2021) and (Singh,2020) which shows that there is no significant relation of gender in compliance with personality traits and resilience.

Statistical analysis reveals that learning environment and sub scales of learning environment is positively correlated with resilience among Indian undergraduates. The learning environment with a good amount of student cohesiveness, teacher support, cooperation, involvement in tasks with proper task orientation and equity enhances the resilience level among Indian undergraduates. Enhancement in the resilient level among undergraduates occurs by equal and fair treatment of teachers in dealing with the students (Equity is positively associated with resilience). Resilience level could be boosted up among students by giving them opportunity for active involvement and to investigate on the tasks provided (as involvement and investigation is positively related with resilience among undergraduates) and the participation of the students must be designed by keeping in mind the equal and fair opportunities to all. Present study reveals that a climate of cooperation in a learning place where students accomplish assignments by taking help from others and supporting others and sharing resources with others enhances the resilience level among individuals (as the cooperation dimension of the learning environment is positively associated with resilience among individuals). Getting a certain amount of work done and incorporating one's ideas and suggestions in task accomplishment is positively influencing the resilience level of undergraduates (as involvement and task orientation is positively associated with resilience). The findings of the present study were in congruence with the study by Fleischmann (2018) who documented that student perception of school climate and school connectedness, contribute to the development of resilience in a statistically significant and meaningful way.

Education Implications:

1. Learning environment should be structured by incorporating activities that would enhance cooperation, cohesive feelings and active involvement among students that will boost up the resilience level among undergraduates. So, teachers should arrange a good number of group activities like group discussions and projects in the classroom structured across the principles of healthy competitions and equal opportunities to all .
2. Teachers should provide support to the students and craft a classroom environment on the principles of equity with the same amount of encouragement, help,praise and opportunities to each and one so that one could feel satisfied and respectful which will pave a way for fostering and developing the feeling of resilience among undergraduates.
3. The findings of the study would be useful for policymakers, counselors and educationists to acquaint themselves with the importance of a positive, fair, enriched, cooperative, task oriented ,cohesive learning environment in developing the capability among students to bounce back to normal in stressful situations quickly.
4. Curriculum planners could redesign the curriculum of the teacher training programmes to include the topic “ The significant role of Classroom environment in building resilience among students” discussing the importance of Student Cohesiveness, Teacher Support, Involvement, Investigation, Task Orientation, Cooperation and Equity in a learning environment so that they should use it in practical aspects during their services in educational institutions to develop resilient individuals- a sign of balanced personality.
5. Teachers should plan activities,set their clear goals for students and limit time for activities in such a way that each and every student remains oriented and completes the task given. Meaningful involvement in the task by each student should be consciously practiced by the teacher. This feeling of task orientation and accomplishments builds up confidence among students which will act as a vehicle for resilience development.
6. As involvement in the class builds resilience among students, teachers should involve each and one present in the class in discussions, incorporate ideas and suggestions given by the students, and allow students to discuss their ideas in accomplishing the task given in a free and constructive classroom environment.

7. The findings of the study could make educational counselors aware about the role of the learning environment in cultivating resilient ability among individuals. They can further suggest tailoring of the learning environment of the child in terms of cohesion, cooperation and sharing, involvement, equal and fair treatment by the teacher while dealing with the less resilient individuals.

8. Seminars must be arranged in educational institutions by concerned Ministry for sensitizing the in-service teachers about the role of healthy and constructive learning environment build on the seven aspects of scale i.e. student cohesiveness, teacher support, involvement, investigation, task orientation, cooperation, equity for its practical implications in building psychologically resilient individuals.

The present research study concluded that the classroom learning environment plays a significant role in cultivating resilience among Indian undergraduates, but that particular classroom must be composed of cooperation, cohesiveness, equity, involvement and support.

References

- Aftab R. (2022). Islamic-Attitude as a Protective Factor for Resilience Among Orphans. *International Journal of Indian Psychology*, 10(1), 283-287. DIP:18.01.025.20221001, DOI:10.25215/1001.025.
- Amponsah, K.D.(2013). Gender Differences in Learning Environment and Student Attitudes in High School Chemistry Classrooms in South Africa. *Scholarly Research Journals for Interdisciplinary Studies*, VOL.II/VIII,1-13.
- Choudhary & Sharma, 2019, Resilience and Emotional Intelligence: A Comparative Study between Government and Private School Children in Sonapur, Assam, IRA International Journal of Management & Social Sciences International Conference on Wellbeing: Lifespan Perspectives & Practices for Sustainable Communities, ISSN 2455-2267 Vol. 14, Issue 02 (Special Issue) pg. 157-160.
- Flesichmann, 2018, BUILDING RESILIENCE THROUGH A POSITIVE SCHOOL CLIMATE, Dissertation, Duquesne University Duquesne Scholarship Collection, <https://dsc.duq.edu/cgi/viewcontent.cgi?article=2478&context=etd>.
- Goh, S.C. & Fraser, B.J. (1996). Validation of an elementary school version of the Questionnaire on Teacher Interaction. *Psychological Reports*, 79, 512–522.
- Hannah, Ryan, "The Effect of Classroom Environment on Student Learning" (2013). Honors Theses. 2375. https://scholarworks.wmich.edu/honors_theses/2375.
- Hussain & Thakur, 2019, Association between Resilience, Mindfulness and academic stress among university students, *International Journal of Research and Analytical Reviews Research Paper*, 2348–1269,6,1
- KennFisher, 2005, Research into identifying effective learning environments, Learning Futures, Rubida Research Pty Ltd. OECD/PEB Evaluating Quality in Educational Facilities.
- Koul, R.B., and Fisher, D.(2003). Students' perception of science classroom Learning environment in Jammu, India: Attitudes and gender differences, *Journal Of Science And Mathematics Education In South East. Asia* Vol. 26, No. 2,107 - 130.
- Kumar, N.(2016). Effect of school environment on the personality traits of XII grade students of Jalandhar city. *Scholarly Research Journal for Interdisciplinary Studies*, Vol.14/35, 6011-6018.
- Lucero, 2021, EMOTIONAL INTELLIGENCE, RESILIENCE, AND COPING STRATEGIES OF THE HELPING PROFESSIONALS, *Asian Journal of Multidisciplinary Research and Review*, 2582 - 8088, 2,2.
- Malik and Rizvi, 2018, Effect of Classroom Learning Environment on Students' Academic Achievement in Mathematics at Secondary Level, *Bulletin of Education and Research* August 2018, Vol. 40, No. 2 pp. 207-218.

- Narwal, 2021, A comparative study on resilience, satisfaction and quality of life among male and female athletes, The International Journal of Indian Psychology ISSN 2348-5396 (Online) | ISSN: 2349-3429 (Print) Volume 9, Issue 1.
- Narwhal, V.(2021).A comparative study on resilience, satisfaction and quality of life among male and female athletes.The International Journal of Indian Psychology, Volume 9, Issue 1, 91-98.
- Nicola Frances Lees 2009, A thesis presented in partial fulfillment of the requirements for the degree of Master of Arts in Psychology at Massey University, Auckland, New Zealand.
- Pidgeon, A.M., et al. (2014) Examining Characteristics of Resilience among University Students: An International Study. Open Journal of Social Sciences, 2, 14-22. <http://dx.doi.org/10.4236/jss.2014.211003>.
- R.M. Dhanapala, 2021,The Effect of Learning Environment on Academic Performance from students' Perspective,Global Scientific Journals, Volume 9, Issue 3.
- Rashida.hakimuddin.kapadia, 2009, A study of metacognition of secondary school students in relation to learning environment and teacher competencies, retrieved from <http://hdl.handle.net/10603/263952> .
- Simranjit Kaur, Academics Resilience Among Senior Secondary Students Influence of Metacognition Self Efficacy and Learning<http://hdl.handle.net/10603/224838>.
- Shrestha, E., Mehta, R.S., Mandal, G. *et al.* Perception of the learning environment among the students in a nursing college in Eastern Nepal. *BMC Med Educ* **19**, 382 (2019). <https://doi.org/10.1186/s12909-019-1835-0>
- Suchitra. k., 2015, Classroom learning environment and select affective variables in relation to achievement in physical science of students of single sex and coeducational secondary schools, retried from <http://hdl.handle.net/10603/50778>.
- Wahyudi, D. and Treagust, D.F.(2004). The status of science classroom learning Environments in Indonesian lower secondary Schools, Learning Environments Research 7: 43–63.