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Impact of the Open Educational Practices through Academic Achievement with Emotional, Social and Academic Adjustment among Researchers

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A B S T R A C T

Purpose: The study's main objective was to determine the impact of the open educational practices through academic achievement with emotional, social, and intellectual adjustment among the state universities of Tamil Nadu researchers.

Design/methodology/approach: The investigator has adopted the survey method of research to study the open educational resources with emotional, social, and academic adjustment of research scholars in Tamil Nadu's state universities. The selection of sampling technique used a stratified random sampling technique for selecting the samples. Most simply, the research design is a plan structure and investigation strategy to obtain an answer to the research questionnaire.

Findings: Implementing the above practical suggestions offered to the undergraduate students and professors could well weed out inadequate emotional, social and educational adjustment, protect the good, help themselves in the open educational resources' learning process. To conclude, good and humanism adjustments among undergraduate student teachers in available educational resources will provide a good study atmosphere to help reach the academic vision.

Originality: The present study seeks to measure the open educational, academic adjustment among Tamil Nadu researchers' state universities.

Practical/Social implications: Adjustments are actions or modifications made to enable researchers to access open educational resources and outcomes. Adjustments to teaching and learning through available educational resources mainly included emotional adjustment, social adjustment, and academic adjustment in the present study.

Keywords: Open Educational Resources, Open Educational Practices, Emotional adjustment, Social adjustment, Academic Adjustment

1. Introduction

Adjustment in open educational resources with research scholars' lives is considered one of the leading indicators of university life success [1]. It is an indicator for the research scholar's ability to face the problems resulting from fulfilling his/her academic [2], social [3], and emotional needs [5]. By accomplishing open educational resources' adjustment with research scholars universities life, the research scholar will be able to form a kind of good relationships with others in the universities leading him/her to enhance his/her academic achievement [6].

There has been an increasing emphasis on industrial [7], scientific [8] , and technological advancements in modern nations because of science and technology's apparent effects on today's world and the future [9]. It observed that scientific methods influence human interaction and have a fundamental role in all countries' national growth and economic and scientific development [10]. Thus, science education has been regarding as central for knowledge economy and intellectual development, especially in emerging societies [11]. Due to the greater importance of science and technology, schools have encouraged students to learn science-related subjects [12]. Specific subjects studied within all sciences are biology, chemistry, physics, sustainability,

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and environmental science [13]. Accordingly, we suggest that scientific and technological advancement in a country can initially achieve through students' high performance in science education and schools' efforts to establish efficient science education [14]. One of the most significant challenges of this century is to motivate students to maintain their learning and success in science education [15]. However, the studies of students' performance in science classes in secondary and high school education were not found adequate and couldn't improve in the last decade [16]. In previous research, various background indices and complex variables have been referring to as impacting students' achievement in science subjects in schools at all levels [17]. The students' performance and interest in science subjects have been relating to several contextual [18], emotional [19], and motivational factors [20], including volume of the subjects, workload [21], students' task orientation and personal abilities [22], instructional design and materials for effective teaching, teacher's efficacy [23], and teaching skills [24], students' motivation and personality, class size, etc [25].

Science education is usually abstract and complicated [26]. Thus, teaching science may require special attention and teachers' efficacy to attract students better and guide them through concrete and transparent methods [27]. It argued that clarifying these process skills and developing efficient teaching methods affect achievement in science education [28]. Another concern regarding students' learning and achievement in science is enhancing students' ability to evaluate and measure scientific knowledge through individual problem-solving skills and promote them to execute scientific examinations independently [29]. This goal requires teachers' skills and efficacy, students' motivation for learning in science [30], and high-quality instructional approaches for interpreting scientific knowledge [31]. Based on that view, the purpose of this study is to find answers for two basic questions [32]. The first question is whether a teacher's self-efficacious one fundamental teacher characteristic is related to student achievement in science education; the second is whether students' learning motivation is related to their science education achievement [33]. Another question of the study is whether there are differences in student achievement in science based on student gender and nationality [34]. A review of teacher self-efficacy, student motivation, and differences in national backgrounds provides some background of teacher self-efficacy, inspiration, and student achievement in science [35].

2. Related Literature Review

Table 1. Related Literature Review

Author & Year	Aim/Objective	Methodology		Result/ Findings & Future Research
		Sample/ Respondent	Design/Tools	
(Zee & Koomen, 2016)	In order to investigate the implications of the TSE on class quality, academic adaptation of the students and psychological well-being of the teachers.	The study consists of 40 years of teachers with 165 research papers for interpretation.	This research design is focused on the published research articles for review.	The findings indicate that TSE exhibits positive ties to academic adjustment, teacher behaviour patterns and classroom-related quality practises and the underlying psychological well-being of teachers, including personal achievement, satisfaction with the job and dedication [36].
(Gupta, 2019)	This research aims to examine the factors underlying the adoption of massive open-line courses (MOOCs) using as theoretical frameworks the technology consumer experience and the principle of self-determination (SDT).	The report includes 40 years of teachers with 165 interpretation documents. The principal data have been obtained from field surveys carried out in universities and universities in Delhi, India.	Utilizing convenience technique for sampling. Structural equation modelling was used to evaluate the hypothesised relationships in the proposed model.	The findings show that the learners are strongly motivated by intrinsic motivation, social acceptance, perceived importance and perceived utility in their intent to adopt MOOCs [37].
(Freilich & Shechtman, 2010)	The research focused on the effects of art therapy on children with learning disabilities' socio-emotional and academic achievement.	The research carried out in Israel examines the contribution of art therapy to the adaptation of children with learning difficulties and evaluates intervention and its correlation with performance.	In a counselling centre, 93 children with intellectual disabilities received Art Therapeutic treatment as an addition to the academic assistance (42 in the experimental and 51 in the control group).	The results showed more favourable results in adaptation under conditions of art therapy and the like improvement in both academic conditions [38].

(Villavicencio & Bernardo, 2013)	The study tested: (1) self control and optimistic academic emotions of pleasure and fierce pride are positive forecasters of accomplishments and (2) pleasure and glory both moderate self-regulation and accomplishment.	The students enrolled in many trigonometry courses in a single university included 1.345 students.	The students responded to a questionnaire-mathematics on academic emotions and a self-regulation scale through the trigonometry school.	The findings are addressed in terms of how positive emotions show positive assessments of task/result meaning, thus strengthening the positive connections between cognitive/motivational variables and learning [39].
(Anand Shankar Raja & Kallarakal, 2020)	The purpose of this paper is for the students of higher education institutions in India to understand the results of the Massive Open Online Courses (MOOC) in view of the COVID-19.	The data collected from students of higher educational institutions in India.	The data used in this research were collected using a convenient sample method from students of HEIs throughout India. In order to minimise several dimensions, the collected data was subjected to a factor analysis using a main component analysis.	Education should be free to stimulate learning enthusiasm and, thus, the stakeholders are responsible for providing a few free courses that will improve the enrolment and participation rate of students [40].
(Palaigeorgiou & Grammatikopoulou, 2016)	The goal of this paper is to describe the advantages of learning and problems of educational Web 2.0 activities in traditional learning environments and as viewed by web 2.0 pioneer educators.	Testimonies were obtained from 26 teachers of primary and secondary Greek. Both teachers in their classrooms had extensive participation in Web 2.0.	The interviews were half-structured and based on case studies, web 2.0 views of students, web 2.0 issues as well as education options.	Teachers pointed out that Web 2.0 learning experiences encourage the teacher to become the focus of the process, open the doors of schools to society and help them learn [41].
(Koukis & Jimoyiannis, 2019)	The purpose of this paper is to report on a Massive Open Online Course study aimed at supporting teachers of Greek at secondary schools.	Three major aspects of active involvement by teachers are the commitment of individuals, contact between peers and mutual support, and the collective development of educational scenarios and artefacts.	The study was conducted using a mixed approach that incorporates information from active teaching involvement through the MOOC network, and quantitative and qualitative data from the answers to the questionnaire.	The results showed that this MOOC was conceptualised by the majority of participants as an efficacious environment to strengthen pedagogical skills and activities in class and to promote professional growth [42].

Literature review is seen in Table 1. Then the researcher chooses the current research gap as "Open Educational Practices through Academic Achievement with Emotional, Social and Academic Adjustment among Researchers." To find out the Impact of the Open Educational Practices through Academic Achievement with Emotional, Social and Academic Adjustment among Researchers.

2. The Purpose and Hypotheses of the Study

To analyze the mean score of overall emotional, social and academic adjustment of the research scholars. There is no significant difference between the mean scores regarding emotional, social, and educational adjustment for the respondents' profile.

Methodology

The investigator has adopted the survey method of research to study the open educational resources with emotional, social and academic adjustment of research scholars instate universities of Tamil Nadu [43]. They used stratified random sampling technique for selecting of the samples. The stratification was done on the basis of gender and locality of students. The sample consists of 350research scholars from state universities of Tamil Nadu. The investigators included the 322 complete samples and excluded 28 samples with incomplete samples. The statistical techniques used for analyzing the data for the present study were mean, standard deviation, mean percentage, average score analysis, t-test, ANOVA and mean score analysis. In addition to the primary data, secondary data were also used in this study to explain the theoretical background of the subjects focused. Test for mean score analysis towards emotional, social and academic adjustment [44].

Analysis

Null hypothesis (H0)

There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to gender of the respondents.

Null hypothesis (H0)

There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to age of the respondents.

Null hypothesis (H0)

There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to educational qualification of the respondents.

Null hypothesis (H0)

There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to religion of the respondents.

Null hypothesis (H0)

There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to subject of the respondents.

Null hypothesis (H0)

There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to location of the college of the respondents.

Null hypothesis (H0)

There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to student's residence of the respondents.

Null hypothesis (H0)

There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to student's family of the respondents.

Null hypothesis (H0)

There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to parent's education of the respondents.

2. Result, Interpretations and Discussion

2.1 Dimension Wise Emotional, Social and Academic Adjustment

An attempt has been made to study the opinion of emotional, social and academic adjustments. After converting the qualitative information of the opinion into a quantitative one, the average scores were obtained from the respondents on various factors like 'emotional adjustment, social adjustment, academic adjustment**',** and obtained results are presented in table 2.

Table 2. Dimension Wise Emotional, Social and Academic Adjustment

Dimension	N	Min	Max	Mean	SD	Mean%
Emotional Adjustment	322	39	80	63.09	10.15	78.86
Social Adjustment	322	37	79	63.16	10.10	78.95
Academic Adjustment	322	28	79	54.24	15.43	67.80

Factor wise distribution of mean, standard deviation and mean percentage of emotional, social and academic adjustment shows that among 3 factors, the highest mean score (63.16 ± 10.10) which is 78.95% is obtained for the factor "social adjustment" whereas, the lowest mean score (54.24 ± 15.43) which is 67.80% was obtained for 'academic adjustment'.

2.2 Emotional, Social and Academic Adjustment With Respect to the Demographic Variables

In this study, the emotional, social and academic adjustment with respect to the demographic variables, namely, gender, age, educational subject, educational qualification, location of the college, religion, student's residence, student's family, parent's education were analysed.

2.3 Gender wise Emotional, Social and Academic Adjustment

To study the effect on the distribution of emotional, social and academic adjustment according to gender of the respondents is shown in the table 3

Table 3. Gender Wise Emotional, Social and Academic Adjustment

Adjustment	Gender	N	Mean	SD	t	p
Emotional	Male	165	65.24	9.96	3.99	< 0.001**
	Female	157	60.83	9.87		
Social	Male	165	65.39	10.07	4.18	< 0.001**
	Female	157	60.81	9.61		
Academic	Male	165	57.50	13.59	3.97	< 0.001**
	Female	157	50.82	16.51		

** Significant at 5%; ** Significant at 1%*

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It could be noted from the table 1.2 that the opinion regarding 'emotional adjustment' among the male respondents, the mean score was (65.24 ± 9.96) and it was (60.83 ± 9.87) among the female respondents. The opinion about 'social adjustment'' shows with respect to the male respondents, the mean score was (65.39 ± 10.07) and it was (60.81 ± 9.61) among the female respondents. The opinion about 'academic adjustment' shows with respect to the male respondents, the mean score was (57.50 ± 13.59) and it was (50.82 ± 16.51) among the female respondents.

Thus, it is inferred from the above analysis that the maximum opinion regarding emotional adjustment, social adjustment and academic adjustment found among the male respondents [45].

Hypothesis Testing by T-Test

The difference between the mean scores is tested regarding emotional, social and academic adjustment with respect to gender of the respondents, using the inferential statistic of research scholar's t test after verifying the normality assumption by Q-Q Plot technique.

H_0: There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to gender of the respondents.

The result is also shown in table 3.

It is understood that the performance of t-test shows since the p value is less than the significance level of 0.01 regarding social adjustment and academic adjustment, the results are significant at 1 per cent level; hence the null hypotheses are rejected. From the analysis, it is concluded that, there is significant difference in the mean scores regarding social adjustment and academic adjustment with respect to gender of the respondents [46].

Age Wise Emotional, Social and Academic Adjustment

To study the effect of age, the distribution of emotional, social and academic adjustment according to age wise of the respondents is shown in table 4.

Table 4. Age Wise Emotional, Social and Academic Adjustment

Adjustment	Age in years								ANOVA	p
	19 - 22		23 - 26		27 – 30		Above 30			
	Mean	SD	Mean	SD	Mean	SD	Mean	SD		
Emotional	63.52	10.55	62.25	9.63	64.74	9.59	60.32	9.88	1.40	0.244
Social	63.94	10.60	62.40	9.59	63.54	9.48	60.21	9.31	1.30	0.274
Academic	55.41	16.37	53.07	14.21	53.39	15.25	52.29	13.67	0.67	0.570

It is clear from the table 4 that the opinion regarding 'emotional adjustment' shows with respect to the age group of 19 - 22 years, the mean score was (63.52 ± 10.55), the age group of 23 - 26 years, it was (62.25 ± 9.63), the age group of 27 - 30 years, it was (64.74 ± 9.59) and the age group of above 30 years, it was (60.32 ± 9.88). The opinion about 'social adjustment' shows with respect to the age group of 19 - 22 years, the mean score was (63.94 ± 10.60), the age group of 23 - 26 years, it was (62.40 ± 9.59), the age group of 27 - 30 years, it was (63.54 ± 9.48) and the age group of above 30 years, it was (60.21 ± 9.31). The opinion about 'academic adjustment' shows with respect to the age group of 19 - 22 years, the mean score was (55.41 ± 16.37), the age group of 23 - 26 years, it was (53.07 ± 14.21), the age group of 27 - 30 years, it was (53.39 ± 15.25) and the mean score among the age group of above 30 years was (52.29 ± 13.67).

Thus, it is inferred from the above analysis that the maximum opinion regarding emotional adjustment was found among the respondents with age group of 27 - 30 years, about social adjustment and academic adjustment; it was found among the respondents with age group of 19 - 22 years.

Hypothesis Testing by One Way ANOVA

Further to test the significant difference between the mean scores regarding emotional, social and academic adjustment with respect to age of the respondents, the one way ANOVA test is used and the result is also shown in table 3.

H_0: There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to age of the respondents.

It is understood that with the F statistic, the ratio of the variances are calculated. Since the p value is greater than the significance level of 0.05 regarding social adjustment, academic adjustment, the results are not significant at 5 per cent level; hence the null hypotheses are accepted. From the analysis it is concluded that, there is no significant difference in the mean scores regarding social adjustment and academic adjustment with respect to age of the respondents [47].

Educational Qualification Wise Emotional, Social and Academic Adjustment

To study the effect of educational qualification, the emotional, social and academic adjustment according to educational qualification of the respondents is shown in table 5.

Table 5. Educational Qualification Wise Emotional, Social and Academic Adjustment

Adjustment	Educational Qualification						ANOVA	p
	M.Phil.		PhD		PDF			
	Mean	SD	Mean	SD	Mean	SD		
Emotional	64.18	9.44	62.30	10.33	54.00	12.46	10.09	< 0.001**
Social	64.21	9.56	62.68	9.85	53.35	11.90	11.42	< 0.001**
Academic	55.54	15.65	52.46	14.63	46.80	13.85	3.71	0.026*

** Significant at 5%; **Significant at 1%*

It can be seen from the table.5 that the opinion regarding 'emotional adjustment' shows among the graduates, the mean score was (64.18 ± 9.44), it was (62.30 ± 10.33) among the post graduates and it was (54.00 ± 12.46) among the research scholars. The opinion about 'social adjustment' shows among the graduates, the mean score was (64.21 ± 9.56), it was (62.68 ± 9.85) among the post graduates and it was (53.35 ± 11.90) among the research scholars. The opinion about 'academic adjustment' shows among the graduates, the mean score was (55.54 ± 15.65), it was (52.46 ± 14.63) among the post graduates and it was (46.80 ± 13.85) among the research scholars.

Thus, it is inferred from the above analysis that the maximum opinion regarding emotional adjustment, social adjustment, academic adjustment and academic was found among under graduate [48].

Hypothesis Testing By One Way ANOVA

Further to test the significant difference between the mean scores regarding emotional, social and academic adjustment with respect to educational qualification of the respondents, the one way ANOVA test is used and the result is also shown in table 1.4.

H_o: There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to educational qualification of the respondents.

It is understood that with the F statistic, the ratio of the variances are calculated. Since the p value is less than the significance level of 0.05 regarding social adjustment, academic adjustment, the results are significant at 5 per cent level; hence the null hypotheses are rejected. From the analysis, it is concluded that, there is significant difference in the mean scores regarding emotional, social and academic adjustment with respect to educational qualification of the respondents [49].

Religion Wise Emotional, Social and Academic Adjustment

To study the effect of religion, the distributions of opinion about the emotional, social and academic adjustment according to religion of the respondents are shown in table 6.

Table 6. Religion Wise Emotional, Social and Academic Adjustment

Adjustment	Religion						ANOVA	p
	Hindu		Christian		Muslim			
	Mean	SD	Mean	SD	Mean	SD		
Emotional	62.86	10.32	63.16	10.74	64.25	8.68	0.35	0.707
Social	62.89	10.21	62.14	10.89	65.50	8.58	1.46	0.233
Academic	54.00	15.57	55.70	14.79	54.36	15.47	0.20	0.821

It is obvious from the table.6 that opinion regarding emotional adjustment shows with respect to the hindus, the mean score was (62.86 ± 10.32), it was (63.16 ± 10.74) among christians and it was (64.25 ± 8.68) among the muslims. Opinion regarding social adjustment shows with respect to the hindus, the mean score was (62.89 ± 10.21), it was (62.14 ± 10.89) among christians and it was (65.50 ± 8.58) among the muslims. Opinion regarding academic adjustment shows with respect to the Hindus, the mean score was (54.00 ± 15.57), it was (55.70 ± 14.79) among christians and it was (54.36 ± 15.47) among the muslims.

Thus, it is inferred from the above analysis that the opinion regarding emotional adjustment and social adjustment, it was found among Muslims and about academic adjustment it was found among Christians.

Hypothesis Testing By One Way ANOVA

Further to test the significant difference between the mean scores regarding emotional, social and academic adjustment with respect to religion of the respondents, the one way ANOVA test is used and the result is also shown in table 6.

H_o: There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to religion of the respondents.

It is understood that with the F statistic, the ratio of the variances are calculated. Since the p value is greater than the significance level of 0.05 regarding social adjustment and academic adjustment, the results are not significant at 5 per cent level; hence the null hypotheses are accepted. From the analysis, it is concluded that, there is no significant difference in the mean scores regarding social adjustment and academic adjustment with respect to religion of the respondents [50].

Subject Wise Emotional, Social and Academic Adjustment

To study the effect of subject, the distributions of opinion about the emotional, social and academic adjustment according to subject of the respondents are shown in table 7.

Table 7. Subject Wise Emotional, Social and Academic Adjustment

Adjustment	Subject						ANOVA	p
	Art Subjects		Science Subjects		Engineering Subjects			
	Mean	SD	Mean	SD	Mean	SD		
Emotional	65.40	10.49	59.85	8.85	66.94	9.61	13.62	< 0.001**
Social	65.46	10.67	60.29	8.64	64.06	10.05	10.58	< 0.001**
Academic	63.54	11.44	42.51	11.81	59.35	10.02	127.42	< 0.001**

* Significant at 5%; **Significant at 1%

It is a disclosure from the analysis that opinion regarding emotional adjustment shows with respect to the art subjects, the mean score was (65.40 ± 10.49), it was (59.85 ± 8.85) with respect to the science subjects and it was (66.94 ± 9.61) with respect to the engineering subjects. Opinion regarding social adjustment shows with respect to the art subjects, the mean score was (65.46 ± 10.67), it was (60.29 ± 8.64) with respect to the science subjects and it was (64.06 ± 10.05) with respect to the engineering subjects. Opinion regarding academic adjustment shows with respect to the art subjects, the mean score was (63.54 ± 11.44), it was (42.51 ± 11.81) with respect to the science subjects and it was (59.35 ± 10.02) with respect to the engineering subjects.

Thus, it is inferred from the above analysis that the opinion regarding social adjustment and academic adjustment, it was found among art subjects and, about emotional adjustment it was found among engineering subjects.

Hypothesis Testing By One Way ANOVA

Further to test the significant difference between the mean scores regarding Emotional, Social and Academic Adjustment with respect to subject of the respondents, the one way ANOVA test is used and the result is also shown in table 7.

H_o: There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to subject of the respondents.

It is understood that with the F statistic, the ratio of the variances are calculated. Since the p value is less than the significance level of 0.01 regarding social adjustment, academic adjustment, the results are highly significant at 1 per cent level; hence the null hypotheses are rejected. From the analysis, it is concluded that, there is highly significant difference in the mean scores regarding social adjustment, academic adjustment with respect to subject of the respondents.

Location of The College Wise Emotional, Social and Academic Adjustment

To study the effect of location of the college, the distribution of emotional, social and academic adjustment according to location of the college of the respondents is shown in the table 8.

Table 8 Location of the College Wise Emotional, Social and Academic Adjustment

Adjustment	Location of the college	N	Mean	SD	t	p
Emotional	Rural	222	62.04	10.37	2.80	0.005**
	Urban	100	65.42	9.27		
Social	Rural	222	62.54	10.41	1.65	0.099
	Urban	100	64.54	9.27		
Academic	Rural	222	53.62	15.13	1.08	0.275
	Urban	100	55.63	16.08		

* Significant at 5%; ** Significant at 1%

It is evident from the above table that the opinion regarding 'emotional adjustment' with respect to the rural location of the college, the mean score was (62.04 ± 10.37) and it was (65.42 ± 9.27) with respect to the urban location of the college. The opinion about 'social adjustment'' with respect to the rural location of the college, the mean score was (62.54 ± 10.41) and it was (64.54 ± 9.27) with respect to the urban location of the college. The opinion about 'academic adjustment' with respect to the rural location of the college, the mean score was (53.62 ± 15.13) and it was (55.63 ± 16.08) with respect to the urban location of the college.

Thus, it is inferred from the above analysis that the maximum opinion regarding emotional adjustment, social adjustment and academic adjustment was found among urban area.

Hypothesis Testing By T-Test

Further to test the significant difference between the mean scores regarding emotional, social and academic adjustment with respect to location of the college of the respondents, the t test is used and the result is also shown in table 8.

H_o: There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to location of the college of the respondents.

Table 8. shows that since the p value is less than the significance level of 0.01 only emotional adjustment, the result is highly significant at 1 per cent level; hence the null hypothesis is rejected. From the analysis, it is concluded that, there is highly significant difference in the mean scores only emotional adjustment with respect to location of the college of the respondents.

Student's Residence Wise Emotional, Social and Academic Adjustment

To study the effect of student's residence, the distribution of emotional, social and academic adjustment according to student's residence of the respondents is shown in the table 9.

Table 9. Student's Residence Wise Emotional, Social and Academic Adjustment

Adjustment	Student's residence	N	Mean	SD	t	p
Emotional	Rural	64	54.11	11.71	8.80	< 0.001**
	Urban	258	65.31	8.36		
Social	Rural	64	54.20	11.46	8.82	< 0.001**
	Urban	258	65.38	8.38		
Academic	Rural	64	50.55	11.90	2.15	0.032*
	Urban	258	55.16	16.07		

*Source: Primary Data * Significant at 5%; ** Significant at 1%*

It could be noted from the table 4.23 that the opinion regarding 'emotional adjustment' with respect to the rural student's residence, the mean score was (54.11 ± 11.71) and it was (65.31 ± 8.36) with respect to the urban student's residence. The opinion about 'social adjustment'' with respect to the rural student's residence, the mean score was (54.20 ± 11.46) and it was (65.38 ± 8.38) with respect to the urban student's residence. The opinion about 'academic adjustment' with respect to the rural student's residence, the mean score was (50.55 ± 11.90) and it was (55.16 ± 16.07) with respect to the urban student's residence.

Thus, it is inferred from the above analysis that the maximum opinion regarding emotional adjustment, social adjustment and academic adjustment was found among urban area.

Hypothesis Testing By T-Test

Further to test the significant difference between the mean scores regarding emotional, social and academic adjustment with respect to student's residence of the respondents, the t-test is used and the result is also shown in table 9.

H_o: There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to student's residence of the respondents.

It can be seen that the performance of t-test shows since the p value is less than the significance level of 0.01 only emotional and social adjustment, p value is less than the significance level of 0.05 only academic adjustment; the results are highly significant at 1 per cent level for emotional and social adjustment and the result is significant at 5 per cent level for only academic adjustment; hence the null hypothesis are rejected. From the analysis, it is concluded that, there is significant difference in the mean scores with respect to student's residence of the respondents.

Student's Family Wise Emotional, Social and Academic Adjustment

To study the effect of student's family, the distribution of emotional, social and academic adjustment according to student's family of the respondents is shown in the table 10.

Table 10 Student's Family Wise Emotional, Social and Academic Adjustment

Adjustment	Student's family	N	Mean	SD	t	p
Emotional	Joint family	55	63.44	10.00	0.28	0.780
	Nuclear family	267	63.01	10.19		
Social	Joint family	55	62.76	8.97	0.32	0.751
	Nuclear family	267	63.24	10.33		
Academic	Joint family	55	63.05	8.97	4.81	< 0.001**
	Nuclear family	267	52.43	15.86		

* Significant at 5%; ** Significant at 1%

It is apparent from the table 10 that the opinion regarding 'emotional adjustment' with respect to the joint family, the mean score was (63.44 ± 10.00) and it was (63.01 ± 10.19) with respect to the nuclear family. The opinion about 'social adjustment'' with respect to the joint family, the mean score was (62.76 ± 8.97) and it was (63.24 ± 10.33) with respect to the nuclear family. The opinion about 'academic adjustment' with respect to the joint family, the mean score was (63.05 ± 8.97) and it was (52.43 ± 15.86) with respect to the nuclear family.

Thus, it is inferred from the above analysis that the maximum opinion regarding emotional adjustment and academic adjustment was found among joint family and, about social adjustment was found among nuclear family [51].

Hypothesis Testing By T-Test

Further to test the significant difference between the mean scores regarding emotional, social and academic adjustment with respect to student's family of the respondents, the t-test is used and the result is also shown in table 10.

H_o: There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to student's family of the respondents.

It can be seen that since the p value is less than the significance level of 0.01 only academic adjustments, the results are highly significant at 1 per cent level; hence the null hypothesis is rejected. From the analysis, it is concluded that, there is highly significant difference in the mean scores only academic adjustment with respect to student's family of the respondents.

Parent's Education Wise Emotional, Social and Academic Adjustment

To study the effect of parent's education, the distribution of emotional, social and academic adjustment according to parent's education of the respondents is shown in the table 11.

Table 11. Parent's Education Wise Emotional, Social and Academic Adjustment

Adjustment	Parent's education	N	Mean	SD	t	p
Emotional	Literate	296	62.40	9.96	0.28	0.780
	illiterate	26	70.92	9.01		
Social	Literate	296	62.55	9.95	0.32	0.751
	illiterate	26	70.08	9.38		
Academic	Literate	296	54.87	15.88	4.81	< 0.001**
	illiterate	26	47.12	4.86		

Source: Primary Data * Significant at 5%; ** Significant at 1%

It is plain information from the table that the opinion regarding 'emotional adjustment' with respect to the literate parent, the mean score was (62.40 ± 9.96) and it was (70.92 ± 9.01) with respect to the illiterate parent. The opinion about 'social adjustment'' with respect to the literate parent, the mean score was (62.55 ± 9.95) and it was (70.08 ± 9.38) with respect to the illiterate parent. The opinion about 'academic adjustment' with respect to the literate parent, the mean score was (54.87 ± 15.88) and it was (47.12 ± 4.86) with respect to the illiterate parent.

Thus, it is inferred from the above analysis that the maximum opinion regarding emotional adjustment and social adjustment was found among illiterate parents and, about academic adjustment, it was found among literate parents.

Hypothesis Testing By T-Test

Further, to test the significant difference between the mean scores regarding Emotional, Social and Academic Adjustment with respect to parent's education of the respondents, the t-test is used and the result is also shown in table 11.

H_0: There is no significant difference between the mean scores regarding emotional, social and academic adjustment with respect to parent's education of the respondents.

The table 11 shows that since the p value are less than the significance level of 0.01 only academic adjustments, the results are highly significant at 1 per cent level; hence the null hypothesis is rejected. From the analysis, it is concluded that, there is highly significant difference in the mean scores only academic adjustment with respect to parent's education of the respondents.

3. Conclusion and Future Work

It suggested creating a wholesome feeling of appreciation, guidance, and freedom in the classroom and college to get the student's ideas. They were conducting regular meetings and students to concentrate on their studies and to solve their problems whenever they occurred. To actively participate in college competitions, sports, extracurricular activities, affect a suitable teaching methodology, borrow the books and magazines from the library, and return the same in time to it and bright appearance at the college through open educational resources. Implementing the above practical suggestions offered to the undergraduate students and professors could well weed out inadequate emotional, social and academic adjustment, protect the good, help themselves in the open educational resources' learning process.To conclude, good and humanism adjustments among undergraduate student teachers in available educational resources will provide a good study atmosphere to help reach the academic vision. The study also conducts at the secondary or higher secondary level in the future. The same type of study may be conducted as an experimental study.

Competing interests

The authors have no conflict of interest to declare

Contributions

Each author contributed evenly to this paper. All authors read and approved the final manuscript.

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Availability of Data and Materials

The datasets generated and analyzed during the current study are not publicly available due to privacy reasons but are available from the corresponding author on reasonable request.

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