Study Approaches and Course Experience of Undergraduate Students at a Central University of India

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ABSTRACT

Quality of learning in higher education is predominantly influenced by students' perception of the courses, they were studying and their approach to study. The present study is related to these aspects of higher education. The present study in this direction aims to assess the quality of teaching-learning of general undergraduate courses in a central university (Jamia Millia Islamia, JMI) located in New Delhi, India. One hundred thirty-three (133) undergraduate students, studying in their final year of graduation were conveniently selected, to assess students' perception of their courses regarding teaching, assessment methods, curriculum workload, etc., and their approaches to study. Two standardized questionnaires; the Course Experience Questionnaire (CEQ) of Ramsden (1991) and Revised Two Factor Study Process Questionnaire R-SPQ-2F of Biggs *et al.* (2001) were used to measure attitude of students in 5-point likert scale. Quantitative descriptive survey method (mean, standard deviation and Carl Pearson coefficient of correlation) was used in the study. Students' perception of academic environment was found significantly related to their study approach. Higher score on good teaching, clear goal, appropriate workload and generic skills were found enhancing deep approach to study in students while higher score on appropriate workload and appropriate assessment were reducing surface approach to study in students. Findings can be used to improve course design and teaching-learning of higher education students specifically, in context of higher education students of JMI.

Keywords: Students' approach to study, course experience, higher education, quality of learning, learning motivation

Quality of teaching learning in higher education institutions of India is still a big issue even after the inception of Choice Based Credit Systems (CBCS) and Learning Outcome Based Curriculum Framework (LOCF) by University Grants Commission UGC (India, 2018). National education policy NEP 2020 has also emphasized for quality students' learning of higher education students. Students' perception of their academic environment and their approaches to study are important dimension related to students' learning and indicating quality of teaching learning in higher education institutions. The present paper is concerned with these important aspects of quality of learning in a minority institution which is a central university (Jamia Millia Islamia) of India.

Historical background of JMI University

JMI is a central university located in Delhi (India). It was originally established at Aligarh in Utter Pradesh state of India in 1920 during British time. It was established on the demands of some scholars and activists of Aligarh Muslim University which want a new national Muslim university which emphasize on Indian nationalism, modern progressive education and free from influences of British culture and people. In 1962 it achieved the status of a deemed university and became

a Central university of India in 1988. This is primarily a minority institution where majority of population of students and teachers is Muslim. Although, admission in undergraduate courses is done through an entrance exam which is conducted at all India level but 50% of the seats are reserved for Muslim students (including scheduled caste, schedule tribe, women and other backward classes Muslims). In 2020, JMI got the first rank among all 54 Indian central universities. The university received an 'A++' ranking by National Assessment and Accreditation Council of India in 2021.

LITERATURE REVIEW

Initial phenemenographic studies conducted on students' learning confirmed three different study approaches in higher education students: deep, surface and strategic (Biggs, 1987; Entwistle *et al.* 1979; Pask, 1976). Students adopting deep approach in the study were found intrinsically motivated for study and were using deep strategies of learning viz. wide reading from different sources, interconnecting different ideas/concepts, analyzing and interpreting the information by relating it to their real-life experiences etc. Students adopting surface approach to study were reading the learning material from the surface and were doing rote learning and memorizing the learning content. Their aim was only to reproduce the material at the time of exam or any other assessment conducted in the class. Students adopting strategic approach to study were rather applying different strategies to achieve good grades in the exams. These learners were cue-seekers and good in time and study environment management.

Ramsden and Entwistle (1983) were the first who found, study approaches of students were highly associated with their perception towards academic environment. Later-on Ramsden (1991) devised Course Experience Questionnaire which was proved a strong indicator of teaching quality in higher education students. Subsequently, many researchers proved this association of study approach and course experience of higher education students (Marchant *et al.* 2018; Kreber, 2003; Parpala *et al.* 2010; Price *et al.* 2011; Yin and Ke, 2017; Yin *et al.* 2015) Study approach and course experience inventories have been frequently used by various western and non-western countries to assess

quality of teaching-learning in the higher education institutions (Yin *et al.* 2018, 2016; Yin and Wang, 2015; Kaur *et al.* 2022; Bhuria *et al.* 2020). The present study in this direction was conducted, to assess quality of teaching-learning in a central university Jamia Millia Islamia (JMI).

The present study was done to achieve answers of following two questions:

- ❒ RQ 1: What were the study approaches and course experiences of undergraduate students studying in the JMI university?
- ❒ RQ 2: Was there any relationship between students' perception of their courses and their approaches to study?

The results of the present study can be utilized in improving course design and teaching learning in the JMI University.

METHODS

Research Methodology

Quantitative descriptive survey method was used in the study. Quantitative data was taken from 133 conveniently selected final year undergraduates studying in Jamia Millia Islamia in different subject areas viz. arts/humanity, science and social science. The data was taken in hard copies. Excel software was used to analyze the data. Obtained quantitative data in the numerical form (1-5) was put on Excel sheets and data was analyzed using descriptive statistics (mean and standard deviation) and Carl Pearson coefficient of correlation was used to find out relationship between study approach and course experience of students.

Population and Sample

133 undergraduates studying in their final year in different subject areas in JMI university were conveniently selected. Details of selected samples is given in the Table 1.

Tools and Techniques

Two standardized questionnaires- Revised Two-Factor Study Process Questionnaire (R-SPQ-2F) of Biggs *et al.* (2001) and Course Experience Questionnaire CEQ of Ramsden (1991) which are globally used and validated across many countries including India, for example: China (Yin *et al.* 2018,

Table 1

Selected samples	Male	Female	Mean-age	Arts	Science	Social science
133	87(65.4%)	46(34.6%)	21.4	62(46.6%)	44(33%)	27(20.4%)

Table 2: Example of an item from each scale of two inventories

R-SPQ-2F

Deep motive: *I come to most classes with questions in my mind that I want to know from my teachers.*

Deep strategy: *I try to study most of the readings suggested by the lecturers.*

Surface motive: *I do not find my course interesting, therefore I keep my work to the minimum.*

Surface strategy: *I find the best way to pass examination is to try to remember answers to likely questions*

CEQ

Good teaching: *My lecturers are extremely good at explaining things.*

Clear goal: *It is always easy to know the standard of work expected from me in this degree course.*

Appropriate workload: *The workload in this course is too heavy for me.*

Appropriate assessment: *The teachers seem to be more interested in testing what I have memorized than what I understood.*

Generic skill: *The course is improving my skills in written communication.*

2016, 2015), Pakistan (Ullah *et al.* 2011, 2013), Britain (Richardson 2013; Richardson *et al.* 2005), Japan (Fryer *et al.* 2012) were used in the present study; The questionnaire R-SPQ-2F had 20 questions in four scales: deep motive, deep strategy, surface motive and surface strategy. The questions: 1, 5, 9, 13 and, 17 belonged to deep motive; the questions: 2, 6, 10, 14 and, 18 belonged to deep strategy scale; the questions: 3, 7, 11, 15 and 19 belonged to surface motive scale and the questions: 4. 8, 12, 16 and 20 belonged to surface strategy scale. Total 10 questions from deep motive and deep strategy make deep approach scale. Total 10 questions from surface motive and surface strategy sub scale make surface approach scale. In CEQ there were total 23 questions in five scales: good teaching, clear goal, appropriate workload, appropriate assessment and generic skills. One additional question on overall satisfaction with the course was given at the end. An example of an item from each subscale is given in Table 2.

Reliability and Validity

To use the questionnaire in the Indian context, a pilot study was conducted with 25 randomly selected final-year undergraduate students of Jamia Millia Islamia University. Cronbach alpha coefficients were calculated to measure the reliabilities of the questionnaire. The two questionnaires were found to havea reliability 0.64 of for R-SPQ-2F and 0.72 for CEQ which was quite good to use in the Indian context.

Findings

Study approaches of undergraduate students of JMI university

Study approach of 133 undergraduate students of JMI university was assessed using R-SPQ-2F inventory. Mean and standard deviation of different subscales of R-SPQ-2F of 133 undergraduate students is given in Table 3.

Higher score on deep motive, deep strategy and deep approach than surface motive, surface strategy and surface approach respectively, shows that undergraduate students of JMI were adopting primarily deep approach in their study. Students had more intrinsic (deep) motivation (and less surface motive) for study and were adopting more

Table 3: Mean and standard deviations of different subscales of study approach of students (for n= 133)

	Deep motive	Deep strategy	Deep approach	Surface motive	Surface strategy	Surface approach
Mean	3.69	3.71	3.69	2.54	2.90	2.72
SD	0.50	0.51	0.43	0.70	0.56	0.55

deep strategies of learning (and applying less surface strategies) in their study.

Course experience of undergraduate students of JMI university

Course experience of 133 undergraduate students of JMI university was assessed using course experience questionnaire CEQ. Mean and standard deviation of different subscales of CEQ is given below in Table 4.

Table 4: Mean and standard deviations of different subscales of course experience of undergraduate students (for n= 133)

	GT	CG	AW	AA	GS	OSS
Mean	3.57	3.41	3.19	2.87	3.55	3.81
SD	0.74	0.61	0.61	0.73	0.62	0.98

Note: GT-good teaching, CG-clear goal, AW-appropriate workload, AA- appropriate assessment, OSS- overall satisfaction scale.

Undergraduate students of JMI university were found having positive perception of their courses at all scales except at one scale; i.e. appropriate assessment scale. This scale was perceived negatively by students. Undergraduate students perceived good teaching, clear goals of doing the course and, undergraduate courses were developing generic skills in them. Students were found overall satisfied with their courses. A little lower score on appropriate workload by JMI students need to be taken into consideration.

Relationship between study approach and course experience of students

Relationship between study approach variables and course experience variables of 133 undergraduate students was found out by using Carl Pearson coefficient of correlation method. Results of tests are given in Table 5, 6, 7, 8, 9 and 10.

Table 5: Relationship of different variables of 'study approach' with 'good teaching' scale of CEQ (for n= 133)

Study approach variables	Good teaching	T-statistic	df	P- value
Deep motive	0.45*	5.82	131	4.14 E-08
Deep strategy	0.37*	4.67	131	7.16 E-06
Deep approach	0.48*	6.37	131	2.85 E-09
Surface motive	0.12	1.45	131	0.14
Surface strategy	0.06	0.78	131	0.43
Surface approach	0.04	0.52	131	0.60

*Note: * indicate relationship is significant at .001 level of significance.*

The value of coefficient of correlation *r* (131) of 0.45, *p* = 4.14E-08, *r* (131) of 0.37, *p* = 7.16E-06 and *r* (131) of 0.48, *p* = 2.85E-09 shows a moderately positive and extremely statistically significant relationship between deep motive, deep strategy, deep approach and students' perception of good teaching in the course.

Table 6: Relationship of different variables of 'study approach' with 'cleargoal' scale of CEQ

Study approach variables	Clear goal	T-statistic	df	P- value
Deep motive	0.35*	4.37	131	2.47 E-05
Deep strategy	0.35*	4.33	131	2.8 E-05
Deep approach	0.41*	5.24	131	6.18 E-07
Surface motive	- 0.02	0.28	131	0.77
Surface strategy	- 0.10	1.25	131	0.20
Surface approach	-0.07	0.81	131	0.41

*Note: * indicate relationship is significant at .001 level of significance*

The value of coefficient of correlation *r* (131) of 0.35, *p* = 2.47E-05, *r* (131) of 0.35, *p* = 2.8E-05 and, *r* (131) of 0.41, *p* = 6.18E-07 shows a moderately positive and extremely statistically significant relationship between deep motive, deep strategy, deep approach and students' perception of clear goal of doing the course.

Table 7: Relationship of different variables of 'study approach' with 'appropriate workload' scale of CEQ

Study approach variables	Appropriate workload	T-statistic	df	P- value
Deep motive	0.06	0.73	131	0.46
Deep strategy	0.19*	2.23	131	0.02
Deep approach	0.15	1.74	131	0.08
Surface motive	-0.25**	3.05	131	0.002
Surface strategy	-0.16*	1.88	131	0.06
Surface approach	-0.24**	2.90	131	0.004

*Note: * indicate significant relationship at .05 level, ** indicate significant relationship at .01 level.*

The value of coefficient of correlation of *r* (131) of 0.19, *p* = 0.02 shows a moderate positive and statistically significant relationship between deep strategies adopted by students and their perception of appropriate workload. The value of *r* (131) of − 0.25, *p* = 0.002, *r* (131) = - 0.16, *p* = 0.06 and, *r* (131) = - 0.24, *p* = 0.004 shows a weak to moderate negative and statistically significant relationship between appropriate workload and surface approach to study (with surface motive and using surface strategies of learning) adopted by students.

Table 8: Relationship of 'study approach' variables with 'appropriate assessment' scale of CEQ

Study approach variables	Appropriate assessment	T-statistic	df	P- value
Deep motive	-0.28**	3.37	131	0.0009
Deep strategy	-0.15	1.83	131	0.06
Deep approach	-0.25*	3.05	131	0.002
Surface motive	-0.30**	3.71	131	0.0002
Surface strategy	-0.34**	4.20	131	4.73 E-05
Surface approach	-0.37**	4.56	131	1.13 E-05

Note: indicate significant relationship at .01 level, ** indicate significant relationship at .001 level*

The value of *r* (131) of -0.28, *p* = 0.0009 and *r* (131) of − 0.25, *p* = 0.002 shows a moderate negative and statistically significant relationship between deep approach and appropriate assessment scale. The correlation coefficient *r* (131) of − 0.30, *p* = 0.0002, *r* (131) of − 0.34, *p* = 4.73E-05 and *r* (131) of − 0.37, *p* = 1.13E-05 shows moderate negative and extremely statistically significant relationship between students' perception of appropriate assessment and surface approach to study adopted by them.

Table 9: Relationship of 'study approach' variables with 'generic skills' scale of CEQ

Study approach variables	Generic skills	T-statistic	df	P- value
Deep motive	0.52**	7.07	131	8.08 E-11
Deep strategy	0.56**	7.87	131	1.16 E-12
Deep approach	0.64**	9.53	131	1.1 E-16
Surface motive	-0.15*	1.77	131	0.07
Surface strategy	0.05	0.66	131	0.50
Surface approach	- 0.06	0.78	131	0.43

Note: ** indicate significant relationship at .10 level and ** indicate significant relationship at .001 level.*

The value of *r* (131) of 0.52, *p* = 8.08 E-11, *r* (131) of 0.56, *p* = 1.16E-12 and *r* (131) of 0.64, *p* = 1.1E-16 shows a strong positive and extremely statistically significant relationship between deep motive, deep strategy, deep approach and students' perception of generic skills. The value of *r* (131) of − 0.15, *p* = 0.07 shows a weak negative and significant relationship between generic skill and surface motive.

Table 10: Relationship of 'study approach' variables with 'overall satisfaction with the course' scale of CEQ

Study approach variables	Overall satisfaction with course	T- statistic	df	P- value
Deep motive	0.32**	3.95	131	0.0001
Deep strategy	0.39**	4.84	131	3.47 E-06
Deep approach	0.41**	5.29	131	4.8 E-07
Surface motive	-0.20*	2.44	131	0.015
Surface strategy	0.10	1.18	131	0.23
Surface approach	-0.08	0.92	131	0.35

Note: indicate significant relationship at .05 level and ** indicate significant relationship at .001 level.*

The value of *r* (131) of 0.32, *p* = 0.0001, *r* (131) of 0.39, *p* = 3.47E-06 and *r* (131) of 0.41, *p* = 4.8E07 shows moderate positive and statistically extremely significant relationship between students' overall satisfaction with the course and deep approach (deep motive and deep strategies also) to study adopted by them. The value of *r* (131) of − 0.20, *p* = 0.012 indicates negative and statistically significant relationship between students' overall satisfaction with the course and their surface motivation for study.

DISCUSSION AND IMPLICATIONS

Teaching-learning at JMI university is usually done by lecture method of teaching, a few group activities/ group discussions and occasionally workshop or seminar. Formative assessments are done by internal tests/assignments etc. and summative assessments are done by externals/semester-end exams of three hour/projects/practical's etc. Ultimate aim of higher education is that students adopt deep approach in their study and be prepared for life and work place challenges. Abundant of studies in western countries confirm; students' way of learning is largely influenced by their perception of teaching, curricula and assessment methods used in the courses (Lizzio *et al.* 2002; Kreber, 2003; Ullah *et al.* 2011; Yin *et al.* 2018; Ramsden, 1979; Ramsden and Entwistle, 1981). The present study was conducted to assess JMI undergraduate students' perception of their courses and how their perception of the courses was related to their approach to study. Findings are discussed below objective-wise:

Study approaches and course experience of JMI undergraduate students

JMI undergraduate students were found adopting primarily deep approach to study and having positive perception of their courses. The final year undergraduates perceived good teaching (mean score 3.57), clear goals of course (mean score 3.41), appropriate workload (3.19), generic skills developed during course (mean score 3.55) and, found overall satisfied with their courses (mean score 3.81). Undergraduate students perceived their courses positive at all scales except 'appropriate assessment' scale. This scale was perceived negatively (mean score 2.87) by JMI students. This needs to be given consideration. A little lower score on 'appropriate workload' scale (mean score 3.19) needs to be given due consideration.

Relationship between students' approach to study and their perception towards the course

JMI undergraduate students' perception of their courses was found significantly related to their study approaches (deep and surface). When students perceived good teaching, clear goals of the course, appropriate workload, and generic skills developed during the course, they were found studying deeply. On the other hand, negative perception of these constructs reduced deep approach to study in students. The research results are in line with most of the studies conducted globally like Britain (Price *et al.* 2011; Richardson *et al.* 2005), Australia (Webster *et al.* 2009), China (Yin and Wang, 2015), Pakistan (Ullah *et al.* 2013). Undergraduate students' perception of inappropriate workload was found enhancing surface approach to study in students. While perception of appropriate workload was encouraging students to apply deep strategies of learning. The findings of the present study are consistent with large number of studies conducted in various countries where inappropriate workload enhanced surface approach to study in students. Students' perception of appropriate assessment was also found reducing their surface approach to study.

One ironical result was found in the study. Appropriate assessment was found reducing deep approach to study in students. It seems that JMI students are overwhelmed by the use of authentic assessments usually. They feel more relaxed and study deep when conventional methods of assessment are used. This type of result is seen in some studies; for example, good teaching in a Chinese study was found reducing deep and surface approach to study in students (Yin *et al.* 2018). Educators of JMI university are suggested to use assessment methods judiciously in the classrooms.

There are three major implications of the study. First, little higher score on surface strategies subscale (mean score 2.90) adopted by students should be look into by educators. This may be due to the course demands or teaching/assessment practices which require for rote learning or memorization. Secondly, undergraduate students did not perceive 'appropriate workload' subscale very good (mean score 3.19). Workload in the courses should be taken into consideration as this was found that course workload was influencing their extent of using deep or surface level studies. Third, more authentic assessment tasks needs to be explored which enhance deep approach to study and reduce surface approach to study in higher education students.

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