

DEVELOPMENT OF MODEL ON STUDENT ENGAGEMENT AND STUDENT SATISFACTION

A.K.SRIVASTAV¹ & RITA²

¹Professor, Bharati Vidyapeeth Institute of Management and Research, New Delhi, India

²Research Scholar, Bharati Vidyapeeth Institute of Management and Research, New Delhi, India

ABSTRACT

The marketplace dynamics in global arena have forced Higher Education Institutions, to prepare and train the graduates, to deal with more demanding, challenging and competitive business environment. In India, Management Institutions also face the challenge of producing quality graduates, for the corporate world. One of the major reasons includes low quality of higher education as a result of unreasonable focus towards the increasing the number of admissions rather than improving the quality in delivery of programs. To resolve these issues, Student Engagement is found to be a promising tool as it has been suggested through previous researches that Student Engagement is an indicator of quality education in any educational settings. Many researchers found Academic Self Efficacy and Institutional Climate predicted Student Engagement. Also, Student Engagement was found to predict Student Satisfaction which is a positive outcome of any educational program. However, these factors are not much studied in India, especially in context of Management Institutions. Thus, this paper investigates few factors which predict Student Engagement in an institution. The researcher has tried to develop a theoretical model which links Student Engagement with Student Satisfaction.

KEYWORDS: Student Engagement, Predictors of Student Engagement, Student Satisfaction, Management Education

INTRODUCTION

The education sector in India has grown with a fast pace in the last two decades. This growth is witnessed by the remarkable increase in the number of enrolments with educational institutions. After liberalization, the influx of multinational companies in all major sectors made Indian market quite competitive. This changed the business scenario in the country and the demand for graduates with good managerial skills increased to a substantial level. However, this increase did not promise quality education as most of the graduates are found unemployable. One important reason behind this poor employability is poor learning as institutions focus more on improving the grades, rote learning, examinations and traditional teaching learning activities. The institutions fail to engage the students and they are less empowered mentally and educationally. The students are not fully developed with the required employability and other management skills.

The higher institutions providing professional courses or programmes exclusively failed to meet this extended demand for employable graduates. This indicates towards the inefficiency of these institutions in identifying the key factors contributing for active learning. The poor interface between corporate and these institutions in fact widened the gap between what the corporate demand and what these institutions are providing. The colleges are not updated with the current skill demands for any profession.

The quality is compromised for quantity and the result is that employability is falling.

Over the last few decades, the environment in which higher educational institutions operate has been witnessing a dramatic change. This change has been there for several reasons like technology upgradation, in teaching and learning tools leading to high cost to institution, increase enrolments and improvement in program quality. In order to face the challenges that lie ahead, these institutions are no less than a marketplace, where students should be given a place of a customer, whose needs and wants are taken care of (Cutlip, 1971). However, the customer-oriented philosophy has been underemphasized. Kotler and Fox (1995) stated that, the institutions who treat students as customers and try to focus on fulfilling their needs and, wants would achieve their objectives effectively.

In today's era, higher education is no less than a service provided to the customers i.e., students. The institutions are the service provider and should satisfy their customers who in this case are the students. It is in fact, different from other services because of the fact that other services work from a commercial perspective and education service incorporate intellectual and social perspective. In case of education service, a student is more than mere a customer as he rather, is a participant (Flutter & Rudduck, 2004) and active creator (Key et al, 2010) of the services. Student satisfaction is a major concern among the higher education institutions in India.

The present study is focused primarily on investigating the variables influencing student engagement and student satisfaction in Indian B-schools. This paper is an attempt to find out the predictors of student engagement. The multidimensionality of student engagement makes it more important to find out the favourable factors predicting engagement among the students. Also, the researcher has tried to explore the insights on the impact of student engagement on student satisfaction.

Review of Literature

Along with corporate sector, the concept of engagement has marked its significance in education sector as well. Employee engagement has been studied in detail for years but student engagement gained popularity for past decade all over the world. In India also, several studies have been done on employee engagement. Student engagement has been understudied in the country so far yet its significance has been acknowledged in western countries.

The variables which are used in the present study are described in the below section on the basis of review of existing literature regarding student engagement and its predictors and also its impact on student satisfaction. The section describes the basis for the variables which were used by the researcher in the study.

Student Engagement

The term student engagement has its existence in the literature for more than 70 years, although the term in particular emerged significantly in late 90s or early twenties (Astin,1999; Kuh, 2007, 2009). Astin used the term student involvement initially, where he observed the impact of factors like attendance on college students. According to Astin (1984), student involvement can be defined as “the amount of physical and psychological energy that, the student devotes to the academic experience”. A student who is highly involved in his studies, usually spend more time on campus, put a lot of time and energy in his studies and interact more with teachers and other classmates. Kuh contribution to engagement literature had been remarkable, in studying engagement from education perspective, both at school and college level.

It was found that, when the institutions focus more on good educational practices, support the teaching staff and administration department, along with the students to concentrate more on learning activities, it endorse and promote high engagement levels (Astin, 1984; Kuh et al., 2005; Kuh, 2003; Pace, 1984; Pascarella & Terenzini, 2005). Institutions having high level of student engagement, achieved desirable college outcomes.

Dimensions of Student Engagement

Different researchers have studied student engagement from different dimensions. According to Harper & Quaye (2009), student engagement is not limited to active involvement and participation of students in certain activities. It encompasses feelings and sense making along with activities. Fredricks, Blumfeld & Paris (2004) studied engagement along three dimensions as Behavioral, Emotional and Cognitive engagement. Schaufeli (2002) measured student engagement against vigor, dedication and absorption. NSSE (2002) developed a scale, to measure student engagement along five benchmarks, as level of academic challenge, student-faculty interactions, active and collaborative learning, enriching educational experiences and supportive campus environment. The topic has been studied in abundance, in western countries, still there has been no common views regarding the dimensions of student engagement, thus making it a multidimensional construct, rather than a unidimensional construct.

PREDICTORS OF STUDENT ENGAGEMENT

Self Efficacy

According to Bandura (1986), self-efficacy can be defined as “the judgement one makes on his/her capability to exhibit a series of specific behaviours for the purpose of reaching a certain level of achievement”. A wide-ranging body of research revealed that self efficacy has a positive relation with grades in a college (Bong, 2001; Lent, Brown and Larkin, 1984; Multon, Brown and Lent, 1991). It is a personal attribute of a student. Duran et al. (2006) conducted a survey in a college in Spain over undergraduate students and found that perceived emotional intelligence and self efficacy is strong predictors of student engagement.

Institutional Climate

The role of situational factors like institutional climate as potential predictor of engagement has been studied though but not much. According to Fullarton (2002), who conducted a study on school children, found that the school climate positively predicts student engagement. Astin (1984) stated that, institutional characteristics have high impact on the engagement level of students than any other factor available. Engagement is a concept which is not any one departments' responsibility. In fact, the institution as a whole, with the contribution of faculty members, academic administrators and other officials create and engaging environment which make students believe that the institutions not only value scholarship but also promote intellectual activities (HU & Kuh, 2002). Pike & Kuh (2005) stressed that, institutions which create engagement environment for students very firmly, adhere to student learning highlighted in their mission as well.

National Survey of Student Engagement (NSSE) emphasized that, the quality of education in an institutions depend upon the ways that institution utilize its resources, plan its curriculum and other learning opportunities, which increase student participation in learning activities (Kuh et al., 2007). Markwell (2007) emphasized that, institutions which create engagement environment is both wise and right thing.

Student Engagement and Student Satisfaction

In order to assess the quality of an institution, satisfaction has been considered as a significant variable (Kuh, Kinzie, Buckley, Bridges and Hayek, (2007)). Several studies documented the positive relation between engagement and satisfaction (Astin, 1993; Pike,1993) and student engagement was found to predict satisfaction (NSSE, 2005) as Supportive Campus Environment benchmark was found to be the best predictor. This can be taken in the sense that a student satisfaction level is highly dependent on the environment of that college or institution and less dependent on other factors like gender or the education level of their parents (Kuh et al., 2006). Talking about Indian higher educational institutions offering professional courses, student satisfaction has not been studied much. Thus, considering the fact that satisfaction is a key factor for quality education, the researcher included student satisfaction in this study. The conceptual model developed for the study to identify the factors under study has been shown in the figure 1 below.

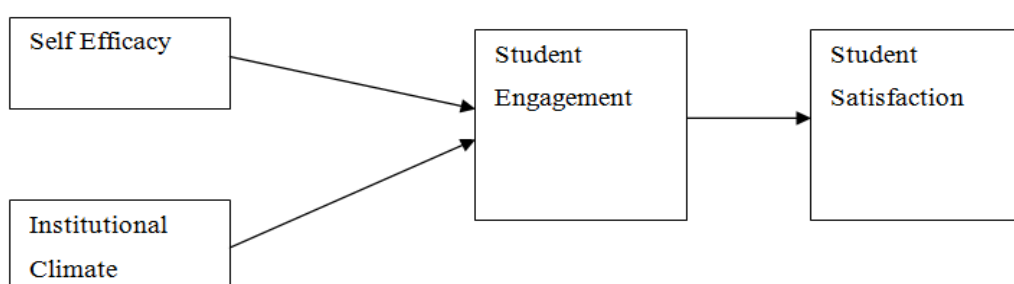


Figure 1: Research Model on Student Engagement and Satisfaction

RESEARCH METHODOLOGY

The study was conducted on B-Schools in Delhi. The respondents were second year students of post graduate program in Business administration. The sample for this study consisted of 200 students. The instruments used in the study were developed by referring different studies which were related to the study factors. The model has been developed by taking help from several prior studies as Lee & Anantharaman (2015), NSSE (2002), Sharma, Khandelwal and Ninghoujam (2012) and Korobova (2012). The questions asked in survey were constructed and modified, to fit the current context. A 23-item questionnaire was specially developed by the researcher and, related responses were recorded and analysed, using The Statistical Package for The Social Sciences software i.e. SPSS (version 19).

Data Analysis

In order to identify the study items, in different variables affecting student engagement and student satisfaction in the present study, the researcher has applied exploratory factor analysis i.e. EFA. Janssen et al. (2008) stated that each item should have a factor loading value of 0.50 in order to assign it to a construct. In order to apply EFA, the sample size should be equals to or more than 100 and as the sample size for the present paper was 200, hence factor analysis can be applied. As the factor loading of each item under study was fulfilling the minimum criteria of EFA, all the items were considered for the study. Principal Component Method i.e. PCA was used in this study to perform EFA. The results of PCA extracted four factors with varimax rotation and having Eigen value greater than one. The total variance explained by all the five variables under study is 73.24% and, Eigen value greater than one. In order to check the reliability of the questionnaire in the study, the researcher applied Cronbach's procedure, using SPSS version 19. According to Nunnally and Bernstein (1994), the variables should have Cronbach's alpha value more than 0.6, in order to retain them in the questionnaire. The

Cronbach's alpha value of each variable has been shown in Table 1.

Table 1: Factor Reliability

Factor Name	Scale items	Cronbach's Alpha i.e. α
Self Efficacy	6	.787
Institutional Climate	8	.709
Student Engagement	6	.883
Student Satisfaction	3	.818
Overall	23	0.894

Sample Sufficiency Test

Bartlett's test for Sphericity and Kaiser-Meyer-Olkin i.e., KMO tests are applied in the study by the researcher in order to find out, whether the sample is adequate and suitable, for applying the factor analysis. The KMO value should range between 0 to 1, in order to apply factor analysis in a study, it is required that, the factors selected for a particular study should have sufficient correlation between each other as KMO and Bartlett's tests, help in understanding the degree of correlation between the factors (Janssen et al., 2008). Here, in this study, the value of KMO and Bartlett's test is significant enough to apply EFA over the data. The results of both the tests are depicted in the Table 2 below.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.880
Bartlett's Test of Sphericity	Approx. Chi-Square	6318.077
	Df	303
	Sig.	.000

Factor analysis usually serves as a factor reduction tool and in this study, the researcher applied varimax factor rotation, to find out the variables impacting the student engagement level, among post graduate students. In the study, a total of 23-items were considered, which were related to four factors and these factors were identified using PCA (principal component analysis) method. The initial factor extraction yielded four factors having eigen value, greater than one as shown in Table 3.

Table 3: Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.778	34.077	34.077	7.778	34.077	34.077	5.740	19.689	19.689
2	5.043	11.353	46.430	5.043	11.353	46.430	4.343	15.659	34.147
3	2.354	6.746	53.275	2.354	6.746	53.275	3.825	12.009	51.157
4	1.490	5.023	69.358	1.490	5.023	69.358	2.602	10.556	69.358

Extraction Method: Principal Component Analysis

Table 4, shows the Rotated component matrix for the factors and their measuring items with factor loadings. It helps in deciding if a variable relate to more than one factor. Self efficacy construct comprised of six measuring items with factor loading ranging between 0.762 and 0.651 as shown in Table 4. Institutional Climate was determined with eight measuring items with factor loadings ranging between 0.736 and 0.879. Student engagement was determined with six measuring items ranging from 0.793 and 0.664 and Student Satisfaction comprised of three measuring items ranging between 0.721 and 0.651.

Hence, the researcher identified four factors from 23 observed variables as shown in the Table 4 below.

Table 4: Rotated Component Matrix

Rotated Component Matrix ^a				
	Component			
	1	2	3	4
SEF1		.762		
SEF2		.758		
SEF3		.713		
SEF4		.788		
SEF5		.554		
SEF6		.651		
IC1	.736			
IC2	.843			
IC3	.867			
IC4	.812			
IC5	.854			
IC6	.692			
IC7	.795			
IC8	.879			
SE1			.793	
SE2			.818	
SE3			.742	
SE4			.618	
SE5			.653	
SE6			.664	
SS1				.721
SS2				.772
SS3				.651

DISCUSSIONS AND SUGGESTION

In the sphere of Indian higher education, a significant growth in educational opportunities has been recorded, especially in the recent two decades. The economic growth and increasing demand for professional graduates in certain fields have prompted this enormous growth. However, the declining level of quality in management institutions in country and poor output produced are pointing out that both government and researchers' community did not pay much attention to evaluate the quality of the output. The country has been shouldered with the responsibility to foster quality in the education system to lead the world in terms of preparing competitive graduates. This cannot be achieved without the wilful engagement of students towards their institution and studies. The management institutions in India may focus on few factors to bring student engagement as discussed below:

- The institutions have to bring in and promote engagement activities in the campus.
- To increase engagement level of students, institutions have to identify the factors that best predict engagement as institution type varies and so does the predictors.
- Engagement is a multidimensional construct, so measuring engagement from different dimensions would give a better picture of the existing engagement levels of students and institutions can find out which dimension works best for their students.
- Government bodies dealing with higher educational institutions have to come up with policies and guidelines

related to student engagement in the campus which would boost quality in the system.

- The stakeholders of institutions are like teachers, non-teaching staff, administrators, parents and students, all are important and their opinions and suggestions must be taken into account while planning and deciding upon the policies and programs for the students.
- A teacher is a key element in bringing positive changes in the students' academic and non-academic behaviour and thus, teachers must be trained on regular basis to enhance the level of quality in the system.
- An engaged student has been found more satisfied with the system rather than a low engaged student and a satisfied student is high on retention and persistence. Hence, in order to raise the level of satisfaction, institutions must invest in regular surveys and research to promote satisfaction.

CONCLUSIONS

The key objective of this study was to find the factors which influence student engagement and satisfaction and a model was developed with the help of the factors. The findings revealed that Self Efficacy and Institutional Climate are the factors which influence student engagement. The study has also revealed that student engagement further predicts student satisfaction. The researcher conducted this study taking post graduate students as respondents and found two factors influencing the student engagement. The future research can focus on identifying factors like motivation, stress and their influence on student engagement. Also, future research can study the influence of self efficacy and institutional climate taking different dimensions of student engagement. Also, student satisfaction can be studied longitudinally to find out the satisfaction level difference between undergraduate and post graduate students in an institution to find out the difference in factors and work on improving the satisfaction level of students. The model developed by the researcher in this study would help the management institutions to find the relevance of student engagement and how it influences the satisfaction level among the students. Thus, management institutions can use this model as a basis to promote student engagement and bring quality in the system.

REFERENCES

1. Astin,A.W. (1984). Student Involvement: A Developmental Theory for higher Education. Journal of College Student Development, 297-308.
2. Astin,A.W. (1985). Involvement: The cornerstone of excellence.Change, 35-39.
3. Astin,A.W. (1993). What matters in College? Four critical years revisited. San Francisco, CA: Jossey-Bass.
4. Astin,A.W. (1999). Student Involvement: A developmental theory for higher education. Journal of College Student Development, 518-529.
5. Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman & Co.
6. Cutlip, Scott M. (1971), "'Advertising' Higher Education: The Early Years of College Public Relations," College and University Journal, Part II:10 (1), 25-33.
7. Duran et al., (2006). Predicting Academic Burnout and Engagement in Educational settings: Assessing the incremental Validity of Perceived Emotional Intelligence Beyond Perceived Stress and General Self-Efficacy,

- Psicothema, Vol.18, 158-164.
8. Harper, S.R.. and Quaye, S.J. (eds) (2009). Student Engagement in Higher Education. New York and London: Routledge
 9. Hu, S. & Kuh, G.D. (2002). Being (dis)engaged in educationally purposeful activities: The influences of student and institutional characteristics. *Research in Higher Education*, 43(5), 555-575.
 10. Fredricks et al., (2004). School Engagement: Potential of the Concept, State of the Evidence. *Review of Educational Research*. 74(1), 59-109.
 11. Fullarton, S. (2002). Student Engagement with School: Individual and School level Influences, Longitudinal Surveys of Australian Youth, Research Report No. 27, 43 pp.
 12. Kotler, Philip and Karen F.A. Fox (1995), *Strategic Marketing for Educational Institutions*, Second Edition, Prentice-Hall, Inc., Englewood Cliffs, New Jersey.
 13. Kuh, G.D. (2001). Assessing what really matters to student learning: Inside the national survey of student engagement. *Change*, 33(3), 10–17, 66.
 14. Kuh, G. D. (2001). The national survey of student engagement: Conceptual framework and overview of psychometric properties. Bloomington, IN: Indiana University Center for Postsecondary Research and Planning.
 15. Kuh, G.D. (2007). How to help students achieve. *Chronicle of Higher Education*, 53(41), B12–13.
 16. Kuh, G.D. (2008). High-impact practices: What they are, who has access to them, and why they matter. Washington, D.C.: Association of American Colleges and Universities.
 17. Kuh, G.D. (2009). What student affairs professionals need to know about student engagement. *Journal of College Student Development*, 50(6), 683–706.
 18. Kuh, G.D., Kinzie, J., Buckley, J.A., Bridges, B.K. and Hayek, J.C. (2007). Piecing together the Student Success Puzzle: Research, Propositions and Recommendations. ASHE Higher Education Report, Vol. 32(5). San Francisco: Jossey Bass.
 19. Lee, Jungki., Anantharaman, Sekhar. (2015). MBA student' Engagement Behavior and Its Implications on Student Loyalty to Alma Mater. *International Academy of Marketing studies Journal*, Vol.19. NO-2.
 20. Markwell, D. (2007). "The Challenge of Student Engagement", *American Educational Research Journal*, Vol.37. 153-184.
 21. A. K. Srivastav & Rita, Student Engagement and Student Success: A Novel Concept for Novel India, *IMPACT: International Journal of Research in Business Management (IMPACT: IJRBM)*, Volume 5, Issue 9, September 2017, pp. 87-96
 22. National Survey of Student Engagement (NSSE). (2002). From Promise to Progress: How Colleges and Universities are using Student Engagement results to improved Collegiate Quality. Bloomington, IN: Indiana Center for Postsecondary Research.

23. Nunnally, J.C. (1978). *Psychometric Theory* (2ed), McGraw-Hill, New York.
24. Pace, C.R. (1984). *Measuring the quality of college student experiences*. Los Angeles, CA: Centre for the study of evaluation, University of California.
25. Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass.
26. Pike, Gary R., & Kuh, George D. (2005). A typology of student engagement for American colleges and universities. *Research in Higher Education*, 185-209.
27. Schaufeli, W.B., M. Salanova, V. Gonzalez-Roma & A.B. Bakker(2002). The Measurement of Engagement and Burn-out: A Two-Sample confirmatory Factor Analytic Approach, *Journal of Happiness studies*, Vol.3, 71-92.
28. Sharma, B.R., Khandelwal, S., & Ninghoujam, S. (2012). The level of student engagement and search for its predictors: An exploratory study of MBA students. *Metamorphosis: A Journal of Management Research*, 11(2), 66-81.
29. Sharma, B.R., Khandelwal, S., & Ninghoujam, S. (2012). The level of student engagement and search for its predictors: An exploratory study of MBA students. *Metamorphosis: A Journal of Management Research*, 11(2), 66-81. Sharma, B.R., & Bhaumik, P.K. (2013). Student engagement and its predictors: An exploratory study in an Indian business school. *Global Business Review*, 14(1), 25-42.

