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## Relationship Between On-Campus Student Engagement and Student Ownership of the Institution

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### Abstract

Educational institutions in the developing countries have always viewed student on-campus engagement as a burden on resources and cost factor. However studies at various primary and secondary level shows better performance and retention of students with on-campus engagement activities. This research focuses on a much-ignored tertiary level of education where students have a much stronger role in creating word of mouth for or against the institution. This research used a sample 2500 tertiary level students of 50 tertiary level educational institutions to see the relationship between the student on-campus engagement measured through number of student societies and extra-curricular activities and student satisfaction and ownership of the institution. The findings of this paper reveals that the ordinary association between on-campus student societies and students' level of ownership for institution was found not significant in the absence of students' satisfaction level as a mediating variable while the stated associations was found handsomely significant and robust in the presence of students' satisfaction level towards societies. Furthermore the ordinary association between students' recreational activities and students' level of ownership for institution was found again insignificant in the absence of students' satisfaction level as a mediating variable while the stated associations was found augustly significant and robust when students' satisfaction level towards societies was taken as the mediating variable. This study helps the educational institutions to understand the psychological aspects of student's association with their educational institution. It outlines the importance of on-campus engagement that leads to students' satisfaction with their institution and development of positive word of mouth at all forums by the students.

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**Keywords:** Student Engagement; Student Satisfaction; and Students' Ownership.



## 1. Introduction

Higher Education Institutions are putting their focus on increasing the level of satisfaction among students. Student satisfaction is directly related to student intake, retention and academic success and hence has diverted the attention of university administrators towards creating more supportive environment in order to attract more students effectively. Every institution has its own goals and missions and so as the students have, for pursuing their degree, which is why for institution the challenge is to attract new students and retain those students who match the institution's mission and to improve upon competencies of the university to retain diverse group of students.

Cost of higher education has been increasing due to the technological changes but it has also improved the learning, teaching tools and techniques. Despite all these issues with diverse and huge higher education system, including institutes, striving to maintain number of students and enrolments, technology has improved the program quality and it has placed these tertiary educational institutions into a market place where challenges lie ahead.

It is also very important for the institutions to identify and understand the needs and wants of the students and to meet the expectations of the students at all levels from academic experiences to extracurricular activities. In addition to that, psychologists have found that satisfaction of the students leads to self-confidence in students. This self-confidence helps students develop their interpersonal and technical skills and acquire knowledge, and this acquired skill set and knowledge finally leads to more confidence in what students do. For example, According to Aitken (1982) most important factor for excellent academic performance is student satisfaction level, and according to Pike (1992) satisfaction has greater influence on student grades than the academic performance on student satisfaction.

Schunk (1991) and earlier Bandura (1977) suggested that, the students mostly control their self-learning process. According to Dambo and Eaton (2000) academically successful students exerts the ability to motivate themselves to achieve a goal or to complete a task given, on the other hand less successful students are the ones who face difficulty in motivating themselves.

The college or university experience has many aspects that actually lead to student satisfaction which as a university's product could be considered as the sum of the student's academic, spiritual, social and physical, experiences.

Most simple and easy factors to identify the issues in the educational institutions are to study the student satisfaction, student quality perception, and self-confidence of students. There are many articles and research journals which attended to clarify above concepts and they have constructed measures for quantifying these factors. It is simple also to find the impact of these factors on one another and on other variables.

### 1.1 Student Satisfaction

Most common and simplest definition of satisfaction is that it refers to the favorableness of the student's personal valuation of many effects and understandings connected with getting admission or not. In order to understand the definition thoroughly, we can say that a student's experience is the factor on which the student's satisfaction depends. The overall student satisfaction is not only related to

the student's classroom experiences but it is also closely related to the academic choices, life in campus and of all other experiences in campus.

Concept of Herzberg Two Factor theory also applies to the student satisfaction for institution. This theory suggests that factors influencing positive satisfaction are different from the factors that promote dissatisfaction. Factors of satisfaction are called Satisfiers and they are mostly in control of the students. Dis-satisfiers or the factors creating dissatisfaction are normally out of control of the students and largely they are in the hands of someone else.

Satisfaction of the student measured as an instant outlook mostly of experience in the student's education, common perception of the student for apparent quality usually affected from the information which is objective, standing and not essentially linked with the individual based experience. Whereas in government offices and administration the quality of the program are more likely achieving the objectives, preservation rates, time for the outcome, salaries for the graduate at the initial level of time, graduating programs of the students in percentages, percentage of passing in exam in the field of the professional certifications.

In higher education the quality has been proposed by two concepts by Rapert, Smith, Velliquette, & Garretson (2004), the first one is process quality attributes and the second one is outcome quality attributes. The previous compacts with how well the services are offered, i.e., at what level the class room teaching and the student advising is carried out, how friendly the institutional environment is, and the factors like this. The satisfaction of the students can be calculated through most of the equipment which are now a days in use, which are supportive in evaluating the delivery of the services in quality (procedure quality) which might not be able to get the attributes of the quality in the educational programs which are offered by the universities, colleges or high schools which are known as a functional quality. As an example, as Kotler and Fox found in (1995), majority of the students in their academic programs are satisfied but they not satisfied with the academic advising or career counseling which are support services.

Higher educational institution and its society both are benefited by its quality of occurrence and association. Thus, there is a strong association between the student, institution or university, and society. The strong educational system gives benefits to its society. In earlier stages of studies in higher educational institutions the student preservation have paying attention on academic capability as the forecaster of preservation and characteristically found that academic performance made clear no more than half of the difference in withdraw rates (Pantages & Creedon, 1978). Also, the social adjustment of the students might be the major element in forecasting determination suggested by the growing body of research (Gerdes & Mallinckrodt, 1994). The integration in the academic institution the social environment is a crucial factor argued studies (Tinto, 1975).

Focusing on the specific transaction and experience in the short-term the student's expectations produces dissatisfaction. That dissatisfaction directs towards the feelings and behaviors which are fond dissimilar from those resulting from satisfaction. Professor might be blamed by the student, the university or the colleague, whereas the positive disaffirmations have a higher probability to be credited to the self. On the one hand, self-confidence in the shorter period is estimated to be connected with positive satisfaction and only with supposed quality if positive satisfaction is extended,

enveloping, and continued. Whereas at the other hand, dissatisfaction with one occurrence directs towards conflict and agreement, while repetition in the dissatisfaction directs towards disconfirmation (alter of prospect and supposed quality), to isolation and to withdrawal, suggested by Aldridge and Rowley (1998).

### *1.2 Statement of the problem*

To study the ordinary impact of on campus student societies and student recreational activities on students' ownership with their educational institutions and the two stage impact of student societies and student recreational activities on students' ownership with their educational institutions when the students' satisfaction level towards societies and recreational activities was taken as the mediating variable.

### *1.3 Research questions*

The review of the literature and the problem statement has established the following research questions:

1. Is there any association between on campus student societies and students' level of ownership?
2. Is there any association between recreational activities and students' level of ownership?
3. Is the association between on campus student societies and students' level of ownership is more robust when the students' satisfaction level towards societies and recreational activities was taken as the mediating variable?
4. Is the association between recreational activities and students' level of ownership is more robust when the students' satisfaction level towards societies and recreational activities was taken as the mediating variable?

## **2. Literature Review**

Research has provided proof that the role of recreational and involvement activities have an impact on overall academic satisfaction. Academic measures have been analyzed with co-curricular activities and were found to be strong predictors as academics (Belch, Gebel & Mass, 2001).

Students are very diverse in their demographics, characteristics and their abilities. Almost all of the university/college students find the environment of the institute heterogeneous because they come from different backgrounds. How students engage with the academic and social environment that they find themselves in has become a legitimate concern for researchers, given the fact that they struggle to adjust to the new ways of learning in a new academic culture (Irungu, 2010). In this world of today they participate in many activities and co-produce their academic career, by doing so they satisfy their values and thoughts inside their mind (Kotze & Plessis, 2003). Psychologists have found that student contentment helps to establish confidence and by that a student acquires many skills and the process of self-building starts. Pike (1991) concluded that overall satisfaction exercises more persuasion on students than academics. Successful Learners use self-controlled mechanism to motivate themselves

(Letcher & Neves, 2010). Customer satisfaction and customer commitment are the main factors in the field of marketing. The important role that customers play has been recognized by corporations and they are making sure to enhance consumer experience to its maximum level. So is the case with education, student involvement and satisfaction is very important for their future behavior (Chen, Hsiao & Lee, 2007).

“Student-faculty interaction is one of the college sub-environments that have been identified as having a positive contribution to students’ acquisition of knowledge and other intellectual competencies (Pascarella & Terenzini, 2005)”. Interaction between the students and the faculty is proved to be essential for student development and high learning experience (Kuh, Kinzie, Schuh, Whitt, & Associates, 2005). The student-faculty interactions completely deal with the number and level of interactions between students and faculty in or outside the class. These interactions can be in the form of discussing class assignments, readings, grades and career plans or may be something else that students want to share with the faculty member or vice versa.

When these communications are recurrent and educational, they help the students improve their cognitive and affective development as students are able to learn directly from faculty while being offered prompt feedback about their progress (Kezar & Kinzie, 2006). As a result, those teachers become the role models, guide and mentors of students for continuous, life-long learning. Astin (1999) hypothesizes that; everyday face to face contacts with faculty is strongly related to satisfaction of students with institution than any other type of student involvement, student or institutional characteristic.

To generate meaningful gains using student-faculty interaction, the most important factors are time and consistency of interactions. Faculty has to be accessible and responsive to students’ needs allowing substantial contact on a regular basis. When this is done, it fosters affirmation, confidence, self-worth, and knowledge acquisition of students and development of the academic skills (Kuh, 1995).

The educational environment that students interact with greatly influences their gains in learning and intellectual development. Kuh, Schuh, Whitt and Associates (1991) describe the campus environment as all the influences and conditions inside and outside the classrooms which affect the development and growth of all the individuals that stay in it. These conditions can be material: location and size of the campus, or they can be social: the communications and interactions between the students and other members of the institute that are directed and formed by the customs, the culture, the expectations and subcultures of different students and most important of all the faculty groups, and organizational policy.

Negative perceptions regarding the institute’s environment are formed when students feel uncorroborated, discriminated against or are not provided adequate services. Negative perceptions can also be created when interactions between the students and their faculty are not good. Learning and development of the student is affected by these kind of perceptions and can inhibit students’ knowledge acquisition, social development and persistence (Cabrera, Nora, Terenzini, Pascarella & Hagedorn, 1999; Carini et al., 2006; Kuh et al. 2005; NSSE, 2007; Schroeder & Kuh, 2003).

According to Kuh et al. (2005) a supportive campus environment is usually a combination of:

- Institutional emphasis on providing their students the support that the students need for academic and social success
- Positive social and working relationships between the groups
- Helping the students at the institution in their non-academic responsibilities
- High quality of friendly relationship of students among themselves and with the other students, and staff.

Kuh defined enriched educational experiences as those experiences that instill diversity experiences, diverse perspectives of students, their activities, and their dialogues in academic and non-academic curricular activities which provide deep learning to students. This type of academic learning opportunities and activities in and outside the classrooms give students more meaningful and useful knowledge so that students can able to incorporate what they learn and reflect on who they are, or what they want to become, on the basis of acquired knowledge through the various experiences (Kezar & Kinzie, 2006; Kuh et al., 2005).

As defined by Kuh out-of-class activities are “the other curriculum”, which provide enriching educational experiences by providing them self-awareness, autonomy, self-directness, confidence, altruism, self-worth, social and practical competencies, reflective thoughts and acquisition of new knowledge, and finally the academic skills and application of knowledge they gained through various sources.

Various studies done on students’ in-class involvement revealed that students more pay special attention and involved in the events of class when they are asked to take notes of what’s been told to them during class. Achievement of higher grades was positively related to taking notes in the class. The greater the student’s investment of time in taking notes, participating in class discussions, and answering questions, the higher the cognitive development (Pascarella & Terrenzini, 1991).

As per the experiences in academic, and program participants high levels of satisfaction are reported along with grade point, test scores are improved, level of confidence increased, and in general the students’ experiences increased. Outcome of this study may contribute the accessible research regarding to the student involvement in recreational activities. The research may be used to facilitate and advance the services regarding to the relationship between the institute and students. The high level of educational programming and activities may contribute to the considerate that how well students’ perceptions and experiences impact future policies as well as the total restructuring of other academic support programs entirely based on student involvement. This research may also contribute to examine and discover the best practices of students’ satisfaction and involvement in the institution’s activities and educational programs. Furthermore the research on On-campus recreation explores involvement, satisfaction, benefits, participation, and also community (Tsigilis, Masmanidis & Koustelios, 2009). The satisfaction of University’s students and the effectiveness of On-campus recreation programs. Astin (1985) concluded in his paper that the more students were involved in the University and committed to their on-campus learning, physically and psychologically, the more likely it is that they would be satisfied with their success and educational experience. Highlights from the Astin’s model included a higher emphasis not only on academic but also on out of class extra-curricular activities. Astin’s work on students’ involvement was found to be linked to many positive outcomes for the

students at educational institutions and has shown the significant importance of tertiary institutions in providing opportunities for their students to become fully involved as part of a truly successful college experience (Wolf-Wendel, Ward & Kinzie, 2009). Lindsey and Sessoms (2006) and earlier, Pace (1990), agree with the Astin that the amount of personal learning and personal development a student receives at the institution is proportionate to the quantity and the quality of the involvement they have.

Student involvement is the actual amount of physical and mental energy a student puts in. Involvement like these can take many forms as in academics, extra-curricular activities and managing societies (Astin, 1999). The involvement of students in recreational activities is beneficial to their academic life. Through students involvement on campus teaches them communication skills profound knowledge about many issues and group dynamics. The notion that a happy student is a retained student is not farfetched (Lau, 2003). When students feel associated with their universities via involvement they feel connected and their academic.

Evidence have suggested that the participation in extracurricular and co-curricular activities integrates the students and has a very positive impact for the “persistence of students and degree completion” (Pascarella & Terenzini, 1991). The involvement of students on the campus has become a potential notion in the higher education sector and is mostly considered very crucial to the level of required output. The dilemma that has emerged now is to what extent the students of an institution can be involved in the extra-curricular activities on campus without letting these activities affecting the GPA of the students (Kiger & Lorentzen, 1988). So the involvement of full time students in the recreational activities and on-campus societies makes them feel involved in a higher purpose, simply, being a part of something.

### *2.1 Hypotheses*

Based on the thorough literature review the following hypothesis were put forward to test:

H1: There is an impact of on campus student societies on students' level of ownership.

H2: There is an impact of students' recreational activities on students' level of ownership.

H3: The impact of on campus student societies on students' level of ownership is more robust when the students' satisfaction level towards societies and recreational activities was taken as the mediating variable.

H4: The impact of students' recreational activities on students' level of ownership is more robust when the students' satisfaction level towards societies and recreational activities was taken as the mediating variable.

## **3. Research Methodology**

### *3.1 Description of Data and sample*

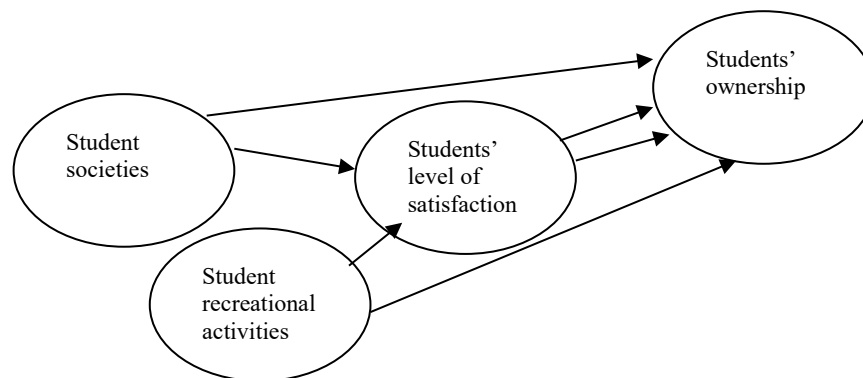
A personal interviewing method was deployed to collect the sample of 2500 students from 50 different educational institutions through a campus survey of randomly selected students in order to investigate the two competing theoretical models, which postulate two categories of propositions/hypotheses which include:

1. The ordinary impact of on campus student societies and student recreational activities on students' ownership with their educational institutions.

2. The two stage impact of student societies and student recreational activities on students' ownership with their educational institutions when the students' ownership with their educational institutions was taken as the mediating variable.

As stated above the on campus student societies, student recreational activities and students' ownership with their educational institutions were taken as the explained variables and explanatory variables respectively while the role of a mediating variable were given to students' satisfaction level towards societies and recreational activities.

### 3.2 Research Model Developed



For illustrating and reporting the procedures involved in conducting the OLS and 2SLS analyses, the above model was developed to highlight the ordinary impact of student societies and student recreational activities on students' ownership with their educational institutions and the two stage impact of student societies and student recreational activities on students' ownership with their educational institutions when the students' satisfaction level towards societies and recreational activities was taken as the mediating variable. While, the collected data for all stated variables were non-parametric and multi-chotomous in nature.

### 3.3 Econometrical Model deployed in this study

Two econometrical models were established and deployed to investigate the stated hypotheses which were:

#### A. OLS Model:

$$\text{Students' ownership for Institutions} = \text{Intercept}_1 + \text{Beta}_1 * \text{On-Campus Students' societies} + \text{ET}_1 \text{ -----}$$

Eq01

$$\text{Students' ownership for Institutions} = \text{Intercept}_2 + \text{Beta}_2 * \text{Students' recreational activities} + \text{ET}_2 \text{ -----}$$

Eq02



**B. 2SLS Model:**

Students' satisfaction towards Institutions = Intercept<sub>3</sub> + Beta<sub>3</sub>\* On-Campus students' societies + ET<sub>3</sub> -  
 ----- Eq03

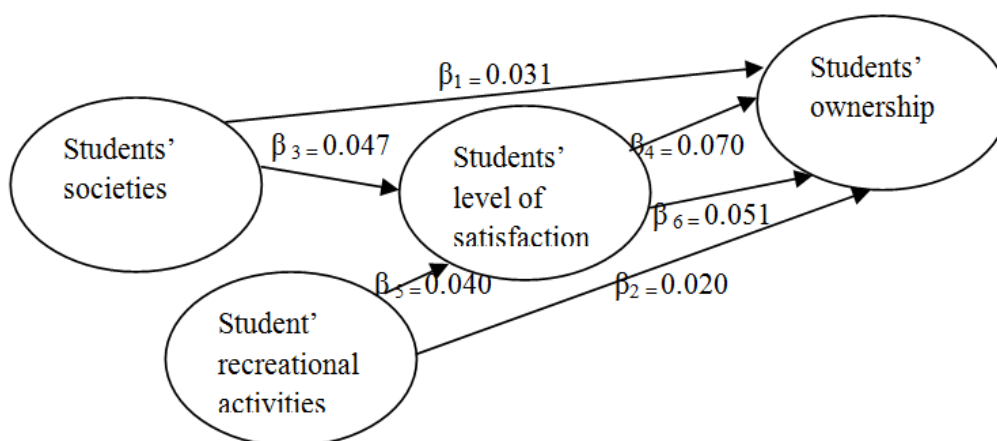
Students' ownership for Institutions = Intercept<sub>4</sub> + Beta<sub>4</sub>\* Students' satisfaction towards Institutions +  
 ET<sub>4</sub>-----Eq04

Students' satisfaction towards Institutions = Intercept<sub>5</sub> + Beta<sub>5</sub>\* Students' recreational activities + ET<sub>5</sub> -  
 ----- Eq05

Students' ownership for Institutions = Intercept<sub>6</sub> + Beta<sub>6</sub>\* Students' satisfaction towards Institutions +  
 ET<sub>6</sub>-----Eq06

**4. Findings & Results**

*4.1 Findings & Coefficients of OLS and 2SLS Models via deploying structure equation modeling*



**A. Findings of OLS Model:**

Students' ownership for Institutions = Intercept<sub>1</sub> + Beta<sub>1</sub>\* On-Campus Students' societies + ET<sub>1</sub> -----  
 Eq01

129.030    0.031  
 (2.711)    (1.383)

Students' ownership for Institutions = Intercept<sub>2</sub> + Beta<sub>2</sub>\* Students' recreational activities + ET<sub>2</sub> -----  
 Eq02

104.010    0.020  
 (1.802)    (0.775)

Findings of OLS model confirmed that Ordinary impact of student societies and student recreational activities on students' ownership with their educational institutions were found not significant at  $t < 1.5$  therefore we are failed to accept the first two hypotheses i.e. H1: There is an impact of on campus

student societies on students' level of ownership. H2: There is an impact of students' recreational activities on students' level of ownership.

#### B. Findings of 2SLS Model:

Students' satisfaction towards Institutions = Intercept<sub>3</sub> + Beta<sub>3</sub>\* On-Campus students' societies + ET<sub>3</sub> -  
----- Eq03

$$\begin{array}{cc} 133.000 & 0.047 \\ (1.655) & (1.572) \end{array}$$

Students' ownership for Institutions = Intercept<sub>4</sub> + Beta<sub>4</sub>\* Students' satisfaction towards Institutions +  
ET<sub>4</sub>-----Eq04

$$\begin{array}{cc} 100.090 & 0.070 \\ (1.511) & (4.349) \end{array}$$

Findings of 2SLS model, as shown in coefficients summary for equations 03 and 04, confirm that students' satisfaction towards Institutions (towards societies and recreational activities) plays a significant mediating role when we interrogate the impact of on campus student societies on students' level of ownership for their institutions as beta<sub>3</sub> and beta<sub>4</sub> are found significant at  $t > 1.5$  and these two betas explains the mediating role of students' satisfaction which is referred in hypothesis 03 and equations 03 and 04. Findings further confirm that the impact of on campus student societies on students' level of ownership is more robust when the students' satisfaction level towards societies and recreational activities was taken as the mediating variable therefore we are failed to reject the H3.

Students' satisfaction towards Institutions = Intercept<sub>5</sub> + Beta<sub>5</sub>\* Students' recreational activities + ET<sub>5</sub> -  
----- Eq05

$$\begin{array}{cc} 122.82 & 0.040 \\ (1.500) & (3.604) \end{array}$$

Students' ownership for Institutions = Intercept<sub>6</sub> + Beta<sub>6</sub>\* Students' satisfaction towards Institutions +  
ET<sub>6</sub>-----Eq06

$$\begin{array}{cc} 122.82 & 0.051 \\ (1.899) & (6.001) \end{array}$$

Findings of 2SLS model, as shown in coefficients summary, for equations 05 and equations 06 confirm that students' satisfaction plays a significant mediating role when we interrogate the impact of students' recreational activities on students' level of ownership for their institutions as beta<sub>5</sub> and beta<sub>6</sub> are found significant at  $t > 1.5$  and these two betas explains the mediating role of students' satisfaction which is discussed in hypothesis 04 and equations 05 and 06. Findings further confirm that the impact of students' recreational activities on students' level of ownership is more robust when the students'

satisfaction level towards societies and recreational activities was taken as the mediating variable therefore we are failed to reject the H4 as well.

## 5. Discussion & Conclusion

There is always a role of moderations and mediations of variables when we gauge the associations between the predictors and explained variables. In this paper we investigated and found the significant importance and role of mediating variable i.e. students' satisfaction level, when the association of on-campus student societies and students' level of ownership for institution was interrogated in comparison of an ordinary association between these two stated variables. The ordinary association between on-campus student societies and students' level of ownership for institution was found not significant in the absence of students' satisfaction level as a mediating variable while the stated associations was found handsomely significant and robust in the presence of students' satisfaction level towards societies. Furthermore The ordinary association between students' recreational activities and students' level of ownership for institution was found again insignificant in the absence of students' satisfaction level as a mediating variable while the stated associations was found augustly significant and robust when students' satisfaction level towards societies was taken as the mediating variable.

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