Antecedents of Higher Degree Students' Satisfaction: A Developing Country Perspective

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Abstract: The purpose of this study is to present the influence of personal and institutional factors on students' satisfaction in the context of developing country that further investigate the link between students' satisfaction and retention. A self-develop questionnaire that comprised of personal and institutional factors was used for data collection. Data were collected from 350 respondents including two public and one private university in Pakistan. Convenience sampling technique was used for data collection. Data were analyzed through SPSS 19.0. In order to check hypothesis, regression analysis was applied which explains that how personal and institutional factors significantly influences students' satisfaction and students' satisfaction influences students' retention. Results reveal that students' involvement and excellence of campus climate are more significant predictors of students' satisfaction as well as students' satisfaction predicts students' retention. This study has just focused on personal and institutional factors that affecting students' satisfaction in business schools. Other dimensions of students' satisfaction can be explored and extension of existing model can be done with the integration of marketing concept that is generating positive word of mouth as well as comparison among different schools can be investigated. Results from this study provide direction to institutions about strategic planning that how they can maximize the level of students' satisfaction by incorporating institutional and personal factors.

Key words: Students' satisfaction · Students' retention · Higher education · Institutional factors · Personal factors

INTRODUCTION

In this contemporary era, students pursue those institutions that provide them unique, memorable, competitive as well as personal educational experiences. Generally, students are being considered as customers since they experience incredibly valued services [1].

In higher education, students are one of the main players who are being considered as resource, customer and product as well. It is much important to ensure the significance influence of students on institutions when considered them as recourse. According to [1], when students enter in practical field they considered as a product of that institution from which they have completed their degrees. Institutions play a momentous role as a service provider/agent when students get admission [1] these institutions considered them as a customer and customers are always significant part for any organization as they are blood of their lives [2]. Moreover, relationship between students and institutions are noteworthy to study since it is expedient to determine whether promised services are effectively and efficiently delivered to its customers [3, 4].

The ultimate purpose of higher educational institutions is to transform students as a professionals and precious assets for a country. Competition among higher educational institutions compels them to add values in their services to satisfy the utmost needs of students that yield competitive edge. Furthermore, creating and maintaining students' satisfaction is crucial concern in present competitive academic world. In order to accomplish this, one can unearth the critical factors that affect the students' satisfaction since less attentions has given in this regard particularly in developing countries context.

Literature has evolved around the relationship between service quality and students' satisfaction [3, 5-8]. Furthermore, some studies focused on institutional factors like teaching quality, teacher expertise, learning environment, courses offered etc. [1] while other side of

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the coin did not observed i.e. students' personal factors. More precisely, past studies somehow not deeply investigated the influence of students' personal attributes on their satisfaction [9]. Acquiring new students is as important as retain to old ones. From prior studies, it is being considered that retaining the current students is critical for higher educational institutions since retaining them until degree completion is an important challenge [10].

There is imperative need to reveal most important attributes of students that maintain their higher level of satisfaction as well retention since this yield to determine the corporate strategies for higher educational institutions. These strategies help themfor making their prospectus more proactive and receptive for the eternally changing needs of current students [11, 12].

Educational environment is very dynamic since competition among institutions is high and there are a lot of challenges for students as well as for institutions. They comprehended that students' satisfaction is one of unique significant [13, 14]. By conceptualizing the existing body of knowledge, considering students' needs is incredible important as it makes institutions to be acceptable while delivering quality services [15]. The main purpose of this study is to conceptualizing students' satisfaction with the integration of personal and institutional factors as well as students' retention in higher educational institution in the developing country context.

As per the synthesis of existing knowledge this study mainly comprises of two research questions; first, what is impact of personal and institutional factors on the satisfaction of higher education business students? Second, what is the impact of students' satisfaction on their retention?

Literature Review: Satisfied students are regarded as favourable tools as well as a marketing agent for an institution to progress well in the market. High level of competition at higher education institutions demands quality services that can only be ensured by students' satisfaction and their stay in the university until degree completion. This is an outcome that higher education institutions are focusing their curriculum to satisfy students [16]. Students' satisfaction is not a static process while it is continuous process that includes issues of perception and expectations made by students' experiences [17]. Students' satisfaction is a complex and

continually changing construct in the higher education environment due to repeated interactions [15]. Several studies examined that cost of retaining an existing customer is 10% of the cost of acquiring a new ones [18].

Students' Satisfaction: Student satisfaction is a state felt by a person after experience or it is an outcome that fulfills person's expectations [19]. Students' satisfaction is the favourability of subjective evaluation by a student about numerous outcomes and experiences associated with education and overall environment [15]. The main feature of satisfaction is its relativity that makes it perplexing since every student as an individual possesses distinctive psychological aspects.

Student satisfaction is not precisely the same thing as educational quality while it is measured on the bases of students' self-reported experiences that are another aspect of educational quality [20]. Actually, expectation and experience develops the concept of satisfaction [21]. In the context of higher education, students' satisfaction is not so far considered as a matter of importance for survival of higher education institutions [22]. In contrast, from the concept of 'students as customers' reveals that students play a crucial role in institutional settings and their satisfaction matters a lot in determining accuracy and authenticity of the system [23].

Students' Academic Involvement: Student involvement means the willingness of student in taking part in their academic activities. The concept of "Involvement" is multifaceted which refers to as ''amount of both physical and psychological energy'' that a student invests in a college [24]. Academic involvement comprises of the associations with knowledge, teachers and other fellow students that leads to their grooming at university. This concept enables institutions of higher education to identify the level of their productivity [20] According to [20], students' involvement affects students' association with the campus, faculty and with other fellows as well as it enhances the overall students' satisfaction. Students will have more satisfaction with all aspects of college life except friendship with fellows when they are being involved in academics with more seriousness [24]. More precisely, students' involvement in academic activities influences students overall level of satisfaction.

H₁: Students' academic involvement significantly enhances students' satisfaction.

Excellence Of Campus Climate: According to [25], climate can be defined as an environment which is formed by the variety of people. Campus climate is "a special environment that is created with normal interaction among students and all campus particulars" these particulars can be faculty members and service support departments [9]. Campus climate impacts directly and indirectly on students' state of personality.

Excellence of campus climate is somehow guides the behaviour of students that what is acceptable in the campus and to what extent there is a difference between favourable behaviour and unfavourable behaviour [26]. Excellence campus climate play an incredible role in students' satisfaction [27]. Students would be more satisfied when campus climate is favourable and match with their personalities. Therefore, campus climate is one of essential determinant of students' satisfaction.

H₂: Excellence of campus climate significantly positive impact students' satisfaction.

Financial Constraints: The term financial constraint has not been defined in literature while it refers to as a negative mismatch between economic needs and economic resources [28]. Individuals feel discomfort in their lives due to financial constraints as more economic needs with less resources.

There are more challenging and complex situations when students face financial constraints. Ineffective allocation of economic resources, unemployment and economic pressures reflects financial constraints [29]. Students whose families are economically strong have different perspective of financial constraints than those whose families are unable to support them financially. According to [30], individuals belongs to different social classes (upper, middle, lower) and they are facing different level of financial constraints that influence their satisfaction. According to [31], a major source of dissatisfaction and difficulty for students is the financial constraints. Students' satisfaction would be decreased if they do not have enough financial resources to support their study.

H₃: Financial constraints significantly decrease students' satisfaction.

Students' Self-Motivation: Self-motivation is defined as the self-generated energy that gives behavior direction towards a particular goal [32, 33] Suggested that motivation has two prominent dimensions; 'intrinsic motivation' distinct behaviour that is engaged in one's own sake (inner-self) and 'extrinsic motivation' is behaviour which links with nature (outer-self).

According to [34], students have uniqueness for their core values, capabilities and strengths. Apart from similarities, students individually have their own personality traits that yield their source of recognition. According to [35], students' self-motivation (intrinsic and extrinsic) has an influence on students' satisfaction. There is linkage between self-motivation and satisfaction as those students who are highly self-motivated would be more satisfied.

H₄: Students' self-motivation significantly enhances students' satisfaction.

Students' Achievement: Students' achievement can be defined as academic achievement which is measured by test score and essential skills. These attributes reflected from students' aptitude, attitude, accountability, responsibility and determination to achieve mastery goals as well as responsibility to the community [36]. In the case of university students, academic achievement can be represented by their grade point average [37]. It's concluded that students' satisfaction boosts up when they are determined to achieve mastery goals [38]. Recent studies [39-41] found that there is positive link among students' satisfaction and students' achievement.

H₅: Students' achievement has significantly positive impact on students' satisfaction.

Students' Retention: According to [42], students' retention can be elaborated in terms of retention with institutional courses, programs and campus. Course retention indicates the net result that how many students enrolled in a particular class/course and how many have completed at the end. Program retention is concerned whether students have graduated in the program in which they have enrolled for a specific duration. Campus retention means that either student is in campus till the completion of degree. Researcher delineated four types of retention [43]: 1) 'Institutional retention' can be linked to institutions including colleges and universities, 2) 'System retention' comprises on students' retention with the system of higher education, 3) 'Retention with academic discipline' means student selects and complete a specialized academic discipline, 4) 'Retention with

Theoratical Farmwork
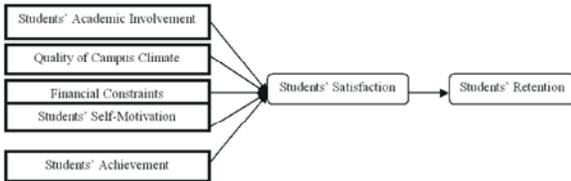
course' measured at the students' course level. In higher educational institutions students are customers [1]. In order to keep high level of customers' retention can be acquired through customers' satisfaction [44].

Students' satisfaction leads towards students' retention [45]. Students' attitudinal behaviour predicts behavioural intentions that ultimately predict students' actual behaviour [46]. According to [47], students' satisfaction has incredible influence on intentions to stay (students' retention).

H₆: Students' satisfaction significantly enhances students' retention.

MATERIALS AND METHODS

Instrument Development: From the synthesis of existing body of knowledge, we have self-developed a questionnaire consisting of 39 items that cover all dependent (students' satisfaction and students' retention) and independent variables (academic involvement, quality of campus climate, financial constraints, self-motivation and achievement) that used in this study. Instrument was developed on five point Likert scale (strongly disagree = 1 and strongly agree=5). For developing the instrument, took help from academic and industrial experts as well as extensive literature review was used.

In order to ascertain face and content validity of the instrument, initial questionnaire was approved from academic experts, finally reworded accordingly to insure the clarity. In validity, a particular measure would be considered as valid if it measures what is supposed to be measure [48]. Generally content validity is measured through domain experts or practitioners [49, 50]. Content and face validity was ensured through three academic experts. In face validity, formatting, sentence structure, spelling mistake and language errors were observed. The purpose of content validity is to examine that to what extent items are addressing all dimensions of a particular construct [51].

Data Collection And Sampling Technique: Data was collected through questionnaire from 350 undergraduate and graduate business school students in the universities (private and public) Pakistan. Sample size of 350 was calculated by using population proportion formula [52] in which 95% confidence interval was employed with 50% probability of successive event and 5.2% margin of error [53].Convenience sampling technique is significantly useful for social and behavioural research studies [54]. Therefore, convenience sampling technique was used for data collection purposes.

RESULT

For the purpose of data analysis, 350 questionnaires were entered in SPSS version 19.0 for multiple analysis including demographic, reliability, factor analysis, correlation analysis and multiple regression analysis.Unit of analysis in this study was individual student who are studying in different business schools. Demographic analysis of these respondents is presented in underneath Table 1. Data normality was checked through skewness and kurtosis as values of all variables is within suggested range that is ±1 [55].

Reliability Analysis: In recent studies, numerous techniques were adopted to assess the reliability of items that used to measure a particular variable. Crobanch alpha coefficient is one of the most prominent tools for reliability [56]. Table 2 present the reliability analysis results, measurement scales represented a sufficient reliability score as suggested by [57]. More specifically, for all constructs the reliability exceeds the threshold value of 0.60 [58]. According to [59], threshold for coefficient alpha value is 0.70. In below table values of all constructs are lies within suggested range.

Exploratory Factor Analysis: Factor analysis makes the factors or clusters of items that have similar psychometric characteristics [60]. It explores interrelationships among observable measures and form factors/clusters of highly correlated items [61]. Factor analysis was carried out extraction through principal component analysis with verimax rotation and all factors were selected on the base of Eigen values. Results of factor analysis from current study meet the two as sumptions that confirmed the applicability of factor analysis, Bartlett's test must be significant and KMO value must at least 0.60 [61, 62]. The results in Table 3 imply that KMO and Bartlett's values lies within suggested range [63].

Table 1: Demographic Analysis

Demographic Attribute	Description	(%)
Gender	Male	57.4
	Female	42.6
University	Public	26.9
	Private	73.1
Educational Leve	Undergraduate	32.0
	Graduate	68.0
Monthly Household Income	20,000-40,000	41.1
	40,000-60,000	33.4
	Above 60,000	25.4

Note: (n=350)

Table 2: Reliability Analysis

Variable	Cronbach Alpha	No. of items
Students' Satisfaction (SS)	0.759	5
Students' Academic Involvement (SI)	0.788	5
Excellence of Campus Climate (ECC)	0.781	5
Financial Constraints (FC)	0.748	5
Students' Motivation (SM)	0.816	5
Students' Achievement (SA)	0.813	5
Students' Retention (SR)	0.812	5

Table 3: Exploratory Factor Analysis

S. No.	SS	SI	ECC	FC	SM	SA	SR
1	.70	.75	.72	.76	.77	.79	.79
2	.79	.73	.78	.76	.74	.78	.73
3	.78	.73	.75	.70	.76	.75	.79
4	.67	.79	.74	.66	.75	.75	.69
5	.64	.69	.69	.66	.75	.72	.76
KMO	0.76	0.80	0.78	0.68	0.77	0.82	0.82
Bartlett	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Variance explained (%)	51.9	54.0	53.6	50.0	57.7	57.0	57.0

Table 4: Correlation Analysis

	1	2	3	4	5	6	7
Students' Satisfaction (1)	-						
Students' Academic Involvement (2)	.73	-					
Excellence of Campus Climate (3)	.68	.67	-				
Financial Constraints (4)	.55	.55	.68	-			
Students' Motivation (5)	.61	.61	.66	.61	-		
Students' Achievement (6)	.34	.27	.33	.32	.34	-	
Students' Retention (7)	.64	.66	.63	.58	.64	.37	-

Note: All values are significant at 1%, (n = 350).

Table 5-A: Regression Analysis-First Model

Variable	Beta	SE	t	Sig	Hypothesis
SS	.26	.16	1.62	.105	-
SI	.42	.04	8.85	.000*	Supported
ECC	.25	.04	5.33	.000*	Supported
FC	.08	.04	2.11	.035*	Not Supported
SM	.09	.04	1.41	.157	Not Supported
SA	.08	.03	1.68	.094	Not Supported

Note: R^2 = .62, F (5,344) = 116.18,*p<.05

Table 5-B: Regression Analysis-Second Model

Variable	Beta	SE	t	Sig	Hypothesis
SR	.98	.16	6.05	.105	-
SS	.70	.04	15.62	.000*	Supported

Note: R^2 = .41, F (1, 348) = 244.05,*p <.05

Variance explains show that how much variance is explained by a particular factor. Scores of variance explained for all variables in beneath table are greater than 50% in which student motivation carry 57.7% which is reasonable good.Literature suggested that loading scores of every item should be greater than 0.40 [61, 64, 65]. Loading scores of all items in underneath table are greater than 0.40 that lies in acceptable range.

Correlation Analysis: Correlation analysis is being used to measure the strength and direction of relationship between variables [52]. In Table 4, correlation between independent and dependent variable are significant at 1%. Correlation among all independent variables and dependent variable is strongly positive except student achievementi.e. 0.34.

Regression Analysis: In this study, model was testified in two phases. In first phase, student satisfaction was regressed through all independent variables and in second phase student retention regressed through student satisfaction. The results from Table5-A, depicts that above listed five independent variables explains 62 per cent ($R^2= 0.62$) of the variance in students' satisfaction. On the other side, results from Table 5-B, shows that students' satisfaction explains students' retention by 41 per cent ($R^2= 0.41$). The significant value of f-distribution exhibits the significance of overall model.

In Table 5-A, students' academic involvement significantly enhances students' satisfaction that support the first hypothesis (β = 0.42, p-value < 0.01). Beta coefficient demonstrates that by increasing one unit in students' academic involvement students' satisfaction would be significantly enhances by 0.42 units. Excellence of campus climate significantly increases students' satisfaction (β = 0.25, p-value < 0.01) that accept the second hypothesis of this study. Students' satisfaction is significantly decreases by financial constraints is third hypothesis of this study which is rejected (β = 0.08, p-value < 0.05) since results depicted that financial constraints significantly increases students' satisfaction. Students' motivation insignificantly enhances students' satisfaction (β = 0.09, p-value > 0.01). This result rejects the fourth hypothesis of this study. Students' achievement not significantly enhances students' satisfaction (β = 0.08, p-value > 0.01) which cause the rejection of fifth hypothesis. In Table 5-B, students' satisfaction significantly increases students 'retention (β = 0.26, p-value < 0.01). Results of this table reveals that last hypothesis of this study is accepted.

DISCUSSION

The prime objective behind this study was to regress students' satisfaction with the integration of personal as well as institutional factors and by extended the model students' satisfaction determine the students' retention. Focusing on student satisfaction is beneficial for institutions to adapt student needs and establish a progressive system for continuous improvement by putting the things effectively [66].

First hypothesises students' academic involvement is significantly positive impact on students' satisfaction which is accepted. Students' involvement enhances the level of their satisfaction and it is being supported from the results of this study [20]. Enhancing students' involvement is critical and reflected by exchange of information among teacher and students, receiving useful advices, highlight opportunities and solving students' problems. Eexcellence of campus climate is significantly enhances students' satisfaction is second hypothesis of this study and this hypothesis is supported. Excellence of campus climate provides the matchless experience to students and it has unique contribution in students' satisfaction [27].

Third hypothesis "financial constraints significantly decrease students' satisfaction" was rejected from empirical results. In theoretical perspective it is understandable that financial constraints predict students' satisfaction negatively while results show contradictions. By integrating the existing social contexts/practice with the theory, in data collection phase most of the respondents are economically sound and they did not face any financial constraint. Therefore, they do not even consider financial constraints are an issue for their satisfaction. Furthermore, data was collected from public and private universities. Public universities charge less fee while fee stricter of private institutions is high but private universities give financial assistance in form of fee concession and numerous types of scholarship that take away students from any financial constraints. Fourth hypothesis is not supported from empirical investigation that students' self-motivation is significantly positive impact on students' satisfaction. Generally in the perspective of developing countries, people are materialistic and they pay fee for educational services that put their focus on institutional performance instead of students' experience/personal forces at campus.

Fifth hypothesises also not supported from empirical data analysis, "students' achievement is significantly increases students' satisfaction". Students as individuals attribute the positive things with them and negatives to others. In the same way, students' achievement is students' effort and they attribute to themselves. Sixth hypothesis is students' satisfaction is significantly enhances students' retention which is accepted. [67] Presented Student Attrition Theory which implies that the lower the scores the greater intent to leave while the greater the scores the lesser intent to leave. Thus, greater student retention when they are more satisfied.

Managerial And Acdemic Implication: This research revealed that personal and institutional factors influence students' retention indirectly through students' satisfaction in higher education institutions. It implies that institutional factors which influence students' retention through students' satisfaction are of greater significance for university stakeholders including students, management body (decision makers, policy makers etc.). The results of this study reveal that "excellence of campus climate" predicts the students' satisfaction which implies that in order to have highly satisfied students, universities' management should focus to improve the quality of campus climate and develop a complete mechanism for its quality control. This study will also help to strategic planners of different universities that how student satisfaction can be ensured by incorporating institutional and personal factors. Likewise, students' satisfaction predicts students' retention which implies the versatile implication to manage students' retention through students' satisfaction that will improve the future prospects of higher education institutions.

Researchers can contribute to the theory development by applying and testing existing relationships among constructs in culturally different market environments of higher education institutions. Cross-cultural results will possess the unique implication to justify cultural differences and respective. Intended researchers in the field of customers' satisfaction can take reference from this study about students' satisfaction. Academic researchers can go for a cross-cultural research to assess students' satisfaction in different cultures as customers' satisfactions vary from research context to context [68]. Cross-cultural results will possess the unique implication to validate that cultural differences exists with respective implications.

Limitations And Future Research: This study just focused on personal as well as institutional factors that affecting students' satisfaction and one predictor for students' retention. Respondents of this study were

business students. Future researchers can extend the model with the extension of students' loyalty to the institutions with business, engineering, medical or other students as well as comparison can be made among these schools. To broaden this area more research questions can be addressed like "Are current students of an institution willing to take admissions in the same institution for some other degree programmes?" and "Will current students recommend their friends or family members to take admission in the institution from where they have completed their degrees? Further study can be conducted in this regard either students' satisfaction and retention is a source of completive advantage over other higher education institutions. Model extension can be done by incorporating both experience outcomes including students' satisfaction and dissatisfaction, at that point, future research can be done, whether "students' dissatisfaction" also leads towards the "intention to leave" as "students' satisfaction" leads towards "students' retention". From the path of "influencers" to "students' satisfaction" and further to "students' retention", to explore whether students are as a source of quality standards, is a good future research direction.

CONCLUSION

Results from this study reveal that the students' institutional and personal factors affecting students' state of satisfaction. The overall satisfaction can be attributed to the students' academic involvement and excellence campus climate. Furthermore, students' satisfaction can be attributed to students' retention which confirmed the previous study [69]. This study proved that institutional and personal factors put positive impact on students' satisfaction and students' retention has increased by students' satisfaction. Students are unique and valuable assets for higher educational institutions that must be treated significantly and strategies must be devised students' preferences oriented. It will enhance the overall level of students' satisfaction that leads to enhance the students' retention.

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