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MASTER THESIS

**SCALE DEVELOPMENT FOR MEASURING RETENTION
IN DISTANCE EDUCATION**

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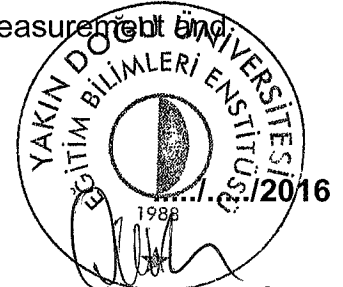
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ABSTRACT

Scale Development For Measuring Retention In Distance Education

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In consideration to the development of distance education, and subsequently, the proliferation of distance learners, it is exceedingly important for institution to discover strategy that can foster students retention by identifying their needs and implementing practices that enhance persistence (Tinto, 2012). This study examines the effective constructs in student retention by investigating dynamics for retention from customer value, technology ,quality, satisfaction, corporate image, behavioural intention, loyalty and retention. This study is helpful to service providers (educational institutions) to improve their marketing strategies to ensure that distance learning students (customers) remain with their desired online programs and is also aimed to identify which engagement initiatives and practices are expected, effective, and predictive for retaining distance learners. The result showed that student behavioural intention and loyalty lead to retention.

Keywords : Retention, Attrition, Satisfaction, Loyalty, Quality, Persistence

Dedication

This work is dedicated to the Almighty God

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CHAPTER I

INTRODUCTION

Because of the rapid development of technology and heightened request by an individual, the involvement of computer and internet by both teacher and student in education is now monumentally unavoidable. Teaching and learning process can take place even while both teacher and students are physically absent and this is no longer a new practice but a contemporary area of education which is putatively understood and embraced by an individual of different ages, which provides for learners the opportunities to learn at more convenient platform. Learning from a distance is widely accepted on a proven premise of its undeniable usefulness to those, who do not have adequate time to manage their jobs, duties, domestic work and to acquire education by attending classes on campus. Besides, students, who are physically challenged prefer distance learning to traditional classroom system of education which might not have adequate facilities needed to cater for their learning styles, stimulate academic excellence performance. Also, students that are living at a distance to a campus, do not have to bother because distance learning programs are independent of geographical location.

It is not necessary for a student of distance learning program to attend classes on campus or to be coming and going around classrooms for lectures. This provides colossal benefits for those, who live far away from an institution, at local environments where there is no college and to students that live overseas. Distance education is capable of providing affordable and wider access to education for as many that wish to save their resources such like time, money and are still interested in acquiring knowledge, education or certain skill.

One of the benefits of distance learning program is that, it is invariably less expensive than face to face classroom college because distance learning programs do not cater for some facilities that include some expenses such as classrooms, chairs and desks for learners so certain amount of money can be saved, thereby providing opportunity for those who might have been financially incredible to acquire higher education traditional, to access distance learning. Because it is cheap and rapid development of science and technology and because of endless request for effective educational systems, distance learning is gaining popularity and attention" (Zhang, Zhao, Zhou, & Jr, 2004). However, student attrition in distance learning has been an issue of concern for a long time (Summerskill, 1962). Research from few colleges revealed that students, who could not finish their study claimed lack of adequate finance, lack of quality service, personal and undisclosed reasons as the responsible factors for their attrition (Cope, 1978). Having a college certificate can bring about better standard of living, more secured future, and fulfilment of vision. There are many advantages to be gained by attending college, the fullness of the benefits is invariably meant for those, who finish their study and are certified (Paulsen, 2001). Students, who do not finish college are susceptible to to have delay in realizing their dreams or earn low salary (Gladieux, 2004). Society depends on an educated individual and gains nothing from student deflection (Kline, & Asker, 2001).

Universities do not gain anything from student attrition but rather record reduced income when students do not finish their study (Murphy, 2003). Feldman (1993) studied students behavioural intentions, how the intentions can affect social unification, and the relationship between intention, social unification, and the desire to persist. The salient result of the study was that institutional behavioral, service quality, student loyalty impacts retention.

The major benefits of distance education are as follow:

Invariably Less Expensive: Distance learning courses are more affordable than the cost of attending traditional schools . The costs of equipment, infrastructure

and acomodation which are attached with expenses for living are invariably the most expensive aspects of a college education, so distance education can help you to save certain amount of money.

More Considerate: Students, who are offering distance learning courses, are able to decide on the time to study and the duration. You are also capable of planning your study together with other activities. Since you are not bound to a classroom, learners do go on with their study any where they can access a computer and the internet.

It is flexible: Learners opinions, suggestions and weaknesses are being put into consideration in decision making or before setting a deadline for submission of assignment and completion of a task. The online learners can go about others things together with distance education. Students can spend longer time on the course that tends to be difficult and they are the determinant of the pace for study.

Science and Technology: Through connection between computer and internet, students can receive their online lectures anywhere at anytime. The major requirement is the availability of computer and internet amenity.

Availability: Distance - learning programs have immensely developed over the past few years, with many approved and reputable programs available for learners.

Wider Access Students of distance education can work on the course just at anytime and anywhere you have computer access. Your study schedule can not be hindered by where you are. Distance education is adapting to the needs of the world citizens.

Time Saving: Students do not need to spend time attending a classroom or travelling to campus for lectures or for any order reasons.

It Centres on Students: While students are having online chatting, they can see and respond to other participants' comments and provide their own comments about the topic at discussion. Sometime, students respond to those topics on discussion that majorly address their concerns and situations thereby producing several smaller units of conversations to be taking place within the group. Students take charge of their own learning experience and channel the on going discussions towards meeting their own individual expectations.

Limited Discrimination: Learners do not converge in classrooms for lectures and occasionally visit campus so this reduces every factor that can foster discrimination such as age, dress, physical appearance, disabilities, race and gender. Because of this, attention is focused mainly on the content of the discussion and learners' ability to contribute positively and constructively to the material at hand.

Access to Resources: It is not difficult to involve renowned visiting scholars from other schools in an online class as well to give allowance to learners to access materials, relevant information and online libraries anywhere in the world. An instructor can compile a resource section online with links to scholarly materials, articles, and other things that are relevant to the courses they study.

Creative Teaching: Distance education embraces the use of interactive learning materials that provide self-direction and logical thinking. Some educators got recognized by applying these concepts to their on ground teaching. In the online environment, the instructor and learners form collaboration to create a dynamic learning experience.

1.1 Statement of The Problem

For the nature and significance of the problem to be discussed in details, some strategies such as relationship marketing, satisfaction, loyalty, and student retention shall be explained and elaborated upon. Relationship marketing is now a vital topic in the issues of marketing during the 1990s. Many international seminars and special issues of journals such as the European Journal of Marketing (1996), the Journal of the Academy of Marketing Science (1995), the Asia-Australia Marketing Journal (1996), and the Journal of Marketing, have successfully created a worldwide forum for discussion on relationship marketing, its issues and promises.

Relationship marketing has to do with the act of managing and maintaining healthy relationship strategy created to foster effective, durable customer invitation to a service. The goal is to foster sales repurchase, enhance inter personal promotion and collect customer data. Good relationship marketing involves a series of network of strategies with technologies that can assist to achieve a better, more reliable relationship with current and prospective customers.

Scale development for measuring retention in distance education by assessing student value, technology, service quality, student satisfaction, corporate image, student behavioural intention, student loyalty and retention has not been investigated in distance learning program.

1.2 The Objectives Of This Research

Relationship marketing theory explains cordial and beneficial relationship that should exist between service providers and customers. This research work is marked to measure customer retention intentions by examining students value, technology, service quality, satisfaction, corporate image, behavioural intention, loyalty and retention at diploma level in distance education program.

The goal of this research is to measure the level of students satisfaction, retention rate in distance education and to determine the factors that can foster students' defection in distance educational organization.

The outcomes of this study may be helpful to service providers (educational institutions) in order to improve their marketing strategies so as to ensure that online students or customers behavioural intentions and expectations with the online programs are meet. The outcomes of this research (key success factors) may increase student retention, which leads to increase in future tuition revenues.

The research questions are as follow ;

- How satisfied are students with the quality of instructional and other educational services?
- What are the factors or student characteristics that impede non-traditional online student persistence in distance learning?
- What is the rate of student retention in distance learning program in Near East University?

1.3 Proposed Research Model

Many researchers in customer loyalty, retention and deflection investigate the processes separately but they have not linked the processes together (Colgate and Norris, 2001). Review of literature shows that (Gan, Cohen, Clemes, & Chong 2006) designed a customer retention model that connects some major constructs which can influence a customer's decision to stay or deflect. Previous work reveals that there is a positive relationship between consumers' behavioural intentions, customer loyalty and customer retention.

Furthermore, there is a positive relationship between customer satisfaction, customer value, and consumers' behavioural intention. Similarly, Dehghan (2012) found that there is a positive relationship between satisfaction and trust, satisfaction and loyalty, reputation and loyalty. This study is based on the work performed by Gan et al. (2006) and Dehghan (2012). This proposed model is to address retention intention in distance education, the proposed conceptual model consisting of retention intention (customer value, Technology, Service Quality, satisfaction, corporate image, behavioural intention, loyalty and retention) can be found as follows:

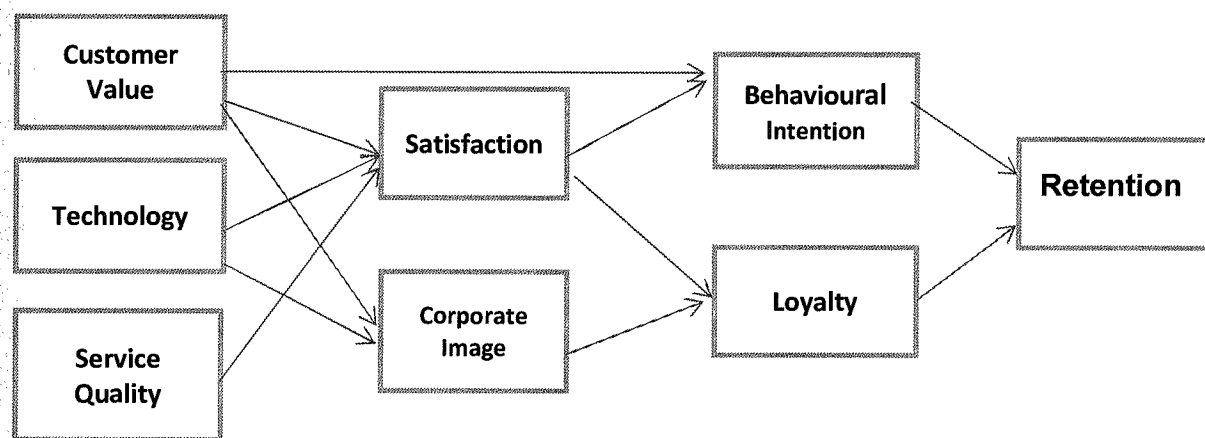


Figure 1 Proposed Research Model (Gan, C. 2006 & Dehghan, A. 2012).

1.4 Satisfaction vs. Loyalty

Customers satisfaction is a salient factor of survival quality, institutions always endeavour to identify customer expectations, behavioural intentions and formulate strategies that will help them to be ahead of average level of the service provided by their counterparts. Retention programs have been existing since 20th century, ever since 1960s, customer satisfaction has become an area of concern and concentration. Kotler (1996) defined customer satisfaction as "the level at which a customer feels about the service rendered to them".

Though, customer satisfaction can be seen as an act that compares between the inputs that can foretell the loyalty of a customer. Satisfaction encloses an emotional feedback in which "customers make comparison of result to their expectations before they make purchase or use" (Brunner, Stocklin, & Opwis, 2008).

Quality is a consumer logical conclusion about the total quality of a product or customer service in respect to many areas as measured by performance, efficacy, durability, efficiency, etc. (Petrick, 2004). Customer retention rate is a benchmark for measuring the success of an institution and a service provider. On the other hand, it is argued that customer satisfaction precedes perceived quality of goods and services (Bitner, 1990). A conscientious evaluation of the current literature has revealed that customer satisfaction mediates the impact of service quality on retention. Educational services just like retail business, depend highly on repurchases by loyal customer (Hoyt & Howell, 2011). Students keep purchasing credit hours until they complete their study.

1.5 Application of Marketing Strategy Model To Higher Education

Managing an educational institution and a business are alike and profitability can be enhanced through the application of similar strategies (Hoyt & Howell, 2011). The review of literature recognised two studies that are recent with applicable models that are perception to customer loyalty to higher education and customer retention to banking Industry but none measures retention the rate directly in continuing education programs.

It has been discovered that academicians who develop instructional websites do not have to consider learners' satisfaction and retention, since there seems to be no direct financial involvement between the student and the educators. Therefore, most of these websites are designed without fore knowledge of the learners' needs, expectations and preferences. However, studies show that a well designed academic website may not have an effective influence on students' perceptions of the site's owner. Without the incorporation of retention program, every online business can collapse (Reichheld & Schefter, 2000).

In many approved research models, learners are considered as customers and educational institutions as service providers (Hennig-Thurau, Langer, & Hansen, 2001). It should be noted that student retention has become a significant factor for educational institutions' development because :

- (a) Institution is being financed by the fees, paid by students
- (b) It is cheaper to retain students than to get new students;
- (c) Students that are retained can contribute to university teaching quality by their commitment, and
- (d) Retained students tend to recommend their schools before and after graduation (Hennig-Thurau, Langer & Hansen, 2001).

Many models have investigated student loyalty and retention, some researchers such as Akarapanich (2006), and Helgesen and Nettet (2007) studied the factors that may foster student loyalty, no one has investigated customer retention through the application of student value, service quality, technology (facilities), satisfaction, corporate image, behavioural intention, loyalty and retention in distance educational programs, this research will investigate all.

CHAPTER II

LITERATURE REVIEW

This chapter contains, the concept of relationship marketing, satisfaction, technology, commitment, service quality, reputation, loyalty, customer value, behavioural intention and student retention assessment models in distance education will be discussed.

2.1 Student Retention Theory Vs Relationship Marketing Theory

Models of student attrition, like that of Tinto's Student integration Model (1993) and Bean's Student Attrition Model (1983), are therefore not adequate enough to provide elaborate information to analyze the student drop out rate. Processes at various degrees in an institution or learning situations have relevant impact on student decision to stay or leave and the relationship marketing theory helps to realise a sustainable development in terms of student enrollment and retention.

2.2 Education is a Service

Education is a service and students are the major focus of the institution, education services constitute core and supporting services. Teaching - learning activity that takes place both in traditional classroom and online is a typical example of core service because it is targeted to bring about an expected learning outcome. Contributive services which include timely information dissemination about courses, student advising, registration via internet, student accounts, complaints are being attended to, and reply is provided promptly in a friendly approach.

Marketing of educational service is about building strong ties between the institution and students which will become the a platform on which reliable and healthy relationship becomes achievable. Educational services can be managed the same way of managing process of relationship. Moreover, it is more challenging than the act of

managing products because products can be standardized but it is difficult to standardize services owing to the involvement of large number of staff.

2.3 Relationship Marketing

Relationship marketing can be defined as shift in marketing practices and strategy, is the founding, creating, and sustenance of relationships and exchanges (Morgan & Hunt, 1994). This theory concentrates on the method of not losing the current customers by strengthening the relationship.

Marketing strategy and online education are related since they are about the production of the product no one else can copy with an atmosphere of learning for students right from enquiry stage. The major benefit in building relationship marketing approach in business is that, resources are managed in order to strengthen and establish ties with existing customers on the proven premise that retaining existing customers is less challenging than getting new ones.

Various models for relationship marketing have been designed widely across many fields of study, specializations and existing evidence suggests that it is a successful and reliable strategy. Research works on student retention and relationships marketing are reviewed and conclusions were drawn. The relationship marketing model reveals another method of assessing student retention, offers another perception on retention strategies, and provides a financial justification for implementing retention programs. Berry (1983) provided appreciable salient point by presenting three methods in which relationship marketing is most applicable.

The advantages that can be derived from applying a relationship marketing strategy in order to retain student are in three folds, and they are as follows:

- a) It fosters the proliferation of the number of graduating students if being applied effectively in educational system.
- b) It is wise and financially profitable to commit resources to student retention .
- c) The tendency for graduants of an institution to become loyal alumni and donors increases if relationship in built.

This research uses the theory of applying relationship marketing model to resolve the challenges associated with students retention in distance education.

2.4 Satisfaction

Oliver (1980) agreed that customer satisfaction is a complete fulfillment of customer expectations of products quality and services rendered. If the quality of the product meets customers' expectations, they will feel satisfied. If this does not take place, they will not be satisfied (Oliver, 1997). In this vein, expectations have effect on customer perception towards the quality of products and services (Brunner, Markus, & Klaus, 2008).

Here are some reasons why customer satisfaction is so important

1. Determinant of repurchase tendency:

Satisfaction is the tool to measuring the tendency of a customer to make a repurchase. The practice of making a request on customers to rate their level satisfaction on a scale graded 1-10 can go a long way to discover the level of repurchase possibility. The customers that give a rating grade of 7 or beyond should be regarded satisfied, and these are the customers that the service provider should expect to come back for further repurchases.

The customers that provide grade of 9 or 10 can be regarded as advocates for the service or products. The customers, whose result is of 6 or below shows a sure sign of dissatisfaction and such can terminate patronage. Such customers should be interviewed to discover the cause of their dissatisfaction.

2. It is a point of differentiation:

The business that will survive in a very competitive market environments is the one that takes customer satisfaction seriously. Recommendation will definitely help a business to gain more customers.

3. It increases patronage:

Research reveals that cost of a product or service is not the only factor that can foster defection or termination of patronage by customer, the act of churning can be due to the lack of quality that customers expect to get, dissatisfaction can lead to customer churn.

There are two types of churn :

***Voluntary Churn:-** Where the customers choose to switch carriers or terminate their use of wireless services

***Involuntary Churn:-** Where service is deactivated involuntarily due to missed payments, bad debts e.t.c

4. It lengthens Patronage: Satisfaction helps service provider to have continual repurchase experience from a customer. Customers tend to keep patronizing a product that fulfills their expectations.

2.5 Service Quality

Service quality is the emerging outcome of the process of comparing customer expectations with the performance of a service. The best benchmark to measure the rate of the user satisfaction is assessment of the connection that exists between the level of satisfaction customer receives and the quality of the product or service rendered. Service quality can be defined in numerous ways. Service quality is the difference between what customers are expecting from a service and the level at which this expectation is being met by the service rendered.

Kotler (1996) emphasized that services can exhibit qualities that are tangible, that can not be separated and can not perish, and that management model of service firms is absolutely different from that of general manufacturers. Therefore, service quality is receiving greater consideration.

2.6 Customer Satisfaction and Customer Value

Quality service, as agreed upon by many customers, has a way of influencing customer value perceptions about any service. The relationships between the service activities, the prior and post perceptions of customers, and observed and real quality of the service, all collectively play leading roles in determining the success or failure of emerging value (Grot & Dye, 1999).

Customers examine the experience they get in return to their prior expectations. Customer value is the difference between the benefits the customer gains, derives from owning and using a product and the cost of acquiring such service or product.

In addition, we must not fail to understand that the total customer benefit is the total addition of product benefits, values services, values that can be personnel and reputation value. Customer value can be created when the benefits that customers receive from a using a product. So, service providers are expected to make a regulation or a balance in between the cost of acquiring a product or service they provide so as to ensure that product provides more value than the value of what customer has to offer in order to own the product or receive the service.

2.7 Customer Behavioural Intention

The rate of customer retention can be increased through positive customer behavioural intention. Service that is of high value would lead to high customer satisfaction and loyalty. In 1996, Griffin suggested that apart from giving consideration to the desire of a customer to buy a product again, other factors like the frequency of repurchase, the desire or readiness to use a particular product or service and customer loyalty to churn attractive competitor strategies play leading roles in behavioural intention and customer loyalty.

Specifically, Zeithaml, Berry and Parasuraman (1996) suggest that service provider should endeavour to make their customers do the following :

- (1) speak things that are positive about their product.
- (2) become advocates of their service,
- (3) make purchases after the first time,
- (4) to build strong relationship with them, And
- (5) pay price increase.

So, customers intention to buy a product and their willingness to make recommendations of certain products or services to others are two factors that demand more consideration.

2.8 Corporate Image

Corporate image stands for an evaluative conclusion of the total perception of the corporation (Nguyen, & LeBlanc 2001).). According to Jøsang et al., (2007), there is a relationship between trust and corporate image in two ways:

- A customer can trust a service provider because of good reputation and
- A customer can trust a service provider regardless the bad reputation.

2.9 Customer Loyalty

Jones and Sassar (1995) believed customer loyalty to be future willingness to buy certain products or services, while Bowen and Shoemaker (1998) believed it as prospect of reciprocal intention. Bowen and Chen (1998) summarized some researches and concluded that the measurement of customer loyalty had three perspectives: Behavioural, Attitudinal, and Aggregative.

Behavioural measurement included behaviours in making purchase again , attitudinal measurement entails the surveys of customer behavioural intention, and Aggregative measurement deals with total evaluation of integrating both behavioural and attitudinal measurement. Customer loyalty is important because it increases profitability .

It is loyalty that will make a customer come back to patronize a product after the first time of purchase. Loyal customers have the tendency to become active ambassadors for any business. Customers are liable to be loyal having been satisfied with the quality of service provided (Hsu, 2008).

2.10 Customer Retention

Almost all the researchers in customer retention and customer deflection study the processes separately without linking the two processes together (Colgate & Norris, 2001). Based literature review, this study designed a customer retention model that connects several major constructs that can influence a customer's decision to stay or defect. A customer retention plan demands that, business should define, measure, and understand customer defection rate.

2.11 Customer Satisfaction and Loyalty

Chong et al. (1997) discovered that customer satisfaction and customer level of satisfaction of service quality were factors that will determine their level of loyalty to a service provider, revealing that satisfaction had the strongest relationship with the loyalty construct. Colgate and Danaher (2000) studied the influence that the application of a relationship strategy can have on entire customer satisfaction and loyalty.

Similarly, Anderson and Sullivan (1993) found out that the intentions to make repurchase were positively under the strong influence of satisfaction to certain product categories, and that customer retention rate increases along side with increase in the level of customer satisfaction (Oliver, 1997). Customer satisfaction is considered to be an antecedent to service loyalty.

2.12 Distance Education and Interactive Technology

Distance education can be referred to as the fastest growing area of education globally and yet, it is with an actual basic shortcoming – the deflection rate experienced is high if this is being compared with students attrition in conventional education.

Recently, researchers focused attention in distance education on online learning development and platforms to be used by online student. A learning environment that is satisfactory can be created by technology that supports an act of interactions and are developed to permit discussion of relevant topics (Jones, 1995).

2.13 Student Behavioural Intention and Value

Reasonable number of studies revealed that customer's value is a factor that is significant in determining their lasting relationship with the service provider (Huber et al. 2001). Customers will likely less desire to switch service provider if only they can discover the actual benefits in staying in a relationship with one (Gwinner et al., 1998). Student value has to do with what students gain from a program and their institutions in comparison with what students offer. If the value of what students offer out weighs the value of what they receive, students value can be said to be poor. Students behavioural intention is invariably receiving high value.

2.14 Student Satisfaction

Satisfaction can be a tool to facilitate improved learning achievement in the traditional classroom and distance education. Researchers believe that student satisfaction, which determines students' interest toward learning should be studied and worked on by all educators so that academic excellence can be achieved by students in distance education setting. The quality of services and teaching in distance education may depend vehemently on the effectiveness of technology that is in use for teaching-learning purpose (Parsad & Lewis, 2008). De Shields et al. (2005) argued that students that are not satisfied may decide to take to short time programs or register for few

courses so as to leave the institution prior to completion. Therefore, the strategy that can enhance student satisfaction and retention in distance education should be embraced and effectively applied.

Student satisfaction is being considered as one of the major factors that can help to determine the quality of distance learning programs. Online learners experience and perceptions can provide reliable information on the things that are valuable to them and can assist institutions to discover an appreciable understanding of their expectations so that provision can be made to meet the revealed expectations in online programs.

2.15 Student Loyalty and Retention

The act of retaining distance learning students exceeds the process of looking for a method to achieve learning stimulation, but it also involves changing orientation otherwise, the distance education will not be fulfilling.

Colleges can increase the level of their student retention and improve success achieved through effective application strategies and methods. Factors that actually lead to changes in student retention and success rate can be multiple and are varied. Persistence is believed by many to be "the enablement to finish an online program in the face of challenges." Attrition is the opposite of persistence. Customer relationship management (CRM) has been referred to as the method of inviting and retaining substantial customers. In the same vein, student relationship management (SRM) can be described as the process of admitting and retaining students till and after graduation.

If we consider the process of creating durable relationship, it will be discovered that students admission can be considered as the foundational stage of complete metamorphosis of the relationship, this process continues in relationship building and does not terminate until both parties agree to put an end to it. This relationship does not end after graduation because retained students who are effective representatives of their program and institution through recommendation of their programs and institution to their friends, tend to remain engaged with alma mater as alumni for continuous relationship.

2.15 Student Retention Measuring Model

The final researcher's model can be found below, which is a combination of the models used by Dehghan (2012), Gan et al. (2006).

In order to assess student loyalty, Dehghan (2012) suggested the following model using seven factors: service quality, technology, trust, commitment, satisfaction, reputation and loyalty.

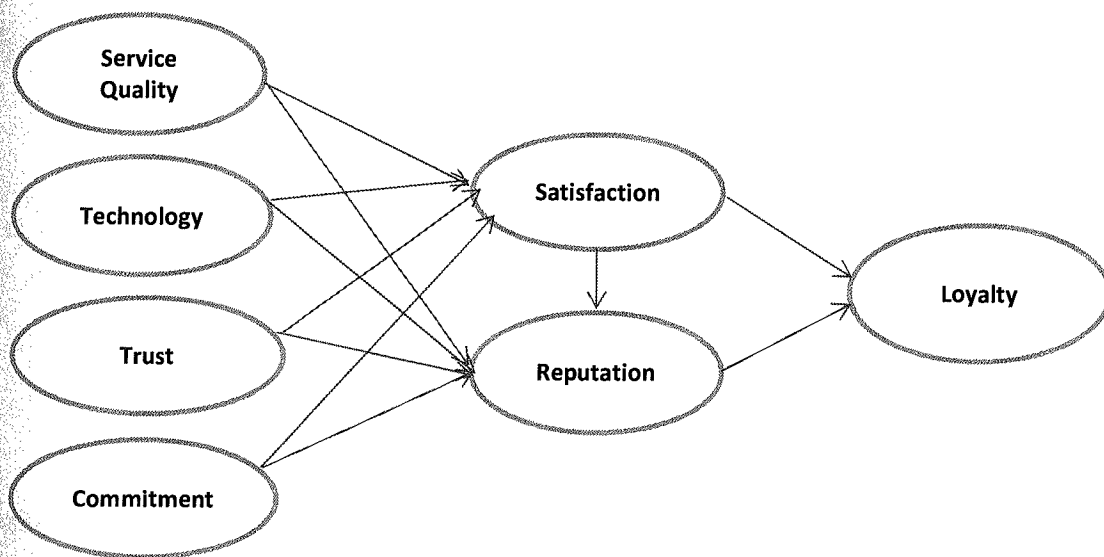


Figure 2. Research Framework (Gan, et al 2006 & Dehghan, 2012).

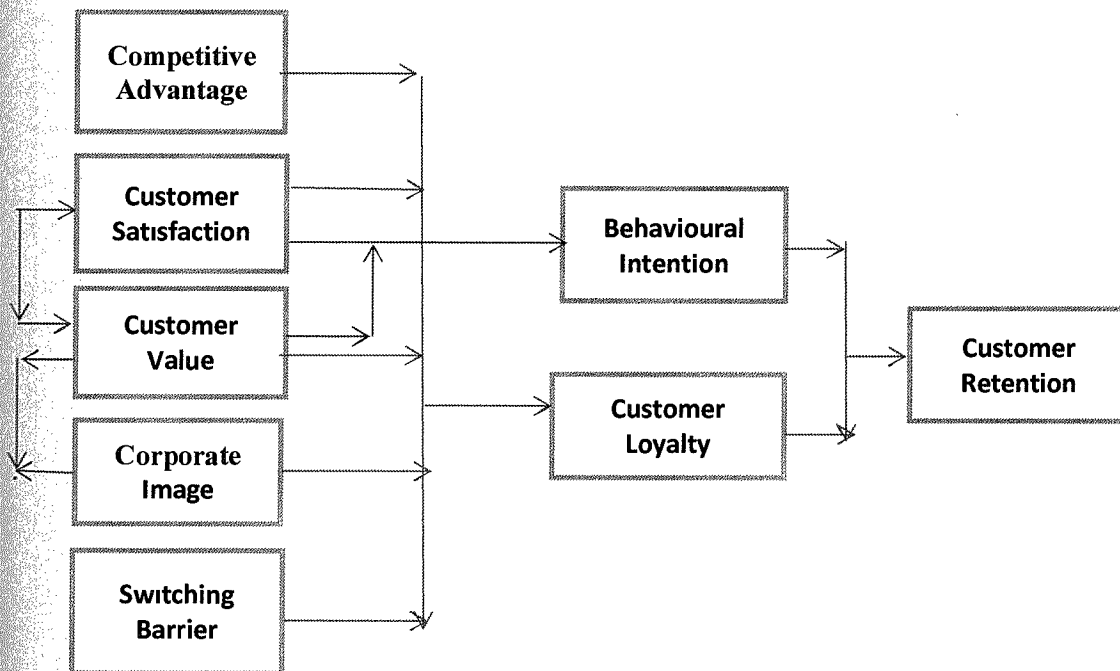


Figure 3. *Research Model of the Relationships between Constructs Impacting Customer Retention (Gan, et al 2006).*

Gan et al. (2006) placed behavioural intention and customer loyalty as intermediary between competitive advantage, customer satisfaction, customer value, corporate image, switching barrier and retention. The results reveal that there is relevant association between behavioural intention and customer retention. Also, shows that there is relevant association between customer loyalty and customer retention

The final researcher model can be found as follow, which is the combination of the two models used by Dehghan (2012) and Gan, et al (2006).

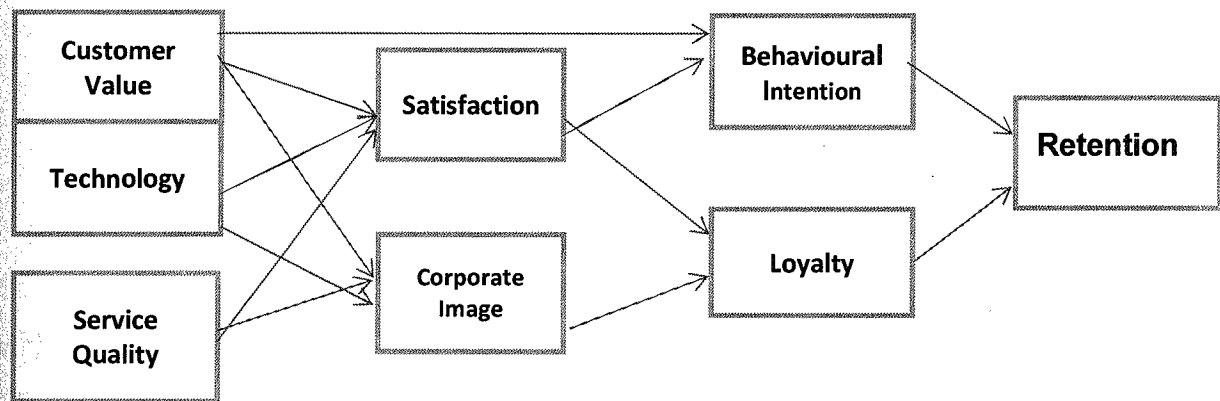


Figure 4. *Proposed Reasearch Model (Gan, 2006 & Dehghan, 2012).*

CHAPTER III

RESEARCH METHODS

3.1 Instrumentation Design

In this chapter, the comprehensive explanation of the research methods which include the research method, the population and sampling, the instrumentation design, the instrumentation validity, the scale reliability, the data collection, and data analysis are contained.

3.1. 2 Population and Sampling

Short term pedagogical certificate students that enrolled in distance learning program in Near East University were the population for this research. Data were collected to investigate student value, technology, service quality, satisfaction, corporate image, behavioural intention, loyalty and student retention .

The variable for demography contained student nationality, gender, and marital status. This study examined a cohort of 188 students out of the total population of 300 students that enrolled in short time pedagogical certificate program in faculty of open and distance education at Near East University.

3.1.3 Instrumentation Design

The draft of the questionnaire was designed involving and combining three questionnaires, the draft was based on Akarapanich's (2006), Helgesen and Nasset (2007) and Gan et al. (2006) studies. Having drafted the questionnaire, it was submitted to the panel of experts that consists of the researcher's advisor and two other experts. The scales for measurement were related to eight constructs: student value, technology, service quality, satisfaction, corporate image, behavioural intention, loyalty and student retention. The constructs were to measure student retention rate in distance education. All questions were based on a five - point Likert-type scale from "1 = strongly agree" to "5 = strongly disagree."

The proposed scales for measurement, which have been partly derived, integrated, and enhanced from Henning-Thurau et al., Akarapanich (2006), Helgesen and Nettet (2007) and Gan et al. (2006) can be found in table 17.

3.1.4 Instrumentation Validity

This research was conducted in similarity with the measurement methods that were applied by Henning-Thurau et al. (2001) and (2002), Akarapanich (2006), and Helgesen and Nettet (2007a). So, validity and reliability were addressed.

Validity of content was done by a rigorous literature review by the research committee. Moreover, the survey questionnaire was applied and tested in a similar case and this empowered the case for strong construct validity. Moreover, average variance extracted (AVE) technique was used to assess validity.

3.2 Scale Reliability

According to Siadat (2008), "Reliability means the level to which method of collecting data yields invariable results, same outcome would be made or conclusions reached by other researchers". The persistence of the the scales for measurement was measured using Cronbach's alpha. Researchers agreed that Cronbach's alpha must be above 0.7. In this study, SPSS software was used to find Cronbach's alpha coefficient values.

3.3 Data Collection

Questionnaire was designed having been approved by the researchers supervisor and by other experts at the faculty of open and distance learning in Near East University. The survey was posted online through online pearson learning model used to administer online lectures by the faculty for online students to access.

The data collection started during spring semester, June 2015 and lasted for some weeks in order to get the highest and best possible response rate. Once the data were collected, SPSS was used to analyze the data.

3.4 Data Analysis

Firstly, missing data and outliers were discovered. Though data that are completed for all surveys are desired, yet, there is probability that some data items will not be available. According to High (2005), there are three ways to resolve the missing data issue:

- (1) By applying completely recorded variables for each topic.
- (2) By filling in data that were missing by mean substitution calculations.
- (3) Inferences that is based on predictions.

Secondly, the reliability analysis to assess the data quality was done. Cronbach's alpha was used to measure the consistency. Factor analysis is capable of discovering the causes of errors in the original model.

CHAPTER IV

RESULTS

In this chapter, statistical analysis, results and the assessment of measures including reliability analysis, descriptive analysis and factor analysis are presented. The survey was sent to students via the faculty of Open and Distance Education at the Near East University to all online short pedagogical students of the university.

The process of collecting data lasted longer than had expected, and the researcher had some other challenges to overcome during the collection of data.

4.1 Exploratory Factor Analysis

The researcher carried out exploratory factor analyses to group observed variables and to determine the factor structures of the survey and the test separately.

4.2 Results of the Exploratory Factor Analysis of the Survey

By using SPSS 17.0 for Windows, Principal Component Analyses with Varimax rotation method were done in order to arrange and reduce the number of observed variables with respect to the common shared variance. After preliminary analyses had been done, the initial survey still consisted of 38 items where 3 items related to demographic profile and 35 items are of five point scale Likert type questions. After missing outlier and influential point analyses, some items that were mentioned in the preliminary analyses stage were removed from further analyses since they might be responsible for inconsistent factor loadings. After removing observed variables with ambiguous factor loadings, the final Principal Component Analysis (PCA) with only 180 observed variables yielded better results in terms of factor structure.

The Kaiser-Meyer-Olkin measure of the adequacy of the distribution values for conducting factor analysis was obtained as 0.866 is in the range between 0.80 and 0.89 which was defined as meritorious (Kaiser, 1974). In addition, Bartlett's test of Sphericity value (0.000) is significant, table 1 depicts the result.

Second Factor Analysis Results

KMO and Bartlett's Test

Table 1

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	,856
Bartlett's Test of Approx. Chi-Sphericity	5616,40
Square	7
Df	630
Sig.	,000

The factor analysis was conducted with the limitation of the number of factors to 5. The total variance explained by 5 factors with 33 observed variables is 48.516%. The rotated factor loadings of the observed variables for the survey are presented in Table 2 where factor loadings that are less than 0.20 were omitted. The items of factor loadings greater than 0.30 in absolute value were considered. The rotated factor loadings of the observed variables for the test are presented in table 2 where factor loadings that are less than 0.51 were omitted.

Table 2: Rotated Component Matrix

	Component							
	1	2	3	4	5	6	7	8
Item 28	,871							
Item 27	,791							
Item 21	,716							
Item 30	,697							
Item 33	,646							
Item 20	,589							
Item 24	,566							
Item 6		,780						
Item 14		,774						
Item 4		,653						
Item 5		,627						
Item 3		,587						
Item 1			,842					
Item 25			,828					
Item 15			,825					
Item 32			,810					
Item 12			,805					
Item 7				,910				
Item 18				,904				
Item 16				,877				
Item 23					,857			
Item 22					,801			
Item 8					,798			
Item 26						,717		
Item 2						,599		
Item 31						,575		
Item 10						,593		
Item 9						,586		
Item 11						,627		
Item 36							,932	
Item 19							,864	
Item 35							,753	
Item 13								,767
Item 29								,709
Item 34								,618
Item 17								,604

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization.

Having determined factors, they were named based on the literature and the content of the items. The eigenvalues, percentages, cumulative percentages and Cronbach's alpha reliabilities of factors were shown in Table 3.

Table 3

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12,646	35,128	35,128	12,646	35,128	35,128	5,266	14,628	14,628
2	3,471	9,641	44,769	3,471	9,641	44,769	3,854	10,706	25,334
3	2,400	6,668	51,437	2,400	6,668	51,437	3,835	10,653	35,987
4	1,961	5,446	56,883	1,961	5,446	56,883	2,918	8,105	44,092
5	1,838	5,107	61,990	1,838	5,107	61,990	2,911	8,086	52,178
6	1,762	4,893	66,883	1,762	4,893	66,883	2,744	7,624	59,802
7	1,274	3,538	70,421	1,274	3,538	70,421	2,558	7,106	66,907
8	1,122	3,116	73,537	1,122	3,116	73,537	2,387	6,630	73,537
9	,982	2,729	76,266						
10	,846	2,351	78,617						
11	,744	2,066	80,683						
12	,636	1,766	82,449						
13	,595	1,652	84,101						
14	,539	1,498	85,599						
15	,492	1,367	86,966						
16	,468	1,301	88,267						
17	,462	1,283	89,550						
18	,412	1,145	90,695						
19	,379	1,053	91,748						
20	,352	,979	92,727						
21	,324	,900	93,627						
22	,288	,801	94,428						
23	,271	,753	95,181						
24	,256	,711	95,892						
25	,228	,634	96,526						
26	,220	,612	97,138						
27	,194	,538	97,676						
28	,152	,421	98,097						
29	,143	,396	98,493						
30	,128	,356	98,849						
31	,110	,306	99,155						
32	,091	,253	99,408						
33	,084	,233	99,641						
34	,072	,199	99,840						
35	,037	,104	99,944						
36	,020	,056	100,000						

Extraction Method: Principal Component Analysis.

Table 4: Communalities

	Initial	Extraction
Item1	1,000	,752
Item2	1,000	,457
Item3	1,000	,662
Item4	1,000	,546
Item5	1,000	,628
Item6	1,000	,799
Item7	1,000	,948
Item8	1,000	,722
Item9	1,000	,562
Item10	1,000	,749
Item11	1,000	,497
Item12	1,000	,723
Item13	1,000	,651
Item14	1,000	,733
Item15	1,000	,811
Item16	1,000	,903
Item17	1,000	,805
Item18	1,000	,942
Item19	1,000	,855
Item20	1,000	,626
Item21	1,000	,735
Item22	1,000	,791
Item23	1,000	,802
Item24	1,000	,694
Item25	1,000	,715
Item26	1,000	,772
Item27	1,000	,834
Item28	1,000	,856
Item29	1,000	,703
Item30	1,000	,660
Item31	1,000	,661
Item32	1,000	,729
Item33	1,000	,761
Item34	1,000	,797
Item35	1,000	,688
Item36	1,000	,903

Extraction Method: Principal Component Analysis.

Demographic Characteristics of the Sample

The summarization of the demographic characteristics of the sample is contained in Table 5. Students responded to questions that had to do with nationality, gender, marital status. The total number of the respondents were 122 students which included males (65.9%) and 63 females (34.1%). It was noted that 133 (71.9%) of the students are Turkish citizens while 52 (28.1%) are TRNC (Turkish Republic of Northern Cyprus). The percentage of the married respondents exceeded (60.5%). The afore mentioned statistics reveal that male students (Men) are likely to be offering diploma program or are more interested in distance education than the female students (Women). Table 5 below represents the demographic characteristics of the sample:

Table 5: Demographic Characteristics of the Sample

	Frequency	Percentage %	Valid Percentage %	Cumulative Percentage %
Nationality				
Turkish	133	71,9	71,9	71,9
TRNC	52	28,1	28,1	100,0
Total	185	100,0	100,0	
Gender				
Male	122	65,9	65,9	65,9
Female	63	34,1	34,1	100,0
Total	185	100,0		
Marital status				
Married	112	60,5	60,5	60,5
Single	73	39,5	39,5	100,0
Total	185	100		

4.2.1 Assessment of Measures

The process of analysing data included reliability analysis, descriptive analysis and factor analysis.

Reliability Analysis

Only 180 students completed the whole questionnaire, incomplete ones were removed from the data analysis. Only the responses that were complete were utilized in reliability test. A Cronbach's alpha coefficient was employed to find the reliability together with consistency.

Any value that is equal to, or greater than 0.7 is acceptable, a reliability estimate was calculated for all the constructs. The outcome disclosed that the Cronbach's alpha value for each construct exceeded the required minimum level (0.7). The table below represents the Cronbach's alpha value for each construct.

Table 6: Cronbach's Alpha

Case Processing Summary			Reliability Statistics		
Variable	Cases Valid	Excluded	N	Number of Items	Cronbach's Alpha
Student Value	180	0	180	7	.713
Technology	180	0	180	5	.822
Quality	180	0	180	5	.730
Satisfaction	180	0	180	3	.811
Cooperate	180	0	180	3	.798
Image	180	0	180	3	.801
Behavioral	180	0	180	3	.827
Intention	180	0	180	4	.890
Loyalty	180	0	180		
Retention					

Descriptive Analysis

Constructs descriptive statistics was estimated, this included the mean of the constructs, variance, standard deviation, item means, item variances, item-total statistics. All constructs contained relevant several items, and each of these items was assessed by using a five-point Likert-type scale: Strongly Agree (1) Agree (2), Neutral (3), Disagree (4), and Strongly Disagree (5).

4.2.2 Student Value (SV)

Students responded to seven items scale that were targeted to assess their view about student value. The total mean (\bar{x}) of the seven items was calculated and found out to be 4.564 with the standard deviation (SV) of 3.931. The mean of Item 3 (The tuition fee is moderate) and that item 4 (Assignments and group projects help me to learn) are lower than the average mean (\bar{x}) .i.e (4.552, 4.022) < \bar{x} . Item 1 (I value my certificate), item 5 (I can access useful and valuable materials that enhance personal study), item 6 (This program worths the cost) and 7 (I will still continue my program if tuition fees increases) have higher means than \bar{x} .i.e. (4.780 , 4.611, 4.768, 4.611) > \bar{x} . The SV construct yielded a reliability result of 0.713 according to the Cronbach's alpha method, which exceeds the acceptable minimum level of 0.7. Table 7, demonstrates the items' results:

Table 7: Student Value Item-Analysis

Statistics for Scale	N	Mean (Sum)	Variance	SD
	7	31.946	7.862	3.931
Item	Mean		SD	N
Statistics				
Item 1	4.780		.493	183
Item 2	4.602		.545	183
Item 3	4.552		.641	183
Item 4	4.022		.574	183
Item 5	4.611		.630	183
Item 6	4.768		.548	183
Item 7	4.611		.500	183
Summary	Min	Max	Range	Max/Min
Means	4.022	4.780	0.758	1.188
Total Mean	31.946			
Total Average Mean (\bar{x})	4.564			

4.3 Technology

Respondents responded to five items that were to measure their point of view about the technology that is in use. The average mean (\bar{x}) of the five items on technology was calculated and the result was found to be 4.642, with a standard deviation (SV) of 1.992. Item 2 (Online learning website is satisfactory) , item 3 (I can gain ascess through my smart phone) and item 4 (The school website is understandable) have lower means than (\bar{x}) i.e (4.601 , 4.578 , 4.524) $< \bar{x}$. while the mean of item 1 (The online library is well equipped) and item 5 (I do not have audio – visual problem while receiving online lectures) have higher means than .i.e (4.746, 4.897) $> \bar{x}$. The technology construct yielded a reliability result of 0.822 based on the Cronbach's alpha , which is above the acceptable minimum level of 7.0. Table 8, reveals the item results:

Table 8: Technology Value Item - Analysis

Table 6: Technology Value Item - Analysis					
Statistics for Scale	N	Mean (Sum)		Variance	SD
	5	23.21		3.980	1.992
Item	Mean		SD		N
Statistics					
Item 1	4.746		.227		183
Item 2	4.601		.445		183
Item 3	4.578		.393		183
Item 4	4.524		.364		183
Item 5	4.761		.257		183
Summary	Min		Max	Range	Max/Min
Item Means	4.524		4.761	0.237	1.052
Total Mean	23.22				
Total Average Mean (\bar{x})	4.642				

4.4 Service Quality

Students responded to five items that were meant to measure their point of view about quality of service rendered. The total mean of the items of the construct (\bar{x}) is found out to be 4.610, having the standard deviation (SV) of 5.276 .

Only item 3 (Feedback is prompt) and item 5 (Learning outcome assessment method is satisfactory) have lower means than the average quality mean (\bar{x}) i.e (4.414 , 4.543) < \bar{x} .The quality construct yielded a reliability result of 7.30 according to the Cronbach's alpha method, which is above the acceptable minimum level of 7.0. Table 9 demonstrates the item results:

Table 9: Quality Item Analysis

Statistics for Scale	N	Mean (Sum)	Variance	SD
	5	23.049	4.936	2.826
Item	Mean	SD	N	
Item 1	4.681	.664	183	
Item 2	4.727	.546	183	
Item 3	4.414	.500	183	
Item 4	4.684	.509	183	
Item 5	4.543	.607	183	
Summary		Min	Max	Range
Means		4.414	4.727	0.313
Mean Total Mean		23.049		1.091
Total Average Mean (\bar{x})		4.610		

4.5 Satisfaction

Respondents responded to three questions that were meant to assess their point of view about satisfaction with service quality. The total mean (\bar{x}) of the three items of satisfaction construct is found out to be 4.590 having a standard deviation of 3.203. Only Item 3 (I speak positively about this program) has a lower mean than the total satisfaction mean, that is $4.487 < (4.590)$. The construct satisfaction has produced a reliability result of 0.812 according to the Cronbach's alpha method, which is above the minimum level of 7.0. Table 10. Demonstrates the item-analysis results.

Table 10: Satisfaction Item Analysis

Statistics for Scale	N	Mean (Sum)	Variance	SD
	3	13.771	3.304	1.652
Item	Mean	SD	N	
Item 1	4.649	.507	183	
Item 2	4.635	.695	183	
Item 3	4.487	.045	183	
Summary	Min	Max	Range	Max/Min
Means	4.487	4.649	0.314	1.094
Total Mean	13.771			
Total Average Mean (\bar{x})	4.590			

4.6 Corporate Image

Respondents responded to three items related to their point of view about corporate image. The mean (\bar{x}) of the three total corporate image items is 4.554, with a standard deviation of 1.621. Only item 3, (My programme of study has a good reputation) has a lower mean than the mean of total items of the construct, i.e $4.419 < \bar{x}$. The construct corporate image has produced a reliability result of 0.801 in respect to the Cronbach's alpha method, which is more the acceptable minimum level of 7.0. Table 11 reveals the item-analysis results.

Table 11: Corporate Image Item-Analysis

Statistics for Scale	N	Mean (Sum)	Variance	SD
	3	13.662	3.242	1.621
Item	Mean	SD	N	
Statistics				
Item 1	4.605	.579	183	
Item 2	4.638	.521	183	
Item 3	4.419	.521	183	
Summary	Min	Max	Range	Max/Min
Means	4.419	4.638	0.219	1.049
Total Mean	13.662			
Total Mean Average (\bar{x})	4.554			

4.7 Behavioural Intention

To assess respondents' point of view about behavioural intention, the scale of three items were used. The total mean (\bar{x}) of the three items of behavioural intention is 4.621, with a standard deviation of 1.723. Item 2 (I intend to use the contents of this program to enhance my learning) and item 3 (I intend to further my education with this program) have lower means than the average loyalty. i.e (4.287, 4.587) < \bar{x} . The construct loyalty has yielded a reliability result of 0.882 based on the Cronbach's alpha method, which is above the acceptable minimum level of .7.0. Table 12 demonstrates the item-analysis results.

Table 12. Behavioural Intention Item-Analysis

Statistics for Scale	N	Mean (sum)	Variance	SD
	3	13.86	3.445	1.723
Item	Mean		SD	N
Statistics				
Item 1	4.689		.635	183
Item 2	4.287		.497	183
Item 3	4.587		.591	183
Summary	Min	Max	Range	Max/Min
Means	4.287	4.689	.402	1.093
Total Mean	13.86			
Total Average Mean (\bar{x})	4.621			

4.7.1 Loyalty

Respondents' point of view was assessed by a scale of three items that were constructed on student loyalty. The mean (\bar{x}) of the total three student loyalty items is 4.565 with a standard deviation of 1.399. The mean of item 1 (I pay my tuition fees regularly) is 4.518 < (4.565), item 2 (I can refer my friends to this university) is 4.492 < (4.565) while the mean of item 3 (I would choose this university again if given the opportunity to start again) is 4.684 > (4.565). The construct loyalty yielded a reliability

result of 0.827 according to Cronbach's alpha method, which is above the acceptable minimum level of 7.0 Table 13, reveals the item results:

Table 13. Loyalty Item-Analysis

Statistics for Scale	N	Mean (sum)	Variance	SD
	3	10.694	13.249	1.399
Item	Mean	SD	N	
Statistics				
Item 1	4.518	.518	183	
Item 2	4.492	.427	183	
Item 3	4.684	.454	183	
Summary	Min	Max	Range	Max/Min
Mean	4.492	4.684	0.192	1.09
Total Mean	13.694			
Total Mean Average (\bar{x})	4.565			

4.8 Retention

This four-question sub-scale assesses the respondents' point of view about retention. The average mean (\bar{x}) of the three Loyalty items is 4.655, with a standard deviation of 1.588. Item 2 (I refer my friends to this university) has a lower mean than the average of the retention means. The construct loyalty has produced a reliability estimate of 0.882 based on the Cronbach's alpha method, which exceeds the acceptable minimum level 7.0. Table 14, demonstrates the item results

Table 14. Retention Item-Analysis

Statistics for Scale	N	Mean (sum)	Variance	SD
	4	18.619	2.964	1.588
Item	Mean		SD	N
Statistics				
Item 1	4.667		.416	183
Item 2	4.549		.412	183
Item 3	4.731		.268	183
Item 4	4.672		.492	183
Summary	Min	Max	Range	Max/Min
Means	4.231	4.667	0.436	1.13
Total Mean	18.619			
Total Average Mean (\bar{x})	4.655			

4.9 Exploratory Factor Analysis

The research instrument was examined using factor analysis, factor analysis is a wide range of methods that can be used to examine whether the responses are influenced by underlying constructs (De Coster, 1988), confirmatory factor analysis was used in this study to assess the construct validity. Factor loadings are important criteria in assessing the factors' significance. The measurement model is assessed based on the items loadings. Factor loadings of less than 0.30 are considered insignificant, those greater than 0.4 are more important, and any loadings over 0.50 are considered significant; however, in confirmatory factor analysis, loadings greater than 0.7 are considered very significant (Costello & Osborne, 2005). Table 12 shows that factor loadings for each construct and its indicators are greater than 0.5, which validates the model. According to Segars (1997), to justify using a construct, the average variance extracted (AVE), which measures the variance captured by the indicators relative to measurement error, should be greater than 0.50. AVE can be calculated using this formula: (summation of squared factor loadings) / (summation of squared factor loadings + summation of error variances).

Table 15 depicts the AVE scores for each construct in the proposed research model. Interestingly, the AVE scores for all constructs meet the minimum requirement confirming the construct validity as follow :

Table 15. Average Variance Extracted (AVE)

Item	Construct	Factor Loading	Average variance Extracted (AVE)	Mean
1	Student Value	0.752	0.681	4.564
2		0.662		
3		0.546		
4		0.628		
5		0.799		
6		0.948		
7		0.722		
1	Technology	0.562	0.651	4.642
2		0.749		
3		0.749		
4		0.721		
5		0.651		
1	Service Quality	0.733	0.811	4.610
2		0.811		
3		0.903		
4		0.850		
5		0.942		
1	Satisfaction	0.856	0.721	4.590
2		0.626		
3		0.750		
1	Corporate Image	0.791	0.789	4.554
2		0.802		
3		0.694		
1	Behavioural Intention	0.715	0.677	4.621
2		0.772		
3		0.834		
1	Loyalty	0.856	0.711	4.565
2		0.703		
3		0.660		
1	Retention	0.761	0.771	4.655
2		0.797		
3		0.688		
4		0.903		

CHAPTER V

Discussion and Implication

This chapter includes a discussion that has to do with the results and conclusions of this research findings. Besides, the effects of the results are discussed. Finally, the limitations of the study and proposed suggestions for further research are made. This study admits that the most challenging problem in distance education is student attrition, and that this impersistence has become the root property of distance education with probable unfair consequences for learners and institutions.

In order to reduce dropout rate, we must find out strategy of empowering student learning stimulation, and make it more resilient to isolation. Many things can be learnt from recent development in the the field of psychology of learning stimulation and also it is important that we find better ways of using them.

5.1 Discussions

The purpose of this research was to measure the rate of student retention in distance education, students point of view and challenges faced with distance learning , it concerns mainly the service quality, strengths, weaknesses, and constraints that can enhance student attrition in Near East University,TRNC,Turkey. A number of studies were found in the literature that dealt with the students loyalty , satisfaction and commitment in distance education. There is no study that has been conducted on measuring of student retention in distance education in TRNC, Turkey . Therefore, this reasearch is necessary to examine the gap in the body of knowledge and offer spaces for further research. The salient research questions were :

- How satisfied are students with the quality of instructional and other educational services?
- What are the factors or student characteristics that impede non-traditional online student persistence in a course?

- What is the rate of student retention in distance learning program in Near East University?

This study is based on the tested and accepted models that applied to constructs that relate to customer loyalty and retention in distance education. The results reveal that both consumers' behavioural intentions and customer loyalty are significant and can predict the desire of a customer to stay or leave, the outcomes are parallel with what was expected. (Colgate & Norris, 2001; Healy, 1999) stated that two constructs affect consumers' chances to stay with or leave their a service provider in the future. Definitely, complementary behavioural intention was found capable of be a strong indicator of retaining banking consumers.

A careful study of the results of Gan (2006) reveals that satisfaction and reputation are significantly related. The respondents of this study were students of distance education and the qualitative research method used in this study was based on study of distance education in Near East University, and this study was guided by three research questions.

Table 16, reveals the summary of the constructs with the total mean (\bar{x}) of 4.589 and S.D of 16.732. It has been discovered that the construct corporate image has the least mean of 4.554 with $4.554 < \bar{x}$ while the construct student retention has the highest average mean of $4.655 > \bar{x}$. The result reveals the average mean of construct satisfaction to be 4.590 which is lesser than \bar{x} . The average mean of each of these constructs, the constructs include: Student Value, Technology, Service Quality and Student Behavioural Intention are found to be higher than .i.e Table 16, demonstrates the constructs' results:

Table 16. The Summary of the average means of the whole constructs

Statistics for Scale	N	Mean (sum)		SD (Sum)	
	8	36.715		16.732	
Construct	Mean	S.D		N	
Statistics					
Student Value	4.564	3.931		8	
Technology	4.642	1.992		8	
Service Quality	4.610	2.826		8	
Satisfaction	4.590	1.652		8	
Corporate Image	4.554	1.621		8	
Student Behavioural Intention	4.621	1.723		8	
Loyalty	4.565	1.399		8	
Retention	4.655	1.588		8	
Summary	Mean	Min	Max	Range	Max/Min
Means (x)	4.600	4.517	4.761	.244	1.054

5.2 Conclusion

In this study, three research questions were addressed. These questions and the obtained results are as follow:

Research Question 1.

“How satisfied are students with the quality of instructional and other educational services?”

Customer satisfaction can encourage healthy relationship between customers and service provider by Grot (1999). It is unavoidably imperative for service providers to improve quality of performance based on the constructs that can foster customer retention so as to have better and reliable chances or head way for survival at every competitive labour market.

It worths noted that, it is when the students are completely satisfied with the service and technology provided by the institution that their loyalty and retention towards the institution becomes achievable.

Part of the result of this research, as revealed in the above table 8 , 9 and 10, will be considered to discover how satisfied are students to the quality of instruction and

educational services of rendered at this faculty. The mean of the constructs Student Satisfaction, Technology and Service Quality are expedient to discover students satisfaction to the whole program offer, technology in use and the quality of the service rendered.

The above table 8, reveals high level of student satisfaction with item 1 (The online library is well equipped) and 5 (I do not have audio – visual problem while receiving online lectures) with the means of 4.746 and 4.761 respectively, which are greater than mean (\bar{x}) the construct .i.e ($4.746 > 4.761$) > 4.642 . In the same vein , the same table reveals student adequate satisfaction with item 2 (Pearson online learning website is satisfactory), item 3 (I can gain access through my smart phone) and item 4 (The school website is understandable) of 4.601, 4.578 and 4.524 respectively , which are though all lesser than (\bar{x}). The mean of the construct technology (\bar{x}) is 4.642 , which is greater 4.600 (mean of all the constructs) as contained in table 16 above. This reveals high level of student satisfaction with the technology in use.

Student satisfaction with the quality of service rendered can be discovered from the result obtained in table 9, the obtained result shows high level of student satisfaction with item 1 (Online technical support is very helpful), 2 (Instructors are masters of their fields of specializations) and 4 (I find online group project, chatting and discussion helpful and interesting) with the means of 4.681, 4.727 and 4.684 respectively, which are all greater than 4.610 (\bar{x}). Also does it reveal adequate student satisfaction with item 3 (Feedback is prompt) and 5 (Learning outcome assessment method is satisfactory), which are slightly lower means than (\bar{x}).

In addition, students revealed their general satisfaction as contained in table 10, to this university and the competence of the staff. In summary, just as revealed by the result of this study, students are highly and appreciably satisfied with the quality of service, tuition fees, method of assessing learning outcome and the technology in use but may have expectations on the improvement of the website and online model for easier accessibility with smart phones and online feedback to be more prompt .

Research Question 2.

“ What are the factors that can foster students defection or attrition in distance education?”

In order to discover the factors that can foster student attrition ,result on student behavioural intention will be considered in contrast with student value i.e consideration of the value students expect to gain with the value delivered by the service rendered.

The results in table 7 above, reveal strong student willingness and decision to complete their program with this university,one of the major causes of student attrition in online program is tuition fees, students tend to deflect to any available distance learning program that offers their courses of study at more affordable tuition fees. In the construct Student Value, the means of the the item 1 (I value my certificate), item 2 (I made right choice by choosing this program), item 6 (This program worths the cost) and item 7 (I will still continue my program if tuition fees increases) are all greater than the mean (\bar{x}) of the construct .i.e (4. 990 , 4.602 , 4.611 , 4.768 and 4.611) > (4.564) . This shows a very low likelihood or probability of student deflection from this program , as revealed in the same result table 7 of the construct student value, and in the table 12 of the construct student behavioural intention, the item 1 (I intend to receive certificate after the completion of my program) of the construct Student Behavioural Intention with high mean of 4,689 >(4.621) ,the result of this study revealed high level of student satisfaction with the quality of the technology use, quality of service and high student value .

The insignificant factor that may foster student deflection has to do with the effectiveness of student assignment and project ,in view of this ,this institution has to ensure that student assignment and project are made to be more effective, helpful to student so as to meet their needs and stimulate personal study for academic excellence.

Research Question 3.

“What is the level of student retention in distance education?”

Gan et. al (2006) shows that both consumer behavioural intentions and customer loyalty are significant predictors of customer retention, therefore to determine the rate of student retention, these two constructs are taken into consideration which may form the continuation of the answer provided based on the result of this study to the research question 2 above .

In table 12, The response to item 1 (I intend to receive certificate after the completion of my program) is of high mean 4.689 which is greater than (\bar{x}) shows students intention to complete their program with this university also in table 14 above , response to the item 1 (I intend to complete my study with this university), item 2 (I will join the alumni association of this university after my graduation) and 4 (I say good things about this program to others) have higher means that the total mean of the construct. The readiness, intention and decision of respondents to make recommendation of their program to their friends and join the alumni association of this university after graduation is a clear indication of high level of student retention in this program.

5.3 Implications

Most of the previous studies have focused on assessing student satisfaction, commitment, loyalty to the program in traditional and online educational systems ,however, this research targets student retention to the program in distance educational settings.

5.4 Limitation and Future Studies

Being that each investigation has its own unique limitations, this particular investigation operated with the following limitations.

5.5 Population

This data used in this study was gathered over two semesters, which assessed the responses from a limited number of distance learners at this institution over a limited time frame. The instrument used to collect learner perceptions was sent to only those who are in distance programs; furthermore, participation in the survey was voluntary. Therefore, there was a lack of random sampling of participants. The perceptions of those learners who decided to participate may not necessarily represent the perceptions of those who chose not to participate.

5.6 Final Reflections

This study was performed as a result of the desire of the department to understand its learners and their expectations, as well as attempt to identify if their engagement initiatives have a positive relationship with retention. However, the results are limited to the institutions and its learners at this point in time.

5.7 Recommendation for Future Research

Based on the results of this study, the following recommendations for future research are provided:

1. Future studies can be carried out in another institution.
2. Similar studies can be conducted using larger sample by targeting several distance educational institutions.

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APPENDIX 1

This questionnaire form is a part of the scientific research about student retention in distance learning program. The present questionnaire will apply to Distance Learning Program in Near East University, TRNC, Turkey.

This research will involve your participation questions that will take about 30 minutes to 1 hour to answer.

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. If you choose not to participate all the services you receive from the school will continue and nothing will change.

Please do not write your name. Your information will remain confidential. You do not have to answer any question if you do not wish to do so, and that is also fine.

The results of this study will be used for the benefit of retaining student.

If you have any questions, you can ask them now or later, if you wish to ask questions later, you may contact any of the following : (Moses, moses.info.neu@gmail.com)

APPENDIX 2

Survey of Questionnaire

1. What is your nationality?

Turkish __, TRNC (Turkish Republic of Northern Cyprus) __, Other__

2. What is your gender?

Male __, Female__

3. What is your marital status?

Single ----- Married-----

Table 17: Research Questionnaire:

4.Student Value	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.I value my certificate					
2.I made right choice by choosing this program					
3.The tuition fee is moderate					
4.Assignments and group projects help me to learn					
5. I can access useful and valuable material that enhance personal study					
6. This program worths the cost					
7. I will still continue my program if tuition increases					
5.Technology					
1. The online library is well equipped					
2. Pearson online learning website is satisfactory					
3.I can gain access through my smart phone					
4.The school website is understandable					
5. I do not have audio – visual problem why receiving online lectures					
6.Quality					
1. Online technical support is very helpful					
2. Instructors are masters of their fields of specializations					
3. Feedback is prompt					
4. I find online group project,chatting and discussion helpful and interesting					
5. Learning outcome assessment method is					

satisfactory					
7. Satisfaction					
1. I am satisfied with this university					
2. I did the right thing by entering this program					
3. I speak positively about this program					
8. Coorporate Image					
1. Instructors are competent and have good reputation					
2. This university has good reputation					
3. My program of study has a good reputation					
9. Behavioral Intention					
1. I intend to receive certificate after the completion of my program					
2. I intend to use the contents of this program to enhance my learning					
3. I intend to further my education with this program					
10. Loyalty					
1. I pay my tution fess regularly					
2. I would choose this university again if given the opportunity to start again					
3. I can recommend this university to my friends					
11. Retention					
1. I intend to complete my study with this university					
2. I refer my friends to this university					
3. I will join the alumni association of this university after my graduation					
4. I say good things about this program to others					