# The Relationship of Distance Learner Autonomy and Student-Tutor Interaction and their Predictive Power over Students' Satisfaction: The Case of St. Mary's University Addis Ababa Center Atlabachew Getaye

#### Abstract

This study was conducted to examine whether distance students autonomy, student-tutor interaction and student satisfaction have positive relationships and the first two independent variables predict the dependent variable- student satisfaction. To examine the above hypotheses, correlational and predictive designs were used, selecting students from Addis Ababa distance students of Accounting and Management departments by applying stratified sampling. The study also attempted to examine if there is significant difference in terms of perception regarding the above variables from year of study, department and gender angles. The findings made known that learner autonomy, tutor-student interaction and distance learners satisfactions displayed moderate positive relationships among one another. Learner autonomy and tutor-student interaction predicted distance students' satisfaction, having almost an equivalent amount of explanation powers. Gender did not show statistically significant difference for autonomy, student-tutor interaction and student satisfaction. Department wise, there were no statistically significant difference for tutor-student interaction and student satisfaction. Nevertheless, the finding showed statistically significant difference for autonomy between Accounting and Management students. Similarly, the results disclosed that there were statistically significant differences between first and third year students in their perception of student autonomy, student-tutor interaction and student satisfaction. The means differences of distance students and tutors did not show statistically significant differences for student tutor interaction, but the findings displayed statistically significant differences for autonomy and student tutor interaction.

Key words: Distance learner autonomy; student-tutor interaction; student satisfaxtion

I. Introduction

#### 1.1 Background

Distance education refers to the application of print or electronic communications media to offer instruction since instructors and students are separated in both place and time. Distance learning, "can be carried out from any location within the confines of a course schedule, at any time that is convenient to the learner" (Tandon et al, 2011,n.p.). Using the available resources-print or electronic and choosing the convenient mode of communication- synchronously or asynchronously, distance students direct their study in an independent manner to realize their dreams.

On the other hand, the separation of instructors and students affects the teaching learning process seriously, and distance education program provides various special techniques to surmount the side effects of the separation. In line with this, Moore in Fuller et al (2011, P.4) pointed out that "when we talk about distance education, we are referring to a distance that is more than simply a geographic separation of learners and teachers. It is a distance of understandings and perceptions that has to be overcome by teachers, learners, and educational organizations."

Distance education has passed four stages. The first stage is text based correspondence courses, where by the texts are similar to the classroom texts. The second generation is characterized by self instructional design. It is text based, but being designed fulfilling the features of distance mode. The third generation integrates print and media i.e., using audio and video with texts and the fourth generation uses interactive ICT to prop up the teaching learning process (COL, 2001).

In relation to Ethiopia, distance education is text based. It has not yet reached the third and fourth stages that developed countries have arrived at. It is text based which is designed taking into account the features of distance learning.

According to Keegan (1980), distance education has six features: the teaching learning is separated in time and space; the usual study area of the student is his/her home or workplace; the impact of educational organization in planning, development and delivery of teaching is essential; the use of communication technology such as broadcast radio and television; audio-and videotapes; interactive audio and video teleconferencing; various computer and Internet technologies, and print technologies while delivering instruction is prominent; the use of two way communication to facilitate interaction and dialogue is important, and the application of principles of industrialization to teaching should be feasible.

For an effective learning to occur, distance education needs to assure the existence of dialogue, program structure and learner autonomy (Moore & Kearsley, 1996).

The ease of communication which exists among educators and students, students and content, students and students, students and the management are essential parts of the learning process for distance learning. Educators specifically tutors are expected not only to tutor but to counsel. While explaining the role of tutors, summarizing the works of other researchers, Pierrakeas, Xenos and Pintelas (2003, p.3) point out that tutors "should promptly solve students' educational problems, discuss in a friendly way the issues that distract them, instruct them during their studies, but most of all encourage them to continue their studies- understanding their difficulties and supporting them effectively." Dialogue is not limited between students and tutors; it is a broad concept which entails the entire communication which occurs in the learning environment. Distance educator trying to develop quality distance learning environments should carefully consider learner-content interaction, learner-learner interaction, and learner-instructor interaction (Moore, 1989; Moore & Kearsley, 1996). To attain the above mission, opportunities for

communication should be designed in the learning program, being mediated in the best possible way with the help of technology.

Next, structure refers whether the course design is responsive to the needs of learners, being conducive for student-student and student-tutor dialogue. The elements of a course such as learning objectives, thematic content, presentations, case studies, animations, exercises, projects and exams should be designed in a flexible manner, catering independent learning. To formulate such kinds of learning experiences, multidisciplinary teams are essential. Student centered approach enables learners to organize learning experiences into meaningful contexts, relating the learning content with their background knowledge (Hannafin & Land, 1997). Distance education is different from the face to face in such a way that the course elements should be formulated well ahead of delivery in line with the needs and interests of students. It should also comply with the intricate relationships among the course content, other students and the instructor. Learners join distance learning having different background. Therefore, the elements of the courses should take into account the background of students' experience, level of knowledge and motivation. For instance, learners may not be mature in their reading ability and within the same group there may exist disparities in reading comprehension ability. As a result, the design should satisfy all types of students and enable to attain learning excellence standards irrespective of their background differences.

Autonomy is a difficult term to define. Autonomy does not mean learning without the support of tutors. In other words, it does not mean giving up responsibility on the part of tutors. According to Holec (1995) in Dickinson (1995) autonomy refers to the potential and critical ability to reflect on the experience one has and to be in charge of one's own learning. It is being able to determine one's objective, learning experiences, methods and techniques of learning, monitoring and evaluation of one's learning progress and achievements (Littele, 1991; Moore & Kearsley, 1996). Here, the learner assumes greater responsibility through active involvement and better learning. The learner constructs knowledge which, in turn, paves the way for creativity, interaction and engagement; s/he is a producer but not a consumer of knowledge.

The term satisfaction can be viewed as an assessment measure regarding the quality of experience, service or product as a result of which the consumer shows long term loyalty in consuming, applying or using the product, experience or service (Donio, Massari, & Passiante, 2006; Fullerton & Taylor, 2002). Satisfaction is all about being pleased or gratified as a result of one's engagement in some form of experience since the participant gets what s/he desired to get (Lin, Lin, and Laffey, 2008). With regards to education satisfaction, it refers to the perception of distance student's happiness and accomplishment about the educational experience that a student went through. Distance students satisfaction can be measured using many factors but this study limits itself to two factors: autonomy and interaction grounding on Moore's transactional theory.

The theory of Moore (1996) is being used by researchers to measure the satisfaction of distance students. Nevertheless, it is not common to find such studies in Ethiopia which is the driving

force to conduct this study. Using the above transactional framework theory of Moore (1996) based on two of the elements, i.e. autonomy and student-tutor interaction, this paper tries to examine the relationship of effective communication and learning autonomy and their predictive powers of learners satisfaction at Saint Mary's University of CODL.

## **1.2** Statement of the Problem

Distance education in Ethiopia is not exploited to the level it should be- even by African standard. This can be attributed to many factors. The expansion of conventional higher education is a half a century phenomenon let alone distance education. In a country where there were only few universities for more than four decades, it would be impractical to expect the expansion of distance education in its proper form.

The emergence of private higher learning institutions in Ethiopia has, nevertheless, created conducive environment for the expansion of distance education. The working class of the country has high interest for it since it enables to pursue one's study without losing one's job. High school drop outs are the other interest groups. Even if Teacher Education programs are banned at the distance mode, primary and high school teachers also want to upgrade their qualification through distance education. Graduates from other fields are also interested in updating themselves. Therefore, the prospect of distance education in Ethiopia appears bright. As a result, the number of students who attend their education through distance is increasing. Despite the ban of Law and Education faculties, the number of students increased from 38,407 in 2001(2008/9) to 68,163 in 2005(2012/13). And it is projected to grow by 30% per annum. The share of private institutions has been greater than public institutions for the last five years (MOE abstract, 2005). Saint Mary's University is the highest enrollees of all the private institutions. For instance, from the total of 37,512 distance students of 2005, Saint Mary's enrolled 13,078 students which made it the highest enrollee (MOE abstract, 2005).

People, however, assume that distance education is not as good as the traditional one. Due to the separation of students and instructors, they question the nature and quality of education at a distance (Munro, 1998). They feel that if learning is not conducted face to face, it is difficult for learners to acquire appropriate skills and practices which make them confident in applying the learning experiences into practice. In other words, there is a tendency to seek learning conditions similar to the conventional style of learning, decreasing the responsibility of students learning but expecting instructor centered approach (Jaffee, 1998). When students join distance learning with student- centered instead of instructor- centered approach, they easily get frustrated when they fail to self regulate their learning. Besides, the learning process is text based which is not supported by technology like that of developed countries. After going through such a system, when distance graduates, and it is common to prefer conventional students to distance students while recruiting. Distance graduate students also appear fearful to compute with the conventional graduate students. These problems can create their own obstacle in the teaching

learning of distance learning, the relationship of instructors and students and distance students and would be employers.

Therefore, this paper tries to examine the satisfaction level of distance learners from effective communication and learner autonomy points of view. The research problems were approached from quantitative angle.

The research problem further attempts to address the following hypothesis driven questions:

- 1. What is the relationship between learners autonomy and student perception of instructor student communication?
- 2. Is there any difference between novice students and experienced students regarding their perception of instructor student communication expectation? How does it affect their satisfaction?
- 3. Is there any difference between students and instructors perception about autonomy and instructor student communication?
- 4. Can learner autonomy predict distance education learners satisfaction?
- 5. Can student instructor communication predict distance education learners satisfaction?
- 6. Is there any significant difference in terms of department and gender and regarding the perception of instructor- student communication and learners autonomy?

## **1.3** Significance of the Study

Distance education students are increasing from year to year, and there is a need to investigate the nature of communication and learners autonomy, linking it to their level of satisfaction to make amendments. This can be done after identifying the negative and positive attitudes of students and instructors about the type of teaching learning communication and autonomy that exist which either create obstacle or facilitate the teaching learning process. Effective communication is one of the essential tools to retain knowledge, skills and practice for learners. The success of distance education may well depend upon the ability of educational leaders to personalize the teaching and learning process and establish effective communication so as to satisfy and retain distance students (Saba, 1999). Students' perception regarding the existence or non existence of effective communication and level of autonomy can affect the teaching learning process either positively or negatively. If students can pursue their studies independently, regulating their own learning, they will enjoy and complete their studies. They will encounter problems while planning, monitoring and evaluating their studies. Therefore, this study can bring useful insights for distance students, tutors and the management of distance education on how to approach distance learning by showing the existing problems related to interaction, learners autonomy and satisfaction so as to take measures if there are gaps with regard to the three factors. Besides, transaction theory is the only distance theory which tries to explain on how to approach distance learning, and this study can check whether the theory is applicable to Ethiopian context.

## **1.4** Objectives of the Study

The general objective of this study is to assess distance students level of satisfaction regarding interaction and level of autonomy. The specific objectives are:

- to examine the relationship between learners autonomy and student perception of instructor student communication;
- to see if there is any difference between students and tutors in their perception of learners autonomy and instructor student communication;
- to see whether student- instructor and learners autonomy predict distance students satisfaction, and
- to inspect the existence of significant difference in terms of department and gender regarding the perception of instructor- student communication and learners autonomy.

# **1.5** Scope of the Study

The study is delimited to Saint Mary's University of Addis Ababa Business Faculty distance students. The study focuses on tutors, first year and third year Business distance students. This is done to see if there is any difference in their perception of tutors and students and student instructor and learner autonomy as a result of their new entry or stay for some years in the university.

# **1.6** Limitations of the Study

The survey instrument was administered only to undergraduate students of Addis Ababa Center. Additionally, no other distance-education stakeholders other than students and tutors were surveyed. Other centers students were not included due to time and budget factors which disallow to generalize the study to Saint Mary's University undergraduate distance students. The study was not also able to generalize its findings to graduate student population since they were not included as subjects of study.

## **1.7 Operational Definitions**

- **Dialog:** refers to the instructor-student interaction or the communication transaction between instructor and student when one provides instruction and the other reacts. It is the extent to which the student and instructor are able to respond to each other (Moore, 1993). It is a measure of eight items from the DELES instructor-interaction-and-support scale that gauge student perceptions of how he or she interacts with their instructor.
- Learner autonomy: refers to the varying capacity of the student's ability to make decisions about his or her learning and the extent to which students rather than the instructor

establish the characteristics of a learning program (Moore, 1993). It is a measure of five items from the DELES student autonomy scale.

**Student satisfaction:** was established by the Sloan Consortium as one of the five pillars of quality education. It is a measure of eight items from the DELES satisfaction scale. The Sloan Consortium (Moore, 2002, 2005) characterized student satisfaction in distance education as a pleasurable and successful experience that meets one's desired learning outcomes, expectations about the educational experience, and includes adequate peer and instructor interaction; it is contentment with all facets of educational experience.

#### II. Methodology

# 2.1 Research Design

A causal comparative study was used. When it comes to student-tutors interaction, the literature claims that first year students have high expectation, where as third year students have low expectation. The two groups were compared and their differences were examined by controlling one of the variables and considering the other as treatment group in order to see the impact on students' satisfaction. Similarly, first year students level of autonomy is assumed to be low, compared to third year students, and the two groups were compared and their differences examined by controlling one of the variables and considering the other as treatment group in order to see the impact on students' satisfaction.

In other words, causal-comparative is the design for this study. Causal-comparative research usually focuses on the association of different groups to a dependent variable and the relationships between variables as they occur in a natural setting as opposed to that of an experimental setting (Wiersma, 2000). The independent variables of student autonomy and instructor-to-student dialog usually take place during the flow of the course and cannot be manipulated. Participants' responses on their level of stated autonomy and perception of dialog were compared with their satisfaction of distance courses using central tendency. The measure of central tendency which was used in this study was the mean. Correlation analysis was found to be appropriate to examine the direct relationship of the two independent variables: student autonomy and student- tutor interaction. Regression analysis were also used to predict the satisfaction level of distance students by examining the relationships of one independent and dependent variables.

# 2.2 Sources of Data

The source of data for this study was primary. Structured questionnaires designed by groups of experts to study distance students satisfaction were used to gather data. Two types of structured questionnaires- one for students and another for tutors were used.

## 2.3 Sampling Procedure

A total of 120 students were selected based on academic stream and department, applying stratified sampling. One hundred twenty students were selected from Accounting and Management departments: 60 from first year and 60 from third year students.

Scholars claim that novice students require more interaction with their tutors, compared to experienced students. On the other hand, experienced students usually have the required skills and strategies and are expected to be self reliant. They are assumed to make their own decisions about what, when, and where to study. And this study wants to examine the validity of this claim.

#### 2.4 Instruments of Data Collection

Questionnaires were the data gathering instruments. The Distance Education Learning Environment Survey (DELES) instruments were utilized in this study to associate the two independent variables of learner autonomy and perception of instructor student dialog with the dependent variable of student satisfaction of distance learning in an attempt to discover the relationships between the variables. The instruments were also used to examine if there were any similarities or differences between tutors and distance students perception of the variables under study. The questionnaire, containing 21 items of questions of learner autonomy, interaction and student satisfaction, having a five point scale which range from never to always and strongly agree to disagree were used. Another questionnaire, having 21 items but being presented from tutors' perspective was also used to gather data from instructors. DELES item values for instructor interaction and student autonomy were set at (a) *never* = 1, (b) *seldom* = 2, (c) *sometimes* = 3, (d) *often* = 4, and (e) *always* = 5. Item values for the student-satisfaction scale were set at (a) *strongly disagree* = 1, (b) *disagree* = 2, (c) *neither disagree nor agree* = 3, (d) *agree* = 4, and (e) *strongly agree* = 5.

The validity and reliability of the instrument were tested by different researchers. To cross check the internal consistency of the instrument, it was piloted on 30 students with Cronbach alphas, and the finding was stable, showing in all cases above 0.75.

## 2.5 Method of Data Analysis

The data were analyzed using quantitative design. The study used both descriptive and inferential statistics. Mean median and standard deviation from descriptive statistics and correlation, T-tests, F-tests, ANOVA and regression from inferential statistics were applied while analyzing the data.

## III. Analysis of the Results

In this chapter, analyses and interpretations of the findings regarding relationship and prediction powers among learners' autonomy, interaction and student satisfaction and their comparisons by sex, department, student instructor and year of study are made. The study makes use of Moor's transactional distance theory.

Model	Sum of	df	Mean	$R^2$	F	Sig.
	Squares		Square			
Regression	1574.041	2	787.021	.457	50.097	.000
Residual	1869.467	119	15.710			
Total	3443.508	121				

Table 1: Relationship between Learners' Autonomy, Interaction and Student Satisfaction

	Autonomy	Interaction	Satisfaction
Autonomy	1.00		
Interaction	.476**	1.00	
Satisfaction	.573**	.588**	1.00
mean	21.10	30.79	31.59
Standard deviation	3.23	6.51	5.34
N	122	122	122

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 1 indicates that when learner autonomy, student interaction as well as distance learners satisfactions were correlated, the results revealed significant moderate positive relationships among learner autonomy and student and instructors interaction (r=.476), learner autonomy and their satisfaction (r=.573) and student and instructor interaction and student satisfaction (r=.588).

# Table 2: ANOVA summary for students' satisfaction as a function of Autonomy and Interaction

Table 2 shows that the independent variables statistically significantly predict the dependent variable, (F = 50, 097, p < .0005) at df(2, 119) implying that the regression model is a good fit of the data). A multiple regression was run to predict distance learners satisfaction from learner autonomy and student –instructor interaction, both variables were statistically significantly predictors of distance learners' satisfaction ( $F = 50, 097, p < .05, R^2 = .457$ ). This indicates that both variables added significantly to the prediction of distance learners' satisfaction.

#### **Table 3: Regression Coefficients**

Model	Unstandardized Coefficients B Std. Error		Standardized Coefficients	t	Sig.	
			Beta			
(Constant)	8.078	2.473		3.266	.001	
1 STLA	.627	.127	.379	4.939	.000	
STIS	.334	.063	.407	5.302	.000	

Table 3 shows that when learners autonomy and their level of interaction were regressed on students satisfaction, the results showed that learners autonomy predicted learners satisfaction ( $\beta$ =.38, p< 5), and similarly students level of interaction predicted students satisfaction ( $\beta$ =.41, p< 5). They are almost close in their level of explanation power in such a way that, learners' autonomy explained 38% of the variation and students' interaction explained 41% of the variation in students' satisfaction.

 Table 4: T-test for Learners' Perception of Instructor- Student Interaction, Learners' Autonomy and Satisfaction by Department

	Departme	Ν	Mea	Std.	Mean	t	Sig. (2-tailed)
	nt		n	Deviation	Difference		
Autonomy	Accounting	66	20.5 3	3.183	-1.47	-2.527	.013
	Manageme nt	46	22.0 0	2.789			
Interaction	Accounting	66	31.0 2	5.636	254	.203	.839
	Manageme nt	46	30.7 6	7.616	.237		
Satisfaction	Accounting	66	31.8 2	4.930	014	013	.989
	Manageme nt	46	31.8 0	5.883	.014	015	

As indicated in Table 4, comparison of distance learners perception of instructor- student interaction, learners autonomy and satisfaction by department revealed significant difference for autonomy between accounting and management department students(t= -1.47, P $\leq$  . 05). This implies that there is significant variation among distance learners in their perception of autonomy due to difference in their department. However, no significant difference is observed for interaction and satisfaction between students due to their difference in the department (t=

.254, P $\leq$  . 05) for interaction and (t= .014, P $\leq$  . 05) for satisfaction signifying that the observed mean differences are due to chance error.

	C	NT	Маат	64.3	Maar	4	Cia ()	
	Sex	IN	wiean	Sta.	wiean	ι	51g. (2-	
				Deviation	Difference		tailed)	
Autonom	Male	71	21.52	3.089		1.7	.088	
v					1.011			
5	Female	51	20.51	3.355				
Interacti	Male	71	30.48	6.979		-		
on					737	.61	.539	
	Female	51	31.22	5.822		5		
						5		
Satisfacti	Male	71	31.86	5.627		_		
on					6/3	63	513	
UII	Female	51	31.22	4 020		.05	.515	
	remale	51	31.22	4.727		4		

 Table 5: T-test for Learners' Perception of iInstructor- Student Interaction and Learners

 Autonomy by Gender

As shown in Table 5 comparison of distance learners perception of instructor- student interaction, learners autonomy and satisfaction by their gender did not reveal significant variation between students due to their difference in gender (t= 1.721, P $\leq$  . 05) for autonomy, (t= -.615, P $\leq$  . 05) for interaction and (t= -.634, P $\leq$  . 05) for satisfaction signifying that the observed mean differences are due to chance error.

Table 6: T-Test for the Equality of Mean by Year of Study

	Year of study	N	Mean	Std. Deviatio	Mean difference	t	Sig. (2-tailed)
				n			
Autonomy	first year	52	18.19	2.434	5.065	-13.615	.000
	3rd year	70	23.26	1.674	-3.005		
Interaction	first year	52	26.69	6.861	7 136	7 1 1 6	.000
	3rd year	70	33.83	4.170	-7.150	-7.110	
Satisfaction	first year	52	28.48	5.758	5 / 10	6 6 1 1	.000
	3rd year	70	33.90	3.564	-3.417	-0.044	

Table 6 depicts that when distance learners perception of instructor- student interaction, learners autonomy and satisfaction are compared by the year of the study results revealed significant difference between  $1^{st}$  year and  $3^{rd}$  year students (t= 13.615, P $\leq$  . 05) for

autonomy , (t= -7.116, P $\leq$  . 05) for interaction and for satisfaction (t= -6.644, P $\leq$  . 05). This implies that there is significant variation among distance learners in their perception of autonomy instructor- student interaction, and satisfaction due to difference in their year of study.

	Status	Ν	Mean	Std.	Mean	t	Sig. (2-
				Deviation	Differenc		tailed)
					e		
Autonomy	Student	122	21.10	3.228	3.798	3.341	.001
	Instructor	10	17.30	5.697			
Interaction	Student	122	30.79	6.505	512	235	.815
	Instructor	10	31.30	8.367	515		
Satisfaction	Student	122	31.59	5.335	5.990	3.357	.001
	Instructor	10	25.60	6.518			

 Table 7: T-test for the Equality of Mean between Students and Instructors

Table 7 depicts that when students and instructors perception of instructor- student interaction, learners autonomy and satisfaction are compared, results revealed significant difference between students and instructors (t= 3.341, P $\leq$  . 05) for autonomy and (t= 3.357, P $\leq$  . 05) for satisfaction (t= -6.644, P $\leq$  . 05). This implies that there is significant variation among distance learners and instructors in their perception of autonomy and satisfaction due their being students or instructors.

### IV. Discussion

The purpose of this study was to examine the relationships among distance students autonomy, tutor-student interaction and satisfaction and look at the existence of statistically significant difference as a result of gender, year of study, department and student- tutors. It also attempted to examine predictive powers of distance students' autonomy and tutor student interaction over students' satisfaction.

Distance learning requires from learners to self regulate their learning independently, and they should be comfortable both psychologically and methodologically (Fellenz, 1985). Learners should be independent thinkers and problem solvers, and while doing so they should know how to plan, how to use and manage their time, how to seek information from others, how to read, how to research, how to form study groups, how to prepare for exams, how to write well, and how to organize information, how to monitor, and how to evaluate their learning since distance learning by its nature require self regulation of one's learning.

On the other hand, the role of tutors, according to Common Wealth Document (2003), is not teaching. S/he is a facilitator. Tutors may propose to their students how to approach their learning, and, of course, sometimes they are expected to offer explanations; otherwise it is students who should know how to master their studies and contents of subject matters. Therefore,

the satisfaction levels of students depend, among others, on the ability of students to regulate their learning and create conducive relationships with their tutors to exploit them in different way so as to maximize their learning.

When distance students are autonomous, they can plan, monitor and evaluate their learning, and if they encounter problems regarding their study, they can ask for explanation from their tutors or take the appropriate measure which can be cognitive, metacognitive or any other. Tutors are also expected to offer advice to distance students on how to study independently and solve different problems which can be psychological, social, educational, etc. which can affect students learning negatively. In other words, tutors are expected to enable learners complete their studies in a satisfied manner. The relationship between distance students autonomy and student tutor interaction thus plays a significant role in completing their studies and being pleased about their academic performance and stay in the university. This study is conducted to examine the existence of the above factors.

Accordingly, the study found out that learner autonomy, tutor- student interaction and distance learners satisfactions display moderate positive relationships among one another. Both autonomy and interaction have positive moderate relationship with distance students' satisfaction, and this study is consistent with the findings of Burgess (2006). Burgess came up with positive relationship among learner autonomy, tutor- student interaction and distance learners satisfactions, autonomy displaying higher mean, compared to student tutor interaction. The higher mean of autonomy can be attributed to the interactive nature of web based learning in the study area which is not the case in Ethiopia. In our case, distance learning is not web based; as a result, the mean of tutor student interaction is slightly higher than autonomy. This is because in our case distance students make use of student tutor interaction and autonomy jointly. Learners make substantial dialogue with their tutors to clarify various issues and address their educational concerns, since the teaching learning is not technology based, and it seems that students are satisfied about the interaction level they had with their tutors. In fact, Fredericksen et al. (2000b) in their survey study of 1,406 distance educated students uncovered that those learners who claimed the highest levels of perceived learning also reported the highest levels of instructorstudent interactions. Similarly, the above finding also confirmed the study of Dougherty (1998) Walker's (2003) and Sampson's (2003). The researchers asserted that there is positive relationship between autonomy and distance students satisfaction.

The finding also revealed that student tutor interaction and autonomy predicted distance students level of satisfaction which is consistent with the findings of Burgess (2006) and Walker (2003) suggesting that higher scores on autonomy and tutor student interaction are associated with higher satisfaction of distance students. Northrup (2002) also came up with a finding that tutor student interaction predicts distance students satisfaction. Bray, Aoki and Dlugash (2008) findings supported the above claim in such a way that student autonomy is the highest predictor of the five factors of student satisfaction followed by interaction. The five factors were learner autonomy, student teacher interaction, student-student interaction, student content interaction and

learner-interface interaction. The findings of Bray, Aoki and Dlugash (2008) uncovered that social interaction was negatively correlated with students' satisfaction, implying a preference for independent learning.

Comparison of distance learners' perception of instructor- student interaction, learners' autonomy and satisfaction by their gender did not, however, reveal statistically significant variation between male and female students. And this finding confirmed the assertion of Lim (2001) and Richardson (2006) who were unable to find statistically significant differences on the satisfaction of students as a result of gender. The above study, nevertheless, failed to confirm the findings of Hartsell (2005). Hartsell found out that women and men do have differences in their perception of interaction.

The mean differences of autonomy, student-tutor interaction and student satisfaction shows statistically significant differences between first year and third year students. This signaled that students' being first year or third year has brought statistically differences in their perceptions of autonomy, student-tutor interaction and student satisfaction. First year students and third year students exhibit differences in their perception of autonomy, student-tutor interaction and student satisfaction probably because they do have difference in terms of their distance learning experiences in such a way that first year students are new to distance learning compared to their counter parts as a result of which they cannot shoulder their learning independently like that of third year students. Besides, they cannot exploit their instructors like that of third year students due to interaction skill problems or lack of experiences. Lin et al. (2008) came up with a finding that distance learning experience affects the satisfaction level of students. As a result graduate students appear better satisfied since they have developed experience of distance learning during their undergraduate study. In line with this, Gallien and Oomen-Early (2008) also found out that past experience of distance learning predicted performance and satisfaction in students for parallel distance learning plan.

# V. Conclusions and Recommendations

# 5.1 Conclusion

On the basis of the analysis, the following conclusions are made:

- Learner autonomy, tutor- student interaction and distance learners satisfactions display moderate positive relationships among one another.
- Learner autonomy and tutor- student interaction predict distance students' satisfaction. Learner autonomy explained 38% of the variation, where as tutor-student interaction explained 41% of the variation. The aggregate explanation power of learner autonomy and tutor- student interaction over student satisfaction was 50%.
- Department wise, there is no statistically significant difference for tutor-student interaction and student satisfaction, but the findings reveal a statistically significant

difference for autonomy between Accounting and Management departments distance students.

- In terms of gender, there is no statistically significant difference for tutor-student interaction, autonomy and student satisfaction. Being male or female does not bring perception differences when it comes to learner autonomy, tutor-student interaction and student satisfaction of distance students.
- The mean differences of autonomy, student-tutor interaction and student satisfaction show statistically significant differences between first year and third year students. This signaled that students' being first year or third year has brought statistically differences in their perceptions of autonomy, student-tutor interaction and student satisfaction.
- The t-test means difference between instructors and distance students shows statistically significant differences for autonomy and satisfaction, but the finding does not display statistically significant difference for tutor- student interaction.

## 5.2 Recommendations

On the basis of the research findings, the following recommendations are proposed:

- Distance learning requires from learners to self regulate their learning, and the role of tutors is facilitating. Distance students thus bear greater responsibility. As a result, students should employ every means which leads them to independent learning. To regulate their learning comfortably, they should exploit their environment, cognitive and psychological abilities and social support to the maximum. It is when they are engaged and motivated in their learning cognitively, metacognitively, behaviorally, taking advantages of the available support from tutors and other people by applying their communication skills that they can be autonomous in their learning.
- The change of teaching learning from teacher centered to student centered has its own challenge for distance students. Most students join distance learning in Ethiopia having a culture of teacher centered learning, and it is problematic for such students to become autonomous soon after joining the distance mode of learning. What adds fuel to the fire is that Ethiopian distance education system has not yet been made web based. Saint Mary's is no exception in this regard. And these factors have their own negative impacts on distance students. Besides, it takes time for the students to be independent learners since they do not have the culture of being so during their stay in elementary and secondary schools. Saint Mary's university therefore should recruit experienced tutors who can give immediate feedback to distance students' academic or non academic queries. The university should also offer recurrent in service distance teaching training for tutors on how to handle their responsibility. Likewise, there is a need to raise the awareness of distance students about the demands of distance learning from the outset, applying various media: print, digital and oral communications.

- The study made clear that distance students utilized both independent learning and dialog. Unfortunately, in Ethiopia there are no instructors who were trained to be tutors. Nevertheless, tutoring has its own unique features that instructors should possess. Unless tutors do have the required sensitivity to support distance students, it will have its own repercussions on the satisfaction and effectiveness of distance students in particular and teaching learning process in general. There is therefore a need to arm tutors with the needed communication and sensitivity skills and personality. Effective dialog can make learners less responsible in their learning since it paves the way for them to solve different academic and non academic problems they bump into during their distance study.
- The study revealed that first year and third year distance students held different perception regarding autonomy, interaction and satisfaction. This is the case because third year students have developed experiences on how to regulate their learning independently and exploit tutors support through dialog which made them satisfied. First year students thus should be given support on how to regulate their learning and establish relationship with their tutors so as to make pleased about their distance learning like that of their counterparts.
- Similarly, tutors and students do not have uniform perception about autonomy and satisfaction but interaction. This is the case because tutors do not have the confidence about learners self regulation. On the other hand, distance students appear to overestimate their self regulation ability and level of satisfaction. This gap should be narrowed by boosting learners' capacity of independent learning and level of exploitation of interaction practically.

## References

- Bray,E, Aoki,K and Dlugosh L. (2008). Predictors of Learning Satisfaction in Japanese Online Distance Learners Vol 9, No 3.
- Burgess, J.V.(2006). Transactional Distance Theory and Student Satisfaction with Web Based Distance Courses. Unpublished PhD dissertation, The University of West Florida.
- COL (2001). <u>Planning and Management of Distance Education: Commonwealth of Learning</u> London:Commonwealth of Learning and International Extension College.
- Desalegn Sherkabu. (2008). "Higher Distance Education in Ethiopia: Course Materials Development, Delivery and Evaluation Practices." <u>Saint Mary's Proceedings of the Sixth</u> National Conference on Private Higher Education Institutions (PHEIs) In Ethiopia.

Dickinson, L. (1995). Autonomy and Motivation: A literature review. System, 23 (2), 165-174.

- Donio, J., Massari, P., & Passiante, G. (2006). Customer satisfaction and loyalty in a digital environment: An empirical test. *Journal of Consumer Marketing*, 23(7),
- Dougherty, P. (1998). Learner control in asynchronous learning environments. *ALN Magazine*, 2(2), 11-16.
- Ethiopia Federal Democratic Republic, MOE. (2009/10). <u>Educational statistics annual</u> <u>Abstract.</u>

- Ethiopia Federal Democratic Republic, MOE. (2013/14). Educational statistics annual <u>Abstract.</u>
- Fellenz, R. R. (1985). Self- Direction : A clarification of Terms and Causes. <u>In Proceedings of the 26th Annual Adult Education RsearchConference.</u>164-169.
- Fredericksen, E., Pickett, A., Shea, P., Pelz, W., & Swan, K. (2000b). Student satisfaction and perceived learning with online courses: Principles and examples from the SUNY learning network. *Journal of Asynchronous Learning Networks*, 4(2), 47-56.
- Fuller,R.G., Kuhne G.W & Frey. (2011). <u>Distinctive Distance Education Design: Models for</u> Differentiated Instruction. New York: Information Science Reference.
- Fullerton, G., & Taylor, S. (2002). Mediating, interactive, and non-linear effects in service quality and satisfaction with services research. *Canadian Journal of Administrative Sciences*, 19(2), 124–136.
- Gallien, T., & Oomen-Early, J. (2008). Personalized versus collective instructor feedback in the online courseroom: Does type of feedback effect student satisfaction, academic performance and perceived connectedness with the instructor? *International Journal of E- Learning*, 7(3), 463–476.
- Hannafin, M., & Land, S. (1997). "The foundations and assumptions of technology- enhanced student- centered learning environments." <u>Instructional Science</u>, 25(3), 167-202.
- Hartsell, T. (2005). Who's talking online? A descriptive analysis of gender and online communication. *International Journal of Information and Communication Technology Education*, 1(1), 42–54.
- Jaffee, D. (1998). Institutionalized resistance to asynchronous learning networks. Journal of Asynchronous Learning Networks. Vol 2(2), 21-32.
- Keegan, D. (1980). "On defining distance education." Distance Education, 1(1), 13–36.
- Lim, C. K. (2001). Computer self-efficacy, academic self-concept, and other predictors of satisfaction and future participation of adult distance learners. *American Journal* of Distance Education, 15(2), 41–51.
- Lin, Y.-M., Lin, G.-Y., & Laffey, J. M. (2008). Building a social and motivational framework for understanding satisfaction in online learning. *Journal of Educational Computing Research*, 38, 1–27.
- Little, D. (1991). Learner Autonomy: Definitions, Issues and Problems. Authentic Ltd. Dublin.
- Moore, M. (1972). Learner autonomy: The second dimension of independent learning. *Convergence*, *5*(2), 76-88.
- Moore, M. (1973). Toward a theory of independent learning and teaching. *Journal of Higher Education, 44*, 661-679.
- Moore, M. (1986). Self-directed learning and distance education. *Journal of Distance Education*, *1*(1), 7-24.
- Moore, M. (1989). Three types of interaction. *The American Journal of Distance Education*, *3*(2), 1-6.
- Moore, M. (1991). Editorial: Distance education theory. The American Journal of Distance

*Education*, 5(3), 1-6.

- Moore, M. (1993). Theory of transactional distance. In D. Keegan (Ed.), *Theoretical principles* of distance education (pp. 22-38). London: Routledge.
- Moore, J. C. (2002). *Elements of quality: The Sloan-C framework*. Needham, MA: Sloan Center for Online Education.
- Moore, J. C. (2005). *The Sloan consortium quality framework and the five pillars*. Retrieved from http://www.sloan-c.org/publications/books/qualityframework.pdf.
- Moore, M. G., & Kearsley, G. (1996). <u>Distance education: A systems view.</u> New York: Wadsworth.
- Munro, J. (1998). <u>Presence at a distance: The educator-learner relationship in distance</u> <u>learning.</u> (ACSDE Research Monograph Series No. 16). University Park, PA: Pennsylvania State University.
- Northrup, P. (2002). Online learners' preferences for interaction. *The Quarterly Review of Distance Education, 3*, 219-226.
- Ogunleye, A.(2008)."Quality Assurance and Quality Indicators in Open and Distance Education: Context, Concerns and Challenges" <u>International Journal of Educational Research and</u> <u>Technology</u>. Vol4(2).
- O'Shea, T.,& Downes, A.(1997). "The roots of quality assurance at the British Open University". In Tait, A. (ed.), <u>Perspective on Distance Education: Quality Assurance in</u> <u>Higher Education: Selected Case Studies.</u> Vancouver: The Commonwealth of Learning.
- Pierrakeas, C, Xenos, M and P. Pintelas. (2003). "Evaluating and improving educational material and tutoring aspects of distance learning systems". <u>Studies in Educational Evaluation</u>. Vol.29.
- Richardson, J. T. E. (2006). Investigating the relationship between variations in students' perceptions of their academic environment and variations in study behavior in distance education. *British Journal of Educational Psychology*,
- Saba, F. (1999). Architecture of dynamic distance instructional and learning systems. <u>Distance</u> <u>Education Report</u>.Vol 3(8), 1-5.
- Sampson, N. (2003). Meeting the needs of distance learners. *Language, Learning & Technology,* 7(3), 103-111.
- Taye Mohammed and Tesfaye Teshome.(2012). Distance Education as a Tool for Development:The Prospects of Private Distance Education in Ethiopia.Saint Mary's Proceedings ofthe Sixth National Conference on Private Higher Education Institutions (PHEIs) InEthiopia.
- Walker, S. (2003, February 13-15). Distance education learning environments in higher education: Associations between the psychosocial environment and student attitude.
  Paper presented at the Twenty-Sixth Annual Southwest Research Association Conference, San Antonio.
- Wiersma, W. (2000). Research methods in education. Needham Heights, MA: Allyn and Bacon.