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### Full length research paper

Students Placement into Different Departments by First Choice and Without: It's Relationship with Students' Academic Performances: The Case of Madda Walabu University

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#### Abstract

The main purpose of this study was to look at the relationship between the Practices of students' placement into different Departments and Students 'academic performance at Madda Walabu University. A descriptive Case Study Research method was employed in this study. A total of 233 students of two batches in their first- and third-year studies in 2012/13 were included in this study using stratified random sampling. In addition, 17 officials (university managers) were included using the availability sampling while 16(two from each selected department) instructors were selected using quota sampling technique. Questionnaire, Interview and Documents analysis were employed to collect data. Both quantitative and quantitative methods of data analysis were used as data collection instruments. Both quantitative and quantitative methods of data analysis were used to complement the limitation of one over the other. The finding of this study shown that practice of student's departmental placement was carried out against choices and interests of most students and it's been one among many factors hindering students' academic performance at this University. Therefore, the concerned bodies at this University, need to give due consideration to students' interests, aptitudes and preferences during student placement into various departments at this university.

**Key Words**: Academic performances, Department, First choice, Students Placement

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Author agrees this article remain permanently open access

### Introduction

Students usually take their ability and future earning into consideration when they choose their academic program. They do such choices so that they can successfully complete courses and secure better jobs after graduation. Students' interest for a study program is

determined by the availability of good jobs which indirectly determine the student's career path for the rest of his/her life and their ability to be graduated from the study program. In this perspective, the students observe comparative individual graduated from institution of higher education as a source of information about which

study program earn them better jobs after graduation. Therefore, Students interest for a study program is developed out of both ability and availability of good jobs. it can be said that interest and attitude of university students towards their academic study (subject) plays a crucial role for the success of the learner. Students joining a particular department by their interest are believed to be highly motivated to learn than students placed in a department without their interest. High intrinsic motivation is a factor which can lead students to a better achievement. The finding by different studies has disclosed that motivated students perform better academically than unmotivated ones (Bank and Finlapson, 1980; Broussard and Garrison, 2002) in Tadesse Dejenie 2004; Sandra, (2005). It is therefore, in such circumstances that, students' confidence in their abilities may increase, resulting in improved self-esteem. On the other hand, Staunton, (2008) stated that, students who have been placed appropriately are more likely to remain at the institution, in turn helping to provide a growing university student population. Therefore, it can be said that students who are located into different study programs on the basis of their abilities and interests they will be more likely to succeed at the university. Ayotol (1998) also confirmed that if students do not have interest in the field they are placed, it affects the way they react or listen to the instructor. However, students' placement into different study program is sometimes carried out without considering students choices for the program and is among the factor hindering academic performance of most students at Madda Walabu University. Therefore, this study was aimed to look at the practice of students' placement into different study program with view point of its relationship with students' Academic performances at Madda Walabu University.

### **Materials and Methods**

In this study descriptive Case Study method was employed to address issues about students' placement into different Study programs and its relationship with students' academic

performances. This method was employed to describe the existing conditions and practices of students' selection and placement into different departments in viewpoint of its relationship with students' academic performance at Madda Walabu University. For this study, both qualitative and quantitative research approaches were used to complement the limitation of one over the other.

Madda Walabu University was purposely selected as study area, from the fact that the researcher has a very close contact as a teaching staff. Through his stay in the university the researcher has informally detected problems related to department placement practice among students in the campus and he thought it is significant to deal with at this university. This study was conducted since 2013 at Madda Walabu University and it included four schools (Faculties) of the university using systematic sampling technique. The Four Schools were; School of social science, language Studies. Engineering Technology and Mathematical science. Therefore, four (44.4%) of the nine schools (faculties) running within Madda Walabu University were employed for this study. In those Schools, the study aimed to look at students' placement into different departments in viewpoint of its relationship with students' academic performance.

There were 13 departments running under the selected four schools among which departments, 8 (61%) of them, were included in this study using stratified sampling as appropriate method for the purpose of this study. The sample departments were, Computer Science Information technology from school of Engineering-Technology, mathematics and statistics from School of mathematical sciences. Amharic and English departments from Schools of language studies and History and Geography from School of Social Science.

Among the batches of eight academic programs, first year and their third year were selected using

purposive samplings from the very purpose that university students face learning difficulties in their first year of studies and students in third year of their studies have better experience of their respective department than students of the other batches. In this regard, this study included 233 students as sample size of this study. Consequently 15 students from each selected first and third year department were included using stratified random sampling technique except one department for which availability sampling method was employed since the population in this department were below the intended sample. Thus, a total of 115 (29.7%) students in their first-year studies in the year 2012/13, comprising 58 males and 57 females and 120(37.8%) students in their third-year studies in the year 2012/13 containing 81 males

and 35 females were included in the study. In addition, 17 university officials (University department heads, School directors, Academic Vice President etc.) and 16 instructors, a total of 266 respondents were used as data sources for the study. I addition policy documents and Guidelines related to students' department placement as well as individual students' GPA were used as sources of data for this study. The researcher decided to include only two instructors from each department and thus, Quota sampling was used to select 16 instructors (2 from each selected departments) while availability sampling was employed to select officials fulfilling questionnaires. The following table 1 indicates students' population, samples students' and sample batches, as well as sampling technique employed for this study

Table1. Student Population, Sample and Sampling technique used in the study

Schools	Sample Departments		sample batches	T/Population	/Population Sample students		
		1stYr	3 <sup>rd</sup> Yr	T	1 <sup>st</sup> Yr	3 <sup>rd</sup> Yr	Purposive
Engineering	Inf. system	59	30	89	15	15	SRS
Technology	Computer science	134	77	211	15	15	SRS
•	Math <sup>'</sup> s	58	49	107	15	15	SS
Mathematical	Statistics	62	51	103	15	15	SRS
science	Amharic	10	23	33	10	15	AS/SRS
Language	English	21	30	51	15	15	SRS
Studies	History	20	30	50	15	15	SRS
Social Science Geography		23	27	50	15	15	SRS
	Total	387	317	704	115	120	

Note AS= availability sampling, SRS=Stratified random sampling, 1st Yr=First Year, 3rdyr Year.

The major data collection instruments used in this study was questionnaire and interview. Questionnaire was used to gather both qualitative and quantitative data. Thus, close ended questions with very limited number of open-ended items was employed for gathering information from all groups of respondents as

they were relatively large in number. Thus, 268 set questionnaires containing 121 items made up of 27 open-ended and 94 close-ended items, a total of 268 set of questionnaires distributed and 266 were returned after educes responses. The data on academic performance was collected through self-reported grade point average (GPA)

which was earned by the participants at the end of the first semester of the 2012- 2013 academic year. In addition, documents were employed just to complement the evidences. It was believed that utilization of such validated and multiple data collection methods as well as data sources would enable to verify the authenticity of the data that was generated.

### **Methods of Data Analysis**

In this study, both qualitative and quantitative data analysis methods were employed. The data collected through questionnaire were analyzed using the Statistical Package for Social Sciences (SPSS; version 16) computer software. The quantitative data were condensed into descriptive statistics such as percentages, correlation and

mean. The qualitative data obtained through open-ended questionnaire, interview and documents were transcribed, and interpreted thematically. The thematic approach was followed to display the analyses and findings from both quantitative and qualitative data. Analysis of qualitative data collected through interview were displayed first and then corroborated by qualitative data analysis in the form of texts and quotes. For purpose of analyzing difference the in academic performance between students who were placed into their department by first choices and those without, all students' department were categorized into two groups based on the data obtained regarding their placement:

**Group A:** Students who were placed in their respective departments according to their first choices.

**Group B:** Students who were placed in their respective departments without their first choices.

The researcher employed such grouping to accommodate difference among individuals who could contribute to the difference in academic performance instead of treating individuals as subjects to analyze the results obtained. Accordingly, a test was conducted. The test made were t-test to compare performance (achievement difference between group A and

B). The mean difference in GPA was obtained by comparing mean value of GPA of (GA) from that of GPA of (GB) and the other statistical method used were correlation coefficient. Correlation was used because it was considered appropriate test for this study to investigate the correlation between academic performances and students' departmental placement condition.

### **Result and Discussion**

# Students placed to their departments by their own first choices and those Assigned without their First choices

Students usually take their ability and future earning into consideration when they choose program of study. This implies that, choices indicate what students' wants to learn order to achieve success and satisfaction performing better grade. Hence, it is important to place students into the department they wish with most preferences (first choices). Students consider their future earning when they choice their study program so that they can successfully complete courses and secure good jobs after graduation (Ayalon and Abraham, 2002). This implies that student's choice of study

program is determined by the availability of good jobs which indirectly determine the student's career path for the rest of his/her life hence forth, the effort devote during their study time.

Therefore, this section looks at the number of students placed to their departments on the basis of their first choices and those assigned out of their first choice across eight departments at the targeted university. Consequently, the placement condition of 233 students in their 1st and 3rd year studies in 2012/13 was used for this purpose. The following tables 2 below indicate the number

of students placed /assigned into their department by their first choices and without their

first choices across the eight departments.

**Table 2.** The number of Students' placed into their department by their first preferences and those without their first choices across the eight departments

Values outside and inside the bracket are frequency and percentage, respectively

Items				Academ	ic Program				
Placementin toAcademic Program	Amharic&Literature	Computer Science	English and Literature	Geography and Environmental Studies	History and heritage management	Information System	Mathematics	Statistics	Total
Without first choice	21(84)	9(30)	25(83)	18(62.2)	26(86)	7(23.3)	12(40)	11(36)	129(543)
By first choice	4 (16)	21(70)	5(17)	10(37.8)	4(14)	23(76.7)	18(60)	19(74)	104(44.7)
Total	25	30	30	28	30	30	30	3 0	233

The table 2 above reveals that, 21 students out of 25 from Amharic department, 25(84%) of 30 (83.3%) students from English department. 9(30%) of 30 students from Computer science department, 7(23.3%) of 30 students from Information system department, 18 (62,2%) of 28 from Geography department, 26((86.%) of 30 students from history department, 11(11%) out of 30 students from Mathematics department and 12(36%) of 30 students from department were placed across the eight departments. Therefore, it is shown more than half 129 (55.4%) of the 233 students' respondents included in this study were assigned to their departments without first choices while only 104(44.6%) of these students, joined their departments by according to first choices. Most of the students assigned to their study programs without their first choices has responded in openended item that, "they were feeling compelled to learn in their departments. However, Victoria, (2008) has described that for a student to have the best opportunity to reach his potential, it absolutely essential that he/she has to initially placed at the proper point in his/her study program in his/her study.

Majority of the students' respondents from history, Amharic and English departments noted in open –ended item that' they were assigned to their departments by their 9th and 10th choices. Therefore, placement of students into their department without first choices was more serious in History and Amharic departments. This raises not only a serious question into the appropriateness of the admission policies, procedures and criteria that are in use to make students placement into different study programs but also consistency of the practices and criteria for all faculties and departments at the targeted University.

The qualitative data obtained through openended items indicated that the majority of the students' respondents, except those learning in the four departments (Computer Science, Information system, Mathematics and Statistics), were attending their learning not out of their love for the profession but for other reasons such as desires for graduation and easily search other job. Students' interviewees among the misplaced students told this issue as "We are attending our field of study outside of our keen interests for the profession and we are ready to change our fields of study if we get other preferences"

This indicated that if departmental placement was not one-time decision, most students would like to change their study program. Students were of the opinion that some departments which are profitable in current local market were sought after by most students while some others are too boring to make sense in relation to their life career in current local market, when they were asked why they were assigned to their department without their first choices. Majority of students' interviewees told "we heard from friends who were graduated from those departments that there is no job opportunity for one who graduated in the department we refused to choose and avoid choosing them" when asked why they do not interest those departments. Freeman (2001) and Minski (2003), confirmed this finding stating that, students are assumed to form their choices and earnings expectations by observing the comparable individuals who are currently unemployed or working in the country. These students were complaining about the departmental placement practice at their university when, they reported that, "However we were compelled and assigned to study in those no-profitable departments by our administrators." MaddaWalabu University legislation document article 37 stipulated as follows the reason why students assigned into their department without their first choices:

In the cases where there are more applicants than places in a program, the applicants who fail to get their first choice will compete for their second choice and if they fail to their second

choice they and do the same for their third, fourth choice, etc.

The overall finding of this study indicated that, due to Limited job opportunities in the local job market was the other main factor for the student for not chosen some department. Consequently, History and Amharic were among departments in which placement problem was too much since, 86% and 84% of student among respondents learning in those departments without their first preferences. It was also indicated that, the administrative bodies at the targeted university were attempting to preserve the non-selective departments than students' interests and preferences. Martha and Charles (2005) stated that, department chairs determine students' taste for academic fields by acting as gatekeepers by welcoming and encouraging and sometimes enforcing students to explore and join the department they lead.

The Difference between GPA of Students Placed to their Departments by their own First Choices and those without

Most studies over the past ten years show that with a good match between interests and academic study we are likely to earn higher grades. This implies that match between academic study stick with academic performance. The more we join our academic study by our most interest, the more is that we graduate on time, satisfied and successful in our career.

Based on this ground this section presents quantitative and qualitative data regarding difference between academic performances of students assigned to their academic study according to their first preferences (Group A) and those assigned to their academic study without their priority (Group B). The GPA of 233 Students who was in their first- and third-year study was used for this purpose. Therefore, the following table3 indicates the GPA mean differences of the two formed group at Madda Walabu University.

Table 3. The difference between GPA of students joined their departments by their own first preferences and those without

Placement to department	f	%	MGPA	df	t	p-value
Without first choice	129	55.3	2.6212	115	1.30	.041
By first choice	104	44.7	3.2160			

Note: MGPA=Mean Grade Point Average, f=Frequency=, t=Calculated value, df=degree of freedom.

The table 2 above indicated that the students joining their departments by their first choice (Group A) achieved better mean grade point average (GPA=3.2160) compared to mean grade point average (GPA=2.6212) of their counterparts joining their respective departments without their first choices (Group B). The average mean grade point (GPA) of students joining their departments by their first choice (Group A) was favoring placement of students into their department by their first choices while that of students assigned

into their departments without their first choices was disfavor students' assignment into their departments without their first choices. The t-test result (t=1.30, df=115, p < 0.05) also showed that there is statistically significant difference between the academic performances (GPA) of students placed to their department by their own first choices (group A) and those assigned without consideration of their own first choices (group B). The students' response to the open-ended item was also confirming this, when students'

participants noted that, they would perform better if they were joined their department by their own first preferences.

Most of the students' interviewees asked "how their achievement in preparatory school was?' If they have performed better in NHEE, what are the major factors affecting their (GPA) university performance?"

My academic achievement in NHEEE was better at preparatory school and I was in hope that I would join the study Program of my first choice. However, it might be due to the fact that my NHEEE was not considered to assign me the study program of my first choice.

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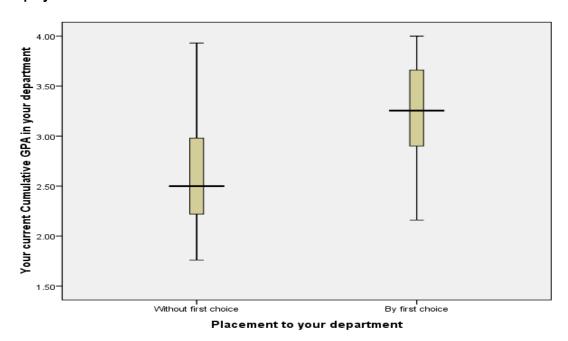
Students' interviewees were asked how is their interest to study and achieve in their current academic study and they responded as: "I am not happy to study in this academic program and my university GPA has adversely decreased"

The students' interviewees identified Illegibility of the program to their interests and aptitudes, studying with those who possess low NHEEE score as rationale that made some students unhappy and uninterested to study and achieve well in their academic study at MWU.

Tamir (2002) has identified that:

The departments whose cut- off point is close to minimal requirements are considered as non –selective by students while those departments whose cut-off point significantly exceeding the minimal score are considered as selected

One among the student interviewees said, "Very few of our classmate students aspire to achieve better CGPA and I experienced carelessness, feeling there is no competition in my department" The finding of this study reflected that academic performance of the students can be affected due to placement of the prepared student in a study program that cannot match his/her ability and knowledge levels. This was confirmed by the finding of Najafpour and Yektatalab (2008) which stated that, failed students lacked interests in their field of study while Dalir et al. (2011) stated that, highly motivated students are more active and experience better academic performances. This implies that in university, enrolling students into different designed academic program without considering their capability and interests, will negatively affect students' leaning and academic performances.



**Figure 1.** student's departmental Placement condition and their Cumulative grade point average (CGPA) in their Department

The above figure 1 confirmed the result in the table 3 above that, there is difference in GPA performance of students in relation to their departmental placement condition.

In this regard, the figure 1 confirmed that, the grade point average (GPA) of students assigned

to their departments without their first choices range between (1.50-2.50) in their departments while that of their counterpart joining their departments by their own first choices range between (3.00-3.50) in their departments. Jones (2013) found out that, students.

Table 4. The correlation between department placement condition and Students Academic performances

Item of Correlation		Placement	to	yourYour current GP	A in
		department	nt your department		
Placement	Pearson Correlation	5		0.706**	
to your department Sig. (2-tailed)				5	
Your current GPA	Pearson Correlation	0.706**		5	
in your department	Sig. (2-tailed)	0.05			

<sup>\*\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

Statistical analysis of Pearson correlation of placement condition and student GPA, shows that there is significant positive relationship between placement condition and GPA of students at (r = 0.706\*, P= 0.05) level of significance. This indicating that, students who were placed to their department by their first preferences were motivated and performing

academically better while their counterparts who joined their department without their first preference were not motivated and performing academically lower. This implies as one factor; placement condition has a significant influence on students' academic performances at the targeted university. This study is therefore in line with the finding of Robbins and Zeegers (2001) in

Tamir (2002), which stated that, students' expectation of success and their confidence in their abilities is positively associated with their academic performance while Dalir et al. (2011),

stated that; highly motivated students are more active and experience better academic performance.

### Conclusions

The finding of this study indicated that, the average mean score GPA achievement of students who are assigned to department without their own first choice (Group B) was lower compared to the other groups placed into their department based on their first preferences (Group A) at Madda Walabu University. This finding also further revealed that, there is statistically significant difference between GPA performance of students placed into their department on the basis of their own first preferences (Group A) and their counterparts assigned into their department without their own first preferences (Group B) at this university. This implies that one of the reasons for lower GPA performances of students at Madda Walabu University is departmental placement practice which was carried out against choices and interests of most students. It can be furtherconcluded that, those students placed into their department on the basis of their own most preferences, face- less learning difficulties (dismissal, repeating courses and dropout) while academic problems were becoming a red flag in the departments where students were assigned without their interests at Madda Walabu University. Here we can further conclude that it is difficult for those departments to teach and create successful professionals from those students joining without their own interests and choice, even poorer it may become harder to wait for such graduates to become creative in their future job or work places. Further research needs to be done to see what students really consider when they choose their study program and whether the placement practices is the case in all university in Ethiopia on same issue.

Cognizant of the fact that placement into department by their first choices alone does not quarantee academic success; this study suggested that, placing students into different department by their first choices has significant relationship with students' academic performances. Therefore. this studv recommended the concerned bodies at Madda Walabu University to take in to consideration students' first preferences during students into different study program to enhance performance of students.

### Conflict of interest

I declare and affirm that this paper is my own work. All scholarly matter that is included in this paperhas been given recognition through citation.

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### References

Adodo1, L and Gbore, O (2011). Prediction of attitude and interests of science Students' of different ability on their academic performance in basic science. *International Journal of Psychology and Counseling Vol.* 4(6), pp. 68-72.

Arfaei,K, et al. (2008). Assessing mid-wifery students' interest in their Career at medical sciences university in Tehran. Knowledge and Health. 3(1):2-32

Bank,C and Finlapson, W (2000).Successful Motivation of Students in Academic Activities. McClelland, D.C. Appleton-Century-Crafts.

- Belfied, R (2000). Economic Principles for Education: Theory and Evidence. Cheltenham: Edward Elgar.
- Broussard, S.C and Garrison, M.E( 2004) .The relationship between classroom motivations and Academic achievement in elementary school aged children. Family Consumer Science
- Research Journal, 33 (2), 106-120. Canada, Statistics in Biology Psychology. Newdelhi, Academic publishers. 295988/258/College-Placement-And-The-Effect-That-Has-On-Jobs-For-College-Grads.html.PVTLTD.
- Dalir, S, Shojaeian, Z and khodabandehloo, G (.2011). Survey on the motivation of nursing and Midwifery students toward their field of study selection- nursing and midwifery school 1387.Iranian Journal of Nursing Research.
- Daniel, L,et al (1999). The Effects of Public School Choice on the Academic Achievement of Minority Students. Presented at the Annual Meeting of the American Educational Research Association (Montreal, Quebec).
- Dessalegn Lemessa(1996). Study of Students Selection, Streaming and Training in Technical and Vocational Schools in Ethiopia. AAU.
- Fortier, S, Vallerand, J(1995). Academic motivation and school performance: Toward a structural model. Contemporary Educational Psychology, 20, 257-274.15th Year No. 64 ADDIS ABABA 17th September, 2009.
- Freeman, R (2011). Supply and Salary Adjustments to the Changing Science Manpower Market: Physics, American Economic Review, vol. 65, 27-39.

- Jones, B(2013). The arithmetic achievement test and the effective placement of students in mathematics (Doctoral dissertation, Ohio University Dissertation Abstracts International, 58(05).
- Jones,K.( 2011).Career Key. Ibadan Nigeria Professor Emeritus, North Carolina State University. Onibonoje press publisher, www.careerkey.org.
- Martha, A and Charles, A(2005). Influences on Students' Choice of College Major, *Journal of Education for Business*, v80 n5 p275-282 May-Jun 2005.
- Murphy, H, et al (2013). Impact of student choice on academic performance: cross-sectional and longitudinal observations of a student cohort BMC Medical Education Bio-Med Central Ltd.
- Najafipour, S and Yektatalab, SH (20013). The prevalence of depression among the students of Jahrom: University of medical sciences and its relationship with academic failure. *Journal of Jahrom University of Medical Sciences.*;6(6):27-37.
- Sandra, D (2002). Mathematics and science achievement: effects of motivation, interest and academic engagement. *Journal of Educational Research. Retrieved on 07/10/2012: http://www. Find articles.com.*
- Tella, A(2006). The Impact of Motivation on Student's Academic Achievement and Learning Outcomes in Mathematics among Secondary School Students in in Nigeria. Osun State College of Education, Osun State, NIGERIA.
- A.g(2008). Α mixed methods Victoria, comparison study of placement strategies Courses. College mathematics Dissertation submitted to College of University. Education Ashland