

Causes of Student Attrition in Bahir Dar University: Qualitative and Quantitative Analyses

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Abstract: *The study investigated major causes of student attrition in Bahir Dar University. Longitudinal design was used to look into the trend of attrition rate over two years. The subjects of the study were all freshman students admitted to the Faculty of Education of the university in the 1997/98 academic year. The total number of students admitted to the faculty in that academic year was 414 (333 males and 81 females). All students were involved in the study. In addition to the freshman students, all second year students (156) were included to supplement the data obtained from freshman students. Questionnaires were used to gather information about those factors that account for students' discontinuation of their education. Documents were also assessed to obtain academic performances and attrition rates of students over the two years. For analysis, both quantitative and qualitative techniques were employed. Results portrayed that the rates of attrition were high in the first year of university education and declined considerably there after. It was indicated that the overall rate of attrition of boys was 0.342 and of females was 0.568. The incidence of female students' attrition rate was almost twice that of their male counterparts. Qualitative data revealed that the major causes of attrition were anxiety, homesickness, health problems, social and environmental adjustment problems, inaccurate perception of one's competence, lack of information about college life and how to study, falling in love, lack of appropriate study skills, scarcity of reference materials to study, overcrowded dormitories and library, curriculum incompatibilities of high school and tertiary level, distorted information provided to freshman students by seniors, and grading problems of teachers. On the other hand, quantitative data showed that the only predictor variable for survival was GPA. However, GPA itself was affected by gender, self-efficacy, and level of anxiety. Male students had higher mean GPAs than female students. It was also found out that anxiety was caused by feeling of inadequacy, which was negatively yet strongly affected by self-efficacy, and gender, where male students were more anxious than female students. Finally suggestions that may help alleviate the problem were forwarded.*

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Introduction

In higher learning institutions, a number of factors may account for the success and failure of students in their educational career. The quality of education is partly determined by the success of students in the learning process. This is to mean that the attainment of any educational objectives depends largely on the mastery and performance of students. Students can attain the expected learning outcomes or educational objectives when they are in good psychological conditions, when the learning environments are conducive enough to facilitate their learning, when the teaching-learning processes are attractive, and when the evaluation procedures are fair and well defined.

In higher institutions of learning, however, there are multitudes of factors that impinge upon the academic performance of students. Individual variables such as motivation, interest, attitude, cognitive styles, attribution styles, affects, learning strategies, self-esteem, and self-efficacy, just to mention some, are crucial in the learning process and performance of learners. Environmental variables like climatic conditions of the area, the learning atmosphere, social interactions among students and their interaction with their teachers, also account for a great deal of achievement variability. The nature of the curriculum, the subject matter to be learned, the availability of learning materials and facilities, the administrative nature of the institution, access of the students to relevant and pertinent information are also climacteric to the attainment of educational objectives.

Some of the problems that may detrimentally affect the individual learner's academic progress may be untangled by himself/ herself and he/she can successfully complete the program he/she is engaged in. But the majority of the problems remains unresolved and may drive the individual out from the learning institution. Research

studies indicated that a great number of conditions are responsible for the discontinuation of students from their schooling.

For example, Kelly (1994) classified the causes of attrition (inability to continue or complete one's educational career for whatever reasons) into two broad categories: social psychology and socio-economic status. In the first instance, factors encompassed were student behavior, performance in school, psychological states, and family background of the students. According to his review, this school of thought employs predominantly correlational studies and treats these factors as independent and student attrition as dependent variable. Thus dropping out of the learning institute is reckoned to be an individual act suggesting that it could be a failure of the individual learner to cope with the task of learning, or the failure of the family or culture of the student.

The other approach emphasizes that individuals who leave schools before completing the program are rather push outs who might have been forced to discontinue their education early because of unequal economic status among students to support themselves, political and/or social structure, and certain practices of the school. This may be equated to discrimination practices.

According to Kelly's presentation, it is possible to say that both academic and nonacademic factors play a vital role in aggrandizing the rate of student attrition in any learning institution. Some researchers (e.g., Ekstrom, et al., 1986; Asmerom, et al., 1989) pointed out that poor academic achievement is a leading cause of attrition. For example, Asmerom, et al. (1989) reported that 83% of their sample students dropped out of their college education for academic reasons. Similarly, Kaplan, Peck, and Kaplan (1997:331), based on review of literature on the problem, stated that

poor academic performance is one of the most often cited correlates of and reasons given for dropping

out of school.... Academic performance as measured by grades...generally heads the list of the variables found to be most highly related to subsequent dropout behavior.

Another researcher (Laekemariam, 1994) argued that students were dismissed; they withdrew, or dropped out from their college education mainly due to low academic competence.

On the other hand, Gebre Sellassie (1998) attributed the causes of attrition to be poor administrative and educational services provided in higher learning institutions to the students. Similarly, Husain, et al. (1987) reported that the causes of student attrition at universities and colleges were the nature of educational planning that gave little chance to the students to get better jobs and varied educational opportunities. Temesgen (1991) also speculated that family backgrounds of the students and curriculum incompatibilities of secondary and tertiary educational levels forced many students to quit their education or to be dismissed.

Other researchers also share the idea that both individual and/or institution-related factors cause students to discontinue their schooling. For example, Bean and associates (1985, 1990), as cited in Cabrera, Nora, and Castañeda (1993), pointed out that student attrition was analogous to turnover in work organizations, and stressed the importance of behavioral intentions (to stay or to leave) as predictors of persistence behavior. These scholars discussed the paramount importance of both internal and external factors as causes of student attrition in colleges. They developed what was called "Student Attrition Model" which presupposed that

behavioral intentions are shaped by processes whereby beliefs shape attitudes, and attitudes in turn, influence behavioral intents. Beliefs are presumed to be affected by a student's experiences with the different components

of an institution (that is, institutional quality, courses, and friends) (Cabrera, Nora and Castañeda, 1993: 125).

Research has also verified *the presumed role of organizational variables, personal variables, and environmental variables in shaping both attitudes and intents as well as of the presumed role of intent to persist on dropout criterion* (Cabrera, Nora and Castañeda, 1993: 125).

These researchers maintained that non-intellectual factors were the most pervasive ones in accounting for the total variance of attrition. Further, they posited that the kind of pre-college characteristics students had would affect the way they adjusted to the new environment.

According to these experts, more often than one thinks, attrition is mainly the result of adjustment problems and self conceptions rather than low level of academic competence *per se*. Regarding the importance of self-system in one's environment, Bandura (1986), as cited in Pajares (1997:3), argues that

This self-system provides reference mechanisms and a set of subfunctions for perceiving, regulating, and evaluating behavior, which results from the interplay between the system and the environmental sources of influence. As such, it serves a self-regulatory function by providing individuals with the capability to alter their environments and influence their own actions. How people interpret the results of their own performance attainments informs and alters their environments and their self-beliefs which, in turn, inform and alter subsequent performance.

Generally the way the individual perceives himself/ herself in comparison to others under certain circumstances will determine how successfully he/she will adjust to that particular environment. Adjustment is an indispensable and crucial factor that enables a

person to execute tasks effectively or to set out goals that are attainable. According to Poduska (1980: 16), *adjustment is the ability to select appropriate and effective measures to meet the demands of the environment while maintaining a healthy attitude toward the circumstances.*

Among those several life events that most of us undergo and face many challenges, education occupies the most magnificent place. In the educational sphere, students are expected to master or to accomplish a great deal of tasks: taking lecture notes, attending classes, studying for exams, writing term papers and other assignments, reading books and reference materials for different subjects, working for minimum requirements for survival in colleges, and host of other academic activities. All these activities demand intellectual and emotional adjustments on the part of the learner. Regarding this, Poduska (1980: 408) expounded that *achieving a sense of harmony between intellectual capabilities and emotional capacities is essential to becoming a well-adjusted individual.* But attaining this harmony is not an easy task for every individual. Some may undergo severe stressful conditions and may be unable to recover, while others, after momentary traumatic experience, may turn up to their normal situations. In short, adjusting to one's environment is highly demanding and sometimes may end up in self-demeaning.

Since students in their environment are subject to continuous evaluations and assessment and are usually bombarded with several academic (and sometimes nonacademic) appraisals, they often experience adjustment problems, which manifest in the form of frustrations, anxieties and emotional instabilities. Tamirie (1997) asked students of Bahir Dar Teachers College and Bahir Dar Polytechnic Institute (presently both have merged to form Bahir Dar University) to indicate factors that may result in failure. Interestingly, adjustment problem was mentioned as one of those important events that constrained their academic performances.

Compared to high school, college environment is mainly characterized by almost homogenous ability groups, high competitive situations, strict grading systems, poor teacher-student relationships, and the need to make important decisions on the part of the individual learner. Such environmental conditions in higher learning institutions induce anxiety, a sense of incapability, and feelings of inferiority for many students. Individuals may manifest their uneasiness through physiological symptoms - such as increased heart beat rate, stomach upset, and sweating - and/or psychological mechanisms - such as physical or emotional withdrawal - which ultimately may result in educational discontinuation.

These days, social cognitive researchers (e. g., Bandura, 1977, 1989; Schunk, 1987; Pajares, 1996a, 1996b; Pajares and Miller, 1994; Pajares and Kranzler, 1995) reported that no matter how frustrating and demanding college environment may be, the level of self-efficacy individuals possess plays a significant role in facilitating their adjustment to the environment. According to Bandura (1989), self-efficacy affects both the cognitive and affective facets of human beings: their thoughts, emotions, and actions. He and his proponents (e. g., Pajares, 1996a; Schunk, 1987) argued that self-efficacy judgment influences the level of performance they achieve, the type of goals they set, the nature of decisions they make, the amount of effort they expend, and their perseverance in tackling a given problem. Pajares (1997:7) stated

Efficacy beliefs also influence the amount of *stress and anxiety* individuals experience as they engage in a task and the level of accomplishment they realize. . . . High self-efficacy helps create feelings of serenity in approaching difficult tasks and activities. Conversely, people with low self-efficacy may believe that things are tougher than they really are, a belief that fosters stress, depression, and narrow vision of how best to solve a problem.

Students' beliefs about their efficacy have been found to be the robust predictors of their success in the academic arena (Pajares, 1996a, 1996b; Pajares and Kranzler, 1995; Bandura, 1989, 1986; Schunk, 1987, Pajares and Miller, 1994, Yalew, 1997b). However, Schunk (1987) warns that students should have realistic self-appraisals. Developing overestimated or underestimated self-efficacy by the students could have a devastating lasting effect on their future task accomplishments. Those who overestimate their competence but face repeated failures would be demoralized and end up in desperation. Those who have developed lowered efficacy expectations will not attempt to challenge a task and do not exert their effort on that task to the maximum level and give up easily.

Students' self-efficacy perceptions seem to either hinder or facilitate adjustments they make in a learning institution. Once students have had bad experiences with their academic endeavors their self-efficacy perceptions will be negatively affected (Czerniak and Chiarelott, 1990). (*Low self-efficacy leads to inferior images of self and ability and results in anxiety, negative attitudes..., and poor performance* (Czerniak and Chiarelott, 1990: 51). As a result of such lowered self-appraisal, students may drop out of schools or colleges. In one study conducted on high school students it was found that dropouts showed lower levels of self-esteem and were more often depressed than those who completed their schooling (Bachman et al., 1971, cited in Lerner and Spanier, 1980).

These findings evidenced that academic performances are not dependent only on ability factors, but also *strong enough motivation can work miracles* (Raaheim, 1991: 41). Students who considered learning as a battlefield may think to leave learning institutions before completing the program.

In sum, student attrition in any educational institution is a great loss to a country, especially where availability of economic resources is limited. Attrition is a problem that results in a massive wastage of human and material resources.

The Faculty of Education of the Bahir Dar University (which was formerly called Bahir Dar Teachers College), one of the higher learning institutions that trains teachers for high schools in the country, admits students with high ESLCE GPA (≥ 3.20 for males and ≥ 3.00 for females). Regardless of this high admission criterion, the rate of attrition seems to be a serious problem. The rate of attrition of regular freshman students in the last 4 years (1986-1989 E.C.), according to the Registrar's Office, for example, indicates a high prevalence rate of the problem (see Figure 1), especially among female students. Consequently, being puzzled by this high attrition rate of students, the then Academic Commission in one of its meetings (Academic Commission minutes number 25/89, dated 22/9/89 E. C.) discussed why a considerable number of students discontinued their education from the college (which now has become Education Faculty). This instigated the researcher to search for the major causes of student attrition in the Faculty.

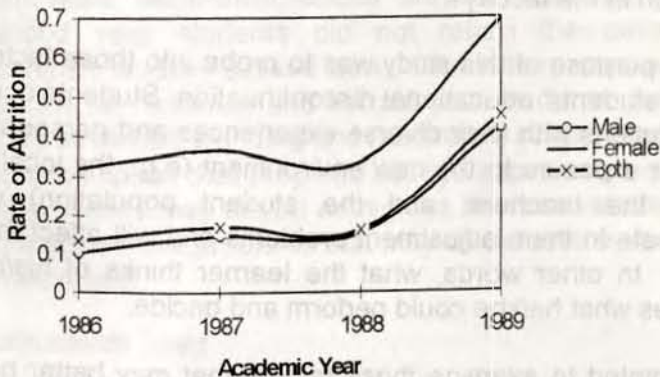


Figure 1: Attrition Rate Profile of First Year Students for Four Successive Academic Years.

As can be seen from Figure 1, a considerable number of students have been dismissed, have withdrawn or quitted the Faculty for various reasons.

This condition may imply that a large amount of money is wasted, and much human and material resource is dissipated. Commenting on the grave consequences of attrition, Laekemariam (1994: 68-69) posited that *the adverse effect of the problem is not simply a misuse of resources but it may also affect the standard of college education.*

Thus, major causes of attrition should be assessed carefully in order to take appropriate measures that would help minimize the problem.

As discussed earlier, in their generalized forms, the causes of attrition could be psychosocial, environmental, institutional, and/or personal. It is a fact that not all students admitted to a certain institution would ever graduate. Some may be dismissed; some withdraw, or drop out for various reasons. The major point to be made here is why a significant number of students discontinue their education. In order to address the issue, the leading research question of this study was formulated as: What are the major causes of student attrition in the faculty?

Thus, the major purpose of this study was to probe into those factors that account for students' educational discontinuation. Students come to learning institutions with their diverse experiences and personality constructs. Their exposure to the new environment (e.g., the locality, the institution, the teachers, and the student population) will undoubtedly create in them adjustment problems and will affect their self-judgments. In other words, what the learner thinks of his/her ability determines what he/she could perform and decide.

This study attempted to examine those factors that may better help understand the causes of attrition. Instead of emphasizing on the sole contribution of low GPA to attrition, which *per se* is an outcome of an amalgam of variables, it seems more justifiable to get into those internal (individual-related) and external (social, institutional, and environmental) factors that account for student attrition in the college in order to devise mechanisms to encourage students to successfully

complete their educational careers. This ultimately will save the resources that are wasted due to attrition.

Design of the Study

This research was a longitudinal study that followed the same cohort for two academic years. Its purpose was to investigate the rate of attrition in the last four semesters.

Subjects of the Study

The subjects of this study were all first year and second year students of the Faculty of Education whose numbers were 414 (333 males and 81 females) and 168, respectively, in the academic year of 1997/98. However, out of the total questionnaires administered, only 336 freshman and 152 second year students returned properly filled in and usable questionnaires. It was found that 48 survivors, 29 dismissals, withdrawal, and/or dropout freshman students, and 16 second year students did not return the questionnaires. One freshman student passed away. The return rates were 81.20% and 90.45% for freshman and second year students, respectively. In this study advanced standing and readmitted students were excluded with the assumption that they had college experiences and the degree of the problems may not be as high as freshman students who suffered from adjustment problems that may be induced by the newness of the environment.

Instruments Used

The instruments used in this study were both open and close-ended questionnaires. The questionnaire prepared to second year students consisted of one open-ended item which asked them to list, regardless of the reasons discontinued students recorded on the clearance forms as causes of discontinuation, the major factors that accounted for students' academic dismissal, withdrawal, and dropping out of the college. The idea here was to probe into those

factors that remain "hidden" behind the curtain for the Faculty's personnel. Because students knew the accurate reasons of their friends' discontinuation of their education, it seemed reasonable to ask them about the causes of attrition. The other purpose of this questionnaire was to collect some background information to develop the questionnaire items for freshman students.

The other questionnaire was prepared to first year students and consisted of two parts: the close-ended items which were meant to assess feeling of inadequacy and anxiety (which were used to indicate adjustment problems of students), and self-efficacy levels of students; and open-ended questions that aimed at gathering information on the students' intentions to continue their education, the extent to which they thought they successfully completed their education, and those factors that students thought were crucial causes for student attrition. Through these items the researcher considered that students would project their adjustment difficulties in their academic careers and the way they evaluated themselves against other students in their classes. Besides, the open-ended questions would help students express their intentions to leave the faculty and to list the underlying psycho-social, environmental, and academic problems their friends (and themselves, too) encountered in their stay in the faculty. For both groups the open-ended questions were written in Amharic.

Variables Treated In the Study

- *The Independent Variables*

Feeling of Inadequacy and Anxiety (Adjustment Difficulty Indicators)

A 24 items questionnaire was used to assess students' feeling of inadequacy. It was prepared to evaluate the extent to which students felt inferior to other students in their classes, expected to work less than others, blamed themselves for they thought they lingered behind others in their task accomplishments, and disliked themselves for

they thought they lacked the competence other students possessed to deal with the tasks of the higher education. The items were developed by the researcher based on the answers from second year students and the existing literature.

The students were asked to rate the items on a 5-point-scale ranging from 0 (No, I never feel) to 4 (Yes, I always feel). The Cronbach alpha reliability estimate of this measure was found to be 0.757. Besides, a 13-items anxiety instrument was used to collect data pertaining to students' degree of anxiety. The items dealt with issues that may arouse anxiety in the students. Scaling was similar to that of feeling of inadequacy measure. The Cronbach alpha reliability estimate of the instrument was 0.798.

Self-efficacy

A questionnaire was constructed to assess the general academic self-efficacy of students. The measure involved 20 items, of which 10 items were taken directly from Pajares (1997), 6 items from Pintrich and De Groot (1990), and the remaining 4 items were developed by the researcher himself. The students were asked to rate their confidence on a 6-point scale where 6 represented high and 1 low self-efficacy levels when the items were phrased positively. Reverse coding was used when the items were phrased negatively. The alpha reliability of the instrument was 0.882.

Grade point average (GPA)

This variable was the students' academic performance collected from the Registrars' Offices of Faculty of Education and Faculty of Engineering (which was formerly known as Bahir Dar Polytechnic Institute). This was done because students who were admitted to the Faculty of Education as freshman were assigned to both faculties based on their GAPs and choice by the end of the first semester of the first year. Since 30 students were transferred to Gonder Medical Science College and other higher learning institutions after they

attended their first year education in the Faculty of Education, the researcher could not get any information about their statuses to determine the rate of attrition. The GPAs considered for analysis in this study were those of the last four semesters. In the path model, however, only first year first semester GPAs (GPA1) were entered. This was done to avoid any missing data for those who discontinued their education.

- *The Dependent Variable*

- Survival*

By survival it was meant that students who procured the minimum GPA and, thus, were attending their education during or after this study was completed. This was the opposite of student attrition which represented students who were dismissed, withdrew, and dropped out from the faculty, for whatever reasons. For analysis purpose, it was coded using "0" and "1" where 0 represented students who discontinued their education, and 1 otherwise.

- Procedure of Data Collection*

First, the questionnaires to second year students were group administered in their regular classes two weeks before the mid-semester of the first semester of 1997/98 academic year. Students were asked to list as many factors as possible that they knew from their friends' experiences and/or they thought could be causes for students' academic dismissal, withdrawal, and/or dropping out from the Faculty. From their responses the most recurring variables were identified. After the identification of the variables, questionnaire items were prepared and administered to all first year students. Since the responses of second year students were mainly used to develop the questionnaire for first year students and to support the information provided by first year students, their grades were not taken into account in the quantitative analysis. The questionnaires for first year students were administered in their regular classes one week after they had taken the mid-semester tests of the first semester of

1997/98 academic year. This was done in order to measure the magnitude of their adjustment problems and the extent to which these problems coupled with their self-efficacy perceptions ruined their future academic performances.

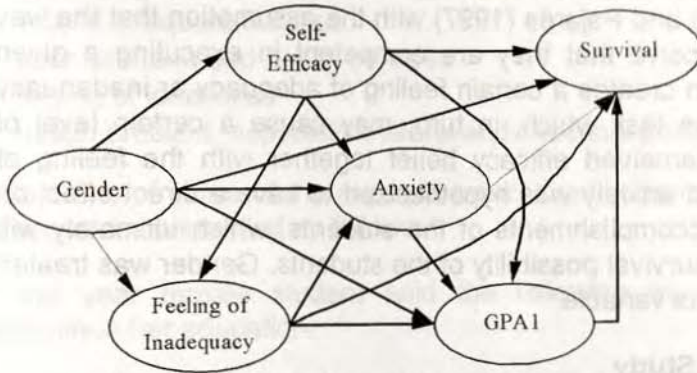


Figure 1: The Proposed Model Representing the Effects of Gender, Self-Efficacy, Feeling of Inadequacy, Anxiety and GPA on Survival.

Data Analysis

To analyze the data both qualitative (narrative) description and quantitative analyses were employed. The qualitative description was employed to analyze the data gathered through open-ended items to identify the major causes of student attrition, and to get a glimpse of the general picture of students' personal feelings, anxieties, and adjustment problems and intentions to continue or leave their education. The quantitative analysis was used to see the effects of some selected variables on the survival rate of students. Regression analysis was utilized to determine the beta weights which indicate the individual contributions of the independent variables to the variance of the dependent variable. To identify the most prevailing variables from among the variables entered the regression equation, stepwise regression analysis was employed. A path model was also

constructed to indicate the direct effects of certain variables upon the others based on the presumed causal relationships of the variables. The constructed model was as follows.

The model was constructed based on the social learning theory of Bandura (1989) and Pajares (1997) with the assumption that the way individuals perceive that they are competent in executing a given course of action creates a certain feeling of adequacy or inadequacy to deal with the task which, in turn, may cause a certain level of anxiety. The perceived efficacy belief together with the feeling of inadequacy and anxiety was hypothesized to have a direct effect on performance accomplishments of the students, which ultimately will determine the survival possibility of the students. Gender was treated as an exogenous variable.

Results of the Study

Data gathered through the open-ended and closed-ended questionnaires were presented and analyzed in this section, both quantitatively and qualitatively.

Qualitative Analysis

In this part of the study responses of the students to the open-ended questions were presented. The results obtained were as follows. The first question freshman students were asked was "Do you have the intention to discontinue your college education?" The responses indicated that 228 (69.30%) students said "no", 94 (28.57%) students responded affirmatively, and 7(2.13%) did not give any response. They were also asked to give reasons why they wanted to discontinue their education. The major reasons why they intended to quit their education were many and diverse. The most recurrent ones included the following:

- being separated and far from parents and friends

- being separated and far from parents and friends
- being placed in a department or college out of one's interest and high school background
- feeling of helplessness and hopelessness
- getting bored of hectic classes and course overload
- lack of adequate facilities
- poor cafeteria and health services
- feeling of loneliness
- health problem, especially malaria and intestinal parasite.

Illustrations of some of the excerpts taken directly from the students' response are presented as follows:

A first year female student said the following as a reason to discontinue her education.

እኔ በበኩሌ ለመመለስ እፈልጋለሁ፤ ምክንያቱም ተማሪ እንደመሆኔ መጠን ወደ ትምህርቱ በማተኮር ጥሩ ውጤት ማግኘት ሲገባኝ ትግሌ ግን ከትምህርት ጋር ብቻ አይደለም። 1. ከበሽታ 2. ከአየር 3. ከምግብና ... ነው። ሌላው ተማሪ ግን ከትምህርት ጋር ብቻ ነው ትግሉ። ታዲያ እንዴት አድርጌ ከነሱ ጋር compete አድርጌ ውጤት ላመጣ እችላለሁ። ደግሞ ትምህርቱ በሙሉ ከአላማዬና ከ interest ጋር የማይሄድ ነው።

I want to go back home because as a student I have to concentrate on my learning to get a good result but I am struggling with 1, disease; 2, weather, 3, food and The other students are dealing only with their learning tasks. So, how could I compete with them and get a passing result. Also all the subjects do not match my future career plan and interest.

Another male student also wrote the following:

መመለስ እፈልጋለሁ። ምክንያቱም የመጣሁበት ትምህርት ቤት በቂ የትምህርት አቅርቦት ስላልነበረው እንዴት ከደህና ትምህርት ቤት ከመጡት ጋር ልወዳደር እችላለሁ።

I wanted to return home. Because the school where I came from had no adequate educational provision, how could I compete with those who came from good schools?

Another student also gave exactly the same response as that of the above student's.

One male student has also said the following:

ምክንያቱም አንዳንድ ልጆች ቀደም ብለው ትምህርቱን አውቀው መምጣትና በክፍል ውስጥ በፍጥነት የመረዳት ችሎታቸው እኔን ዝቅተኛነት እንዲሰማኝ በማድረግ ትምህርቱን እንዳቋርጠው ይገፋፋኛል።

Because some students know the subjects before hand and understand the lessons fast, this creates a feeling of inferiority in me and forces me to quit my learning.

In all the above cases, there is enough evidence to indicate the prevalence of a low level of perception of one's competence and a high level of feeling of inferiority.

The second question presented to the students was: Comparing yourself with students in your class, do you think that you will successfully complete your education? The intention of this item was to assess the students' self-perceptions against their classmates. The majority of the students said that they had the competence to deal successfully with the tasks of their education and they were confident that they would graduate from the university. However, a limited number of students (31 in number or 8.56%) reported that the probability of graduating successfully from the college was 80% and below. Specifically speaking, 13 students said that their chance of graduation was much below 50%, and 18 students reported that the possibility of graduation was within the range of 60 - 80%.

In sum, a greater number of the responses showed that the students seemed to be doubtful of their success, had a fear to compete with

others, felt they lacked competence, and had mental unrest. Some examples of such responses are as follows:

የራሴ ችሎታ ከሌሎች ጋር ሳነፃፅር ተመርቄ የመውጣቱን ነገር ያሳስበኛል፤ ቢሆንም እወጣለሁ ብዬ አስባለሁ።

When I compare my abilities with the abilities of others, the chance to graduate bothers me; any how I think I would complete the program.

A gravely disappointed and frustrated first year female student had also written the following on the questionnaire:

የተማሪዎቹ ችሎታ በጣም ያስደነግጣል። እጅግም ያስፈራራል። ራሴን በጣም ዝቅ አድርጌ ነው የማየው። ስለዚህ በምንም መልኩ ይሳካልኛል ብዬ አሳስብም።

The students' competence is disturbing. It is very frightening. I have a very low perception of myself. So in no case do I think that I will be successful.

A third question which was framed to probe into the psycho-socio-educational and environmental problems students encountered in their every day university life was presented to them. The item was "While attending your education here in the university, what major problems have you faced that discouraged your learning?"

The responses given by the students were so immense and diversified which can be categorized under the following main headings:

Psychological

- homesickness
- inattentiveness
- fear of survival in the college
- lack of concentration and motivation
- anxiety

- lack of persistence
- love

Social

- problem of interaction with classmates
- inability to make friends easily
- lack of support from anyone in the university

Educational

- high school - college curriculum incompatibilities
- difficulty of the courses
- lack of reference materials for the courses
- problem of note taking during lecture and from references
- teachers' speed while delivering the instruction

Institutional

- lack of information and guidance and counseling
- poor food and health facilities
- contaminated water that causes some intestinal parasites.

Environmental

- hot weather
- malaria

Financial Problems

Some illustrative responses are presented below:

One female student wrote the following:

- ከዚህ በፊት የለመድ-ኳቸውን የቤተሰብ የቅርብ ድጋፍ ማለት እንደምክርና ማበረታታት ያሉ ነገሮችን ማግኘት አለመቻል
- የቤተሰብ መራቅና አዲስ አኗኗር መጀመርና ሀሳቤን መሰብሰብ አለመቻል
- የትምህርት አሰጣጥ ከበሬት ልምዴ በጣም መለየቱ

- የምፈልገውን ምርጫ አገኛለሁ አላገኝም እያልኩ በማሰብ ገዜዎን አባክኛለሁ።
- Now I could not get parental close attention, encouragement and advice which formerly I used to get.
- to be far from parents and starting new life and inability to concentrate on my tasks.
- the educational provision rendered here differs from what I experienced in the past.
- I spend much of my time contemplating whether I could get the department I would like to join or not.

Another male student reported the following:

የምፈልገውን ትምህርት ባለመማሬ ትምህርቱ በጣም አስጠልቶኛል። ስለዚህ የግዴልሽነት ሥራ በመስራት ለማለፍ እንጂ ተጨንቆ ለማጥናት ሀሳብ የለኝም በዚህ የተነሳ ከኮሌጁ ልባረር እትላለሁ።

Because I am not learning what I wanted to study, I hate the subjects I am learning now. As a result I do not feel responsible for what I am doing and I am not that much bothered by my learning and therefore I may be dismissed from the college.

Still another student reported the following:

- የቤተሰብ ናፍቆት
- ራሴን ዝቅ አድርጌ መመልከት
- የእንቅልፍ መብዛት
- ሌክቸር የመያዝ ችሎታዬ እየቀነሰብኝ ማለትም በመሀል ክፍት ቦታዎችን ትቼ ስሄድ በማጠናበት ወቅት ይረብሻኛል።

- Family nostalgia
- Perceiving myself inferior
- Too much sleep

- My ability to take lecture notes is poor and when I study my lecture notes much of it is incomplete and that frustrates me.

A very anxious and hopeless looking female student also said that

ራሴን መቆጣጠር ይሳነኛል፤ ጤነኛ መሆኔን እጠራጠራለሁ፤ በጣም ሰነፍ አድርጌ ነው ራሴን የማዬው፤ የማነበውን ነገር ቶሎ እረሳለሁ፤ ምንም ነገር ደስ አይለኝም፤ ትምህርቱም በጣም ከብደኛል፤ የምፈልገውን ነገር የማገኝ አይመስለኝም።

I lose control over myself. I doubt whether I am normal. I perceive myself very lazy. I immediately forget what I read. Nothing interests me. I find the subjects very difficult. I am afraid whether I could get what I wanted.

One student had also related his problem with lack of information about college life and distorted information provided to first year students by senior ones in the following way:

ከወንድም ወይም ከህቱ ወይም ከሌላ ጓደኛ ስለሌሌይ ኑሮ ሳያጠኑና ምንም መረጃ ሳይዙ መምጣት፥ ባንዳንድ ተማሪዎች ጭራሽ የማይመለስ መሆኑን አስቀድሞ መናገር።

Students come to the college without any information about college life from either a brother, sister or a friend. Some [senior] students [here in the college] provide us distorted information about the nature of the courses and examinations by telling us that they are very difficult.

All these data were excerpted from the responses of freshman students. In sum, almost 85 percent of the students reported that they encountered various problems that may counteract their successful learning.

Since the primary intention of this study was to scrutinize major factors that account for student attrition, students were asked to

mention those factors that may cause this problem. Accordingly, the question presented to second year students was: Regardless of the reasons students provided as causes to their academic dismissal, withdrawal, and dropping out from the faculty; based on your experiences of those students who discontinued their education, what do you think were (are) the major causes for such conditions? First year students were also asked a similar question but a bit different in its wording. The item was: Some students (probably some could be your friends) discontinued their education for various reasons. What do you think are the causes that impel them to discontinue their college learning?

It was postulated that second year students could provide actual causes of student attrition based on their experiences of their friends or other students whom they knew that they had discontinued their educational careers. But first year students had little or no such experiences. However, it was assumed that first year students could project their own psychological, social, environmental, and other institutional related problems that may be frustrating to the students to normally progress in their educational endeavor, which ultimately end up with their educational discontinuation.

The responses collected from both years' students were classified, categorized and analyzed. On the basis of the frequencies of the factors mentioned by the students, the variables were rank ordered where the most recurring ones were put at the top. There was high degree of concordance between the responses of second year and first year students' responses. The average ranks were used to determine the rank orders of the variables.

The results obtained indicated that:

- exaggerated anxiety (terror, trepidation, uneasiness, worry, fear, concern, apprehension) about their performances and how to get along with other students as well as with the tasks of the learning,

- homesickness and nostalgia of former friends,
- health problem caused by malaria and other parasites,
- social and environmental adjustment problems,
- very low perception of ones ability – which could cause anxiety, frustration, and feeling of inadequacy, or very high perception of ones ability– which may not encourage students to exert their effort to a possible extent for they may put down other students,
- lack of competence in dealing with the tasks of their educational careers,
 - falling in love,
 - being placed in a department or college which was not the choice of the individual student,
 - lack of appropriate information, guidance and counselling services and other forms of encouragement as well as support from the university,
 - lack of appropriate study skills,
 - scarcity of reference materials,
 - overcrowded dormitories and library that do not provide comfort during studying,
 - curriculum incompatibilities of secondary and tertiary levels,
 - teaching style differences of high school and college teachers,
 - difficulty in taking notes during lecture and from references, and

- distorted information provided to freshman students by seniors that induce apprehension in them,

were the top presumed causes of attrition reported by students. In addition, grading systems of the teachers and cheating in ESLCE were also found as causes of student discontinuation.

Quantitative analysis

The second part of the study dealt with quantitative data analysis. Results obtained from first year students were taken for analysis purpose and the variables that were included in the quantitative analysis were gender, self-efficacy, feeling of inadequacy, anxiety, first year first semester GPA (GPA1), and survival. In the following section data that showed the survival and attrition rates of the subjects are presented:

Table 1: Survival and Attrition Rates of Students by Sex and Semester

Academic Year	Survival Rates			Attrition Rates			
	Male	Female	Total	Male	Female	Total	
1990 E. C.	Semester I	0.799	0.593	0.758	0.201	0.407	0.242
	Semester II	0.910	0.854	0.901	0.090	0.146	0.099
1991 E. C.	Semester I	0.950	1.00	0.957	0.050	-	0.043
	Semester II	0.980	0.941	0.975	0.020	0.059	0.025
Overall		0.658	0.432	0.615	0.342	0.568	0.385

As clearly shown in Table 1, survival rates increased as one moves from the first semester of the first year to the end of the second year. Inversely, the rates of attrition declined following the same academic years. The case was true gender wise, except in Semester I of 1991 E. C. academic year where no one female student discontinued her education. The overall attrition rate was found to be 38.5% for both groups of students. However, gender wise comparison revealed that 56.8% of female students and 34.2% male students discontinued their education for various reasons, of which academic dismissals took the largest share (59.46% of the total attrition rate).

Although the magnitudes of attrition rates were very high for both genders in the first year of university life, it was drastically higher for female students. Almost half of the total enrolled females (49.4%) discontinued their education within the first academic year. This clearly indicated that male students seemed to have better survival rates than their female counterparts.

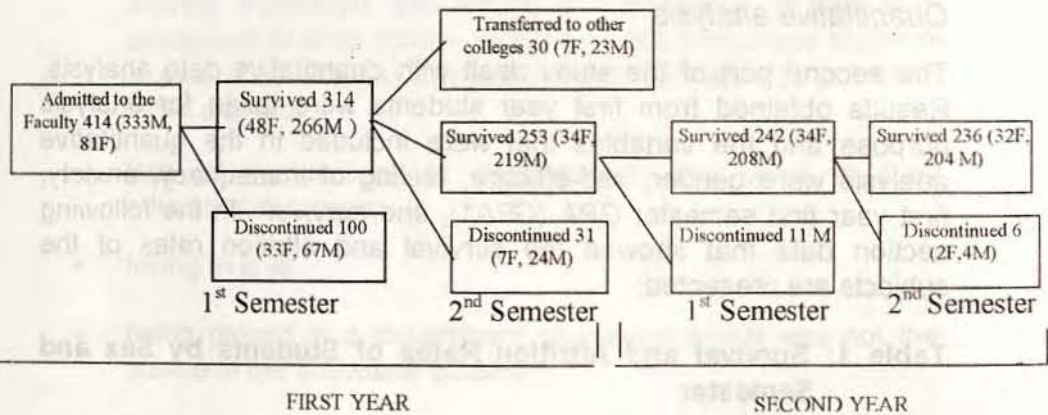


Figure 2: Flow chart that shows the numbers of students admitted to the college, survived and discontinued.

The following flow chart showed the number of students who were admitted to the college and those who survived and discontinued at different semesters since they joined the faculty. The chart showed that 414 (81 female and 333 male) students were admitted to the college in the 1990 E. C. academic year. Of these students, 100 (33 female and 67 male) students discontinued their education due to different reasons. Nineteen students (4 female and 15 male) left the Faculty before they sat for the first semester exam. The remaining students, i.e., 81 of them, stopped their learning after they had taken the first semester exam. The majority of them (40 or 49.38% students) were dismissal cases. The number of students who completed the first semester of the first academic year was 314 (48 females and 266 males). By the end of the first year there were 283

students who promoted to the second year. As can be seen from the data, the number of attrition in the second semester of the first year was 31(7 female and 24 male) students, whereas in the first and second semesters of the second year the numbers of students who discontinued their education were found to be 11 (all males) and 6(2 female and 4 male) students, respectively. Finally 236 (32 female and 204 male) students promoted to third year.

Further analyses were made to see the effects of some psychological constructs, gender, and grade point average on students' survival. To visualize the direct and indirect effects of those variables upon survival, a path model was constructed, and only significant path coefficients were presented.

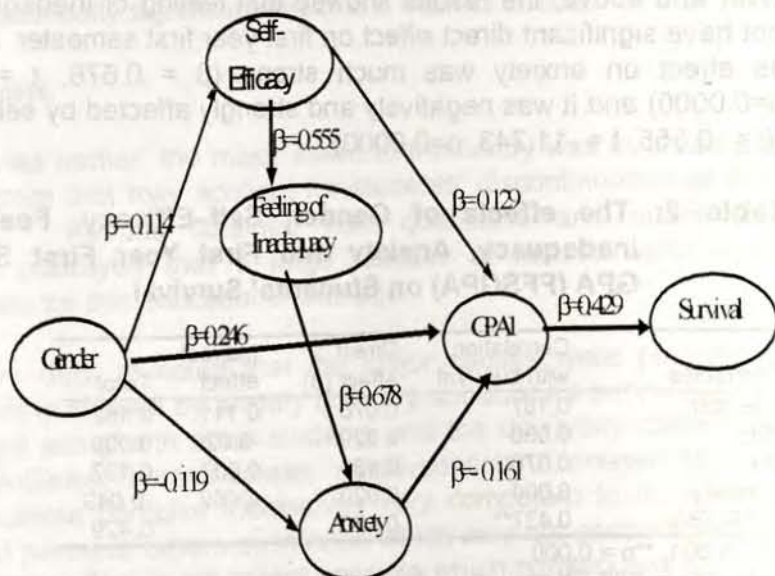


Figure 3: A path model representing the effects of gender, self-efficacy, feelings of inadequacy, anxiety, and first year first semester GPA on students' survival (only significant path coefficients were entered).

It was revealed in the model that the only factor that had direct, strong and significant effect on students' survival was GPA ($\beta = 0.429$, $t = 8.026$, $df = 315$, $p = 0.000$). However, it is interesting to observe that students' academic performance itself was affected by the other variables; namely, gender, self-efficacy, and anxiety. When the effects of these variables were examined, it was indicated that the effect of gender was stronger than the effects of the other two. This implies that male students seem to have achieved higher mean scores than their female counterparts, and those students who perceived themselves competent scored higher GPA than those with low level of efficacy. The effect of anxiety was negative implying that more anxious students tend to score less than those with low level of anxiety.

Over and above, the results showed that feeling of inadequacy did not have significant direct effect on first year first semester GPA, but its effect on anxiety was much strong ($\beta = 0.678$, $t = 13.997$, $p=0.0000$) and it was negatively and strongly affected by self-efficacy ($\beta = -0.555$, $t = -11.743$, $p=0.0000$).

Table 2: The effects of Gender, Self-Efficacy, Feelings of Inadequacy, Anxiety and First Year First Semester GPA (FFSGPA) on Students' Survival

Variables	Correlation with survival	Direct effect (β)	Indirect effect	Total
Gender	0.187*	0.076	0.111	0.187
SE	0.030	0.029	-0.02	0.009
FI	0.076	0.130	0.007	0.137
Anxiety	0.004	0.020	-0.069	-0.049
FFSGPA	0.437**	0.429*	-	0.429

* $P = 0.001$, ** $p = 0.000$

Note: SE = Self Efficacy, FI = Feeling of Inadequacy, FFSGPA =First year first semester GPA.

Furthermore, regression analyses indicated that, 21.2% of students' survival was determined by the composite effects of gender, self-

efficacy, and feeling of inadequacy, anxiety, and first year first semester GPA. When the independent contribution of each factor was considered, GPA took up 18.7%, which was 88.2% of the total R^2 , gender accounted for 1.4%, that was 6.7% of R^2 , and the joint contribution of the other variables was only 1.1%, which was almost negligible.

On the other hand, the direct, indirect, and total effects were determined to scrutinize the relative importance of the factors that presumably determine the survival chance of the students.

As indicated in the table, it was FFSGPA that had direct and total effects on students' survival more than the other factors. The indirect and total effects of gender were moderately high. The other variables had no statistically significant direct and indirect effects.

Discussions

As indicated earlier, the major intent of this study was to probe into those factors that may account for students' discontinuation of their education. Results obtained from qualitative and quantitative analyses portrayed that a large number of factors were found responsible for this educational wastage.

Qualitative data revealed that the major causes were problem of adjustment instigated by anxiety or worry about one's survival, about how to get along with other students and the university community, health problems, homesickness, misperception of oneself (that is, some students perceive themselves very competent to do learning tasks and perceive others as inferior, which may not encourage them to exert their effort to the extent possible which consequently results in failure, and others have low perception of their ability that may block their effort expenditure), lack of competence to carry out their educational career properly, falling in love, being assigned in a department or college which was not the choice of the individual

student, lack of appropriate information and encouragement from the university, lack of study skills, scarcity of reading and reference materials for the courses, crowded dormitories and library which do not allow private study, curriculum incompatibilities of secondary and tertiary levels, teaching style differences of high school and college teachers, difficulty in taking notes from reference materials and/or during lectures, distorted information provided to freshman students by seniors that induce apprehension in them, grading systems of teachers, and cheating during ESLCE (i.e. some students cheated during ELSCE and got high GPA to join higher learning institutions, and since they lacked the competence to deal with academic matters, they would be dismissed, or they withdrew, or dropped out).

These results indicated that the factors that impinge upon students' successful learning include psychological, environmental, institutional and/ or sociological events. In practice, in order for a student to fully perform his/her task, his/her mind should not be preoccupied with other situations. The first thing in learning is to be mentally and psychologically ready. But the high rate of attrition in the first year of college life, and especially in the first semester, does not imply that. Students seem to be distracted by certain impediments that could have grave consequences on their performance.

The psychological problems coupled with lack of guidance and counseling services in how to work, study, adapt to the new environment, and so forth, will boost the rate of attrition. Asmerom, et al. (1989), and Ekstrom, et al (1986) stated that the leading cause of students' educational discontinuation is academic achievement. These findings could be quite right on the surface. But academic achievement is an outcome of multitudes of factors. The results have also showed that the only predictor variable among the variables treated in this study to explain survival of students was grade point average. As revealed by the data, the composite effect of gender, self-efficacy, feeling of inadequacy, anxiety, and GPA on survival was 21.2% ($R^2 = 0.212$, $F_{5, 311} = 16.734$, $p = 0.0000$). When, however, the

independent contribution of each variable was considered, GPA had the largest share, i.e. 18.7%, followed by gender which was only 1.4%. This was further supported by the stepwise regression analysis.

To see whether other variables had any effects on GPA, a path analysis was conducted. As portrayed in the model, gender, self-efficacy and anxiety had direct bearing on it. GPA was regressed on gender, self-efficacy, feeling of inadequacy and anxiety, and the multiple determination coefficient (R^2) was found to be 0.112 ($F_{4, 312} = 9.801$, $p = 00.000$). This means 11.2% of the variance in students' academic performance was explained by the combined effects of these variables. But a stepwise regression analysis indicated that only gender and anxiety had a 10% contribution to the variance of the GPA. Gender had the highest positive effect on GPA ($\beta = 0.257$, $t = 4.727$, $p = 0.0000$) showing that male students had higher mean GPA than female students which supported the findings presented in Table 1 where the rate of survival for males was by far higher than that for the females. It was shown there that the rates of survival were 65.8% for males and 43.2% for females.

Anxiety was also the other contributing factor for students' academic unsuccessfulness ($\beta = -0.146$, $t = -2.686$, $p = 0.008$). This means the more students become anxious, the lower would be the score they obtain. This is in line with the existing literature. For example, Bligh (1990) stated that students who are more anxious are more likely to study long hours without interest and understanding of the material at hand. Students' preoccupation with anxiety could be attributed to their transfer from a place where they were brought up or where they lived for a long time with their friends and parents or other people around them to a new environment where almost every thing is novel and odd. Commenting on this idea, Morgan and his colleagues (1986) pointed out that when students move from a friendly and well experienced social area to a new one they will feel anxious, helpless and depressed. This will in turn force them to contemplate about

themselves rather than concentrating on their academic tasks. It is true that when individuals move from one place to another, they will experience at least momentary cultural shock which counteracts their successful adjustment that consequently will become detrimental to the effective actualization of their competence.

It is also interesting to note from the model that anxiety was so much affected by feeling of inadequacy which in turn was negatively affected by self-efficacy.

This showed that students who perceived themselves more competent seem to feel adequate to challenge the tasks of academics than those students who contemplate that they are inadequate, and those students who feel inadequate to carry out their educational tasks may become more anxious than those who feel adequate. It seems logical to speculate that for effective utilization of one's endowed potentials, one should feel competent and strive harder with less degree of anxiety. Proponents of self-efficacy theory (Bandura, 1989; Pajares, 1997; Schunk, 1987) reported similar findings.

It was also indicated in the model that male students seem to be more efficacious than their female counterparts. But it is surprising to observe the effect of gender on anxiety to be negative, which means that male students tend to be more anxious than female students. This may be possible in the sense that since the society expects males to work hard and be successful, they may feel more responsible for their survival. In other words, societal stereotypes may be at the background to push males to feel anxious when they fail to live up to its expectation. It was shown in one study that the society considered boys as independent, brave, achieving, and competent (Yalew, 1997b), and failing to live up to this expectation may mean a defeat for them. Thus, survival in the university could be the major concern of males more than females.

In sum, a large number of factors were identified in this study that account for the educational discontinuation of students from the college. The factors range from individual related to institutional, social and environmental. Although academic achievement was found to be the most determining factor for students' survival, it was found out that it was affected by other variables. Hence, academic failure *per se* should not be considered a cause for student attrition rather it is a manifestation of the existence of other variables that mitigate effort expenditure of students in the academic settings.

Therefore, in order to reduce the magnitude of attrition in the university the following suggestions could be worthy of consideration:

- When students come to the college, sufficient information should be given to them. Students indicated that they did not get any relevant information about living and studying in the university. They got pieces of information, mainly distorted, from their seniors. That could not suffice students who need to adjust themselves successfully in the university.
- The university, although it is a major source of frustration and anxiety to the students, does not offer at all guidance and counseling services. Thus, efforts should be exerted to assign a counselor to help students solve their adjustment problems.
- In the university the number of student population is increasing and the existing libraries could not accommodate all students. The university should construct some extra buildings to extend the libraries.
- Some mechanism should be devised by the Ministry of Education or the Regional Education Bureau to provide high school students information about college life and other important aspects of college learning. The students should not consider higher

education as something special that is completely divorced from high school curriculum.

- Students should be encouraged and trained to take notes from references and lectures. And an attempt should also be made to help them develop good study habits that focus on deep understanding of courses they learn. Of course, this may be a problem for us where student population is large.
- In the university, especially in some departments, testing, measuring and grading students are major problems. Therefore, the university should devise some mechanisms where those teachers who do not have this knowledge get some orientation about measurement and evaluation.
- The students have many health problems that impede their successful learning. To alleviate these problems, or, at least those health problems that can be easily managed, the University should have its own well equipped clinic and trained staff instead of referring every student with a minor case to the Hospital.

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