



Eduardo Mondlane University

Faculty of Education

The Influence of Academic and Social Adjustment to Higher Education on  
Academic Achievement:

A Study conducted with First-Year University Students of Cultural Studies and  
Management

Dissertation submitted in fulfillment of the partial requirements for the  
Master's Degree in Higher Education Studies and Development

Rafael André Malombe

Maputo, December 2016

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Maputo, 2016

## **DECLARATION**

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant source that I have used or quoted have been indicated and acknowledged by means of complete references.

Signed.....

Rafael André Malombe

December 2016

**To**

**Andile Rafael Malombe**

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## ABSTRACT

First-year university students experience many issues that hinder their development within campus, with greater index in failure and mass disapproval rates. Farther research showed that first-year students tend to depart from university with high drop-out rates in the first semester of the first year. For a better analysis and understanding of the process of transition, adjustment and academic achievement faced by this sample of Cultural Management students, this study resorted to the Tinto's theory of student retention and departure and examined the influence of academic and social adjusting experiences on academic achievement in the "Higher Institute of Arts and Culture". The researcher used univariate and bivariate analysis (descriptive narrative) to analyze the data collected from the adapted "Student Adjustment College Questionnaire" (SACQ) administered to first-year students (n = 65) to further examine the relationship between academic and social adjustment and academic achievement (final grade point average) of first-generation students using the pearson correlation test. The questionnaire is composed of two dimensions: (i) Academic adjustment and (ii) Social adjustment. The analysis of the adapted SACQ revealed statistical significance in the academic experiences, academic dimension (1.84) with the most significant component "motivation" (1.50). The relation between the adjustment dimensions and academic performance of students is expressive; there is a correlation of positive significance between the "academic dimension" and the discipline of 'Theory of Knowledge' (0.478) . There is also a moderate positive correlation between the "social dimension" and 'Study Skills' (0.246), revealing that the academic adjustment dimension is much closer to academic achievement than the social adjustment dimension, not excluding the important role of social experiences discussed in this study. Some implications of this study, as well as recommendations for future research, are referenced at the end of this thesis.

Keywords: Higher education, academic adjustment, social adjustment, academic achievement

## **List of abbreviations and acronyms**

GPA Grade Point Average

HE Higher Education

HEI Higher Education Institution

MINED Ministry of Education

MCTESTP Ministry of Science and Technology, Higher Education and Professional Technician

SPSS Statistical Package for the Social Sciences

### **Higher Education Institutions**

ISRI Higher Institute for International Relation

UCM Catholic University

UEM Univesity Eduardo Mondlane

UMBB Mussa Bin Bique University

UP Pedagogic University

### **Other acronyms**

FRELIMO Mozambican Liberation Front

IMF International Monetary Fund

RENAMO Mozambique National Resistance

WB World Bank

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## **CHAPTER 1: INTRODUCTION TO THE STUDY**

### **INTRODUCTION**

Entrance to Higher Education represents for the vast majority of students the achievement of a career and personal development project. The expectations created at this moment and in this new stage are high, on the part of the youth himself and other significant such as family, secondary school peers and friends. In this context, the student is confronted with a set of challenges inherent in academic life, which will stimulate their adjustment and therefore permanence and academic achievement.

These higher education associated challenges begin with the adjustment process to the HE institution itself and stem from the cognitive and study requirements, the effort against the academic demands, the degree of satisfaction with the academic environment, the interpersonal relations that will be established with peers and faculty, the degree of self-esteem and participation in social activities, the experiences of engagement in the management of time and departure from home and consequent removal from friends and family.

Adjustment to higher education is thus a complex process in which both personal variables and academic and social variables interact having repercussions on the student's overall developmental level and academic performance (Baker & Siryk, 1984; Tinto, 1996). Thus, the need to give a great importance to these variables that helps the young freshman to integrate academically and socially in this new mysterious context.

In the last fifteen years, in Mozambique, the expansion of higher education has seen a growing number of students attending higher education which translates into a high differentiation of the student body with respect to their academic and social characteristics, thus, the urgent need to create support fields with greater insertion in the teacher-student relationship (Langa, 2013, 2014). With this scenario several challenges concerning the quality of teaching, infrastructures and support services for freshmen students has arisen.

In an attempt to address the problems raised, the Ministry of Education (MINED), now the Ministry of Science and Technology, Higher Education and Technical Professional (MCTESTP), has designed a fundamental set of instruments for the revision and regulation of Higher Education, among which , National System of Evaluation, Accreditation and Quality Assurance of Higher Education (SINAQUES), Decree n° 63/2007, of the Regulation of the National Qualifications Framework for Higher Education (QUANQES), Decree No. 30/2010, of the National System of Accumulation and Transfer of Academic Credits (SNATCA) Decree n° 63/2007, considering the students' differentiation regarding their potentialities, formative paths, difficulties, background and aspirations, naturally heterogeneous.

Although there is a continuous search for improvement strategies of the Teaching and Learning Process (PEA) regarding methods of study, expectations and motivation in learning, self-regulation in learning, yet, it is noted a fundamentally teacher-test-centered approach and the 2vertical transmission. In this system, adaptive experiences (academic, social and personal) and their influences on academic performance are not emphasized, being unnoticed, leading to the lack of social and academic support services for freshmen.

Nonetheless, recently and increasingly, there is a special concern on the part of universities and HE departments towards adjusting experiences in HE and the quality of education in HEIs and students daily study and learning behaviors. These variables (adjusting variables) are now recognized as necessary for the quality of training, school success and student development (Almeida, 1996; Soares & Almeida, 2001;).

Among others, the motivation for the development of the theme of this thesis “The Influence of Academic and Social Adjustment to Higher Education on Academic Achievement” of 1st year students of the Higher Institute of Arts and Culture is the need to understand the reason why many students of this institution approve for the following academic years with many difficulties, often failing one or more disciplines. On the other hand, for the fact that in recent decades the university, in addition to its complex and unique nature as a distinct organization, has been evidenced by incorporating social segments that did not have access until recently (Maassen & Oslen, 2007).

In the light of the above, it is easy to understand that is to investigate if the academic achievement is related, among other aspects, to the academic and / or social adjustment of students to higher education. In the end, the central question of this study is to know, *how academic and/or social adjustment to higher education influence on academic achievement?*

## **OVERVIEW OF THE RESEARCH**

This dissertation focuses on the influence of academic adjustment on the learning outcomes of first-year university students. The aim of this chapter is to provide the background and motivation for this research. The problem statement will be discussed and the aims will be specified. The paradigm perspectives of the research will be provided. Thenceforth, the research design and methodology will be presented and the chapter layout will be given. This chapter will end with a chapter summary.

### **1.1 Background and Motivation**

Demand for higher education is increasing at a larger extent around the world more prominently in developing countries. In Mozambique, from 2006 to 2010, the number of university students more than doubled, from over 40 000 to more than 100 000 students (Langa, 2013). The challenges in tertiary education, particularly in Sub-Saharan Africa (SSA) are related to inadequate access, poor quality of supply, low levels of efficiency as reflected in high dropout rates and failures.

Adjustment is a psychological concept that refers to the behavior that permits people to meet the demands of the environment (Rathus and Nevid 1986). The entry in higher education is for a large majority of students an implementation of a career project and personal development. The expectations created by learners and their significant in relation to this particular new stage of life are higher. Hence, life at university for the first year can be exciting and challenging (Habibah *et al.*2010).

Nevertheless, tertiary students are confronted with a set of challenges in relation to the new academic life they are exposed to which will stimulate their learning process. In this new environment learners increase personal freedom which allow them to be more individualistic. According to Tao et al. (2000) Learners have to reconstruct their personal relations in a new

environment and this often causes mental and physical distress. Dropout rates in HEIs are often associated with students' bad adjustment with university.

In this context, these challenges begin with the students' adjustment to the higher education institution and course which is not always the student's first vocational choice. Therefore, adjustment may arise from interpersonal relationships that will be established with peers and faculty, the cognitive demands and the level of teaching, the degree of autonomy afforded by new contexts of everyday life, leaving home and consequent alienation from friends and family, the personal requirements at the level of time and money management, career prospects and vocational commitments to learning and training opportunities, among others. (Abdullah et al. 2009; Habibah et al.2010).

The experiences in the first year of university are extremely important for retention in higher education and students' academic success (Pascarella & Terenzini,2005; Reason, Terenzini & Domingo, 2006). However, students respond differently to the experiences faced at university. Some respond to adjustment issues positively and constructively while others feel oppressed and fail to cope with life at university. In this regard, the present study discusses the two major dimensions of adjustment which are social and academic.

## **1.2 Problem Statement**

Higher education has suffered from sharp changes over the past decades. In this context, the university needs a new organization, embracing and redefining the way society produces, creating and disseminating its values in order to promote the improvement of human condition in its many dimensions (Cardoso, 2004). As a result the university should review its methods, practices, goals and curriculum and learning methodologies.

In an extremely competitive world, the university needs to look carefully to the students, promoting conditions for their integral development, seek to develop their potential to the fullest so that students reach their level of personal excellence and be prepared for an active role in society (Santos, 2000).

In this regard, Ferreira and Hood (1990) argue that HEIs do not care about the holistic and harmonious development of student's personality and stress, agreeing with several authors on

the importance of interventions aimed at promoting the holistic development of university students (Pascarella, 1985; Ferreira & Hood, 1990; Santos & Almeida, 2002).

Therefore it is important to point out the adjustment difficulties and academic performance of students in higher education and subsequently analyse the influence of academic and social variables on the learning outcomes. Investigation of the first-year student's successful academic and social variables can help better identify the specific cause for adjustment issues amongst first-year university students.

Moreover, the study reveals limited attention to the first-semester experience of first-year university students, focusing more on the first semester. Adjustment in the first year of study at university has increasingly become recognised as vital to the overall success of students (Friedlander et al. 2007). At this early stage students either form beliefs and patterns of behaviour towards higher education or drop from university.

In order to reach academic success the fresher university student needs to develop his intellectual, academic and personal skills, such as the establishment and maintenance of interpersonal relationships, decision sense about the career (Upcraft & Gardner, 1989). Therefore, the university emerges as a context facilitating the personal development of young and adult people, promoting personal, social and emotional academic integration and adjustment of students (Ferreira Soares & Almeida, 2001).

Nevertheless, research in this study field shows that more than half of students who enter higher education reveal personal and academic difficulties, with increased levels of psychopathology of the university population (Stone & Archer, 1990, cited by Santos, 2000; Parker *et. al*, 2004).

Based on this debate, the study embraces the following research problem: How academic and/or social adjustment to higher education influence on academic achievement?



### **1.3 Research Questions**

The investigative questions that guided the study are as follows:

- (1) How Mozambican first-year students experience academic adjustment?
- (2) How Mozambican first-year students experience social adjustment?
- (3) To what extent can adjustment affect on academic achievement?

For the purpose of this study, first-year students are defined as students who are first time first-year students which excluded students who have prior university experience.

### **1.4 Aims**

#### **1.4.1 General aim**

The general aim of this study is to investigate if academic and social adjustment to higher education influence on academic achievement.

#### **1.4.2 Specific aims**

In terms of the literature study, the specific aims are to:

1. Identify and explain social and academic adjustment problems encountered by Mozambican first year students;
2. Establish the adjustment problems related to students achievement
3. Establish the academic achievement challenges encountered by first-year students;
4. Examine the impact of academic and social adjustment on academic achievement.

In terms of the empirical study, the specific aims are to:

1. Investigate the statistical nature of the influence of adjustment on academic achievement;
2. Investigate differences in adjustment according to personal, interpersonal, career, academic and contextual dimensions.

**1. 4. 3 Further aims** of the study are to:

1. Relate theory and results.
2. Formulate recommendations for further research in this field.

## 1.5 Importance and significance of the study

The access to Higher Education is presented in the literature as a key moment in the psychosocial development of young students. New patterns of behaviour as well social and emotional experiences considered as unique features in academia occur on first-year university students soon after their arrival at university. Recent studies indicate that access to higher education presents challenges and changes in several areas of psychological development (Almeida *et al.*, 1998; Pascarella & Terenzini, 2005; Soares & Almeida, 2001) and young learners may experience high levels of stress and anxiety in the transition and subsequent academic adjustment (Fisher, 1994; Grace, 1997).

Research in the area also suggests that an adequate adaptation process favours the development of autonomy, identity, cognitive abilities, the learning process and interpersonal relationships (Chickering & Reisser, 1993), intervening here personal, interpersonal and broader academic contexts (Astin, 1993; Pascarella, 1985; Pascarella & Terenzini, 2005; Tinto, 1993).

For a better understanding of transition and academic adjustment approach of students, we need to master the knowledge of these complex phenomena. Taking into account the objectives and expectations regarding students route in Higher Education, Astin (1993b) lists seven different types of students we can find, with greater or lesser frequency in HE in Mozambique: (i) scholastic (student with high expectations of academic success and equal level of vocational aspirations); (ii) social activist (student who expresses high concerns at social level and thus intends to actively participate in political and social life of the academia); (iii) the artistic (with student interests and capabilities in the artistic domain); (iv) the hedonist (highly self-centred student and essentially intends to take maximum advantages of the pleasures available in academia); (v) the leader (very competent student at interpersonal level in academia); (vi) the statues pursuer (student seeking an academic training for professional purposes which guarantees power, prestige and status); and (vii) non-committed (student whose projects and / or objectives of personal and vocational nature are not clearly defined). Thereby, students differ in their plans, objectives and expectations when entering into Higher Education and such characteristics affect their behaviour, learning,

extracurricular involvement, satisfaction and development throughout university attendance ( Baker & Schultz, 1992; Soares, 2003);

This research provides relevant information regarding the issues facing first-year university students as they integrate socially and academically to the HE environment and later examines how can this integration/adjustment influence on the academic achievement. According to Pascarella and Terenzini (1991) specifying the effects of college attendance on first-generation college students may be the most important research on college impact and stakeholders in higher education recognize that society and the economy benefits from a college-educated populace. Researchers and experts of Higher Education Studies ought to carry out studies of the academic and social adjustment of this population and its impact on academic achievement to ensure that programs, curricula and services are responsive to first-year university students.

## **CHAPTER 2: HIGHER EDUCATION IN MOZAMBIQUE:**

### **Historical review and changes**

#### **INTRODUCTION**

The higher education system in Mozambique went through a radical and structural process of transformations at all levels, and these can be divided into three stages: (i) the colonial period (ii) post-independence period up to the 90's (iii) from 90's to the present. Thus, it is important to situate them in the history and general development of the country.

In the last thirty decades, Mozambique went through numerous transformations in all areas. In this period, the country was submerged in a 10-year war for independence and sovereignty of the then Portuguese colony. The independence was proclaimed by Samora Moises Machel on June 25, 1975, preceded by a civil disastrous war between 1977/8 which ended in 1992 covered by a peace agreement between the FRELIMO (Liberation Front of Mozambique) and the former armed rebel movement RENAMO (National Resistance of Mozambique). It should be noted that this conflict has wiped out many lives and destroyed a great number of economic infrastructures.

After independence the government of the so-called People's Republic of Mozambique began with a steadfast education development campaign, at a stage where the level of education of the Mozambican population was intensely low. For instance, in 1975, illiteracy rates were almost 90%. As an increase in literacy and adult education campaigns, improvements were progressively reduced by 73% in the 80's and 65% in the 70's respectively (Gómez, 1999). Mozambique and other African countries went through moments of search for identity, recovery, cultural and socio-economic autonomy. According to Gómez (1999), the objective situation of oppression and domination did not trigger an automatic process of awareness of national unity or identity. For this author, the weak economic development, on the one hand, and the political limitations imposed by the colonial regime, on the other hand, delayed the formation of a national conscience capable of opposing the common oppressor.

Higher education, in turn, has undergone major changes, being referred to as 'turbulent time'<sup>1</sup> Beverwijik (2005). Despite these changes the number of HEIs continued to increase, observing the entry of a huge number of private institutions. In addition to the policy of expansion and 'massification'<sup>2</sup> of higher education (law 1/93), the emergence of these institutions may be associated with the demand for higher education (increase number of students) and the failure of public universities to account for the growing number of candidates. Nevertheless, this 'mass' pursuit for higher education and consequently its expansion is not accompanied by the levels of quality and services inherent in these institutions.

This introduction aims to demonstrate that the construction of higher education in Mozambique is mainly a work established and built from the arrival of the nationalist struggle for independence and grew with the process itself and the vicissitudes arisen from the independence.

## **2.1 The Higher Education in Colonial Period**

The establishment of the first HEI in Mozambique dates back from August 21, 1962 thanks to the decree-law number 44530, before this period there was no evidence of the presence of HE in the country. This first higher institution in the country was initially named General University Studies of Mozambique (EGUM-Deceet Law 44530). The students of this institution used to initiate their studies in Mozambique and finish in Portugal. The aim of the General University Studies of Mozambique (EGUM) was to lecture the general part of some courses (the first two years), mainly to the children of a growing settler population that settled in the colony of Mozambique and an elite of assimilated Mozambicans (MESCT, 2000).

The EGUM lectured in their establishments, nine courses, including education, medicine, agronomy, veterinary and civil sciences, electrical and chemical engineering and mining.

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<sup>1</sup> There were several problems namely: courses were outdated and of limited relevance, rote style of learning, limited and outlined research facilities, library and educational materials and unqualified staff. High dropout and failure rates were also evidenced.

<sup>2</sup> Although there is an exponential increase in students from 5000 in 1990 to slightly more than 14,000 in 2014, the gross participation rate remains low (1.5%) which makes it still an elitist system. It is observed an expansion without massification (Langa, 2015)

Between 1965 and 1968, the EGUM opened new courses, including teacher training for secondary education, theoretical and applied mathematics, physics, chemistry, biology and geology (MESCT, 2000).

In 1968, the EGUM became a university, being called 'Lourenço Marques University' (ULM-Decree-Law 45790/1986) and for the first time, it offers undergraduate courses entirely in Mozambique (Chilundo, 2003; MESCT, 2000) to include Applied Mathematics, Physics, Chemistry, Biology, Geology as well as Roman philology, History, Geography, Economics and Metallurgical Engineering (Mario et al., 2003; Berverwijk, 2005; Langa, 2006).

The false idea spread by the Portuguese colonial Government that this Government in the late colonialism in the 1960s and early 1970s would have banished the racist and colonial ideologies has fallen apart. For instance, in 1975, Lourenço Marques University (ULM) was mainly used for the children of the settlers, with only 40 black students from Mozambique, which accounted for about 2% of students (Mario et al. 2003).

## **2.2 The Higher Education in post-independence Period until the 90's**

After independence, specifically from the 1980s, Mozambique is in a period of transition from socialism to multi-party system and market-driven economy with implications for the National Education System (SNE), particularly higher education.

In 1981, the 9th session of the People's Assembly, under resolution No. 11/81 of December 1981, approved the general guidelines of the SNE, which were the basis for the creation of the National Education System (SNE-law 4/83 of March 23). In 1983, the SNE was structured in several subsystems, namely: General Education, Adult Education, Technical-Vocational Education, Teacher Training and Higher Education. In 1992 (Law no. 6/92 of 6 May), the SNE underwent a readjustment process due to the economic, social and political developments that "force" to abandon the socialist system and to embark on a market economy. Consequently, with independence, the university was restructured due to the new political and socio-cultural dynamics accompanying the emergent transformations of the independent country. Therefore, in 1976, the institution was renamed Eduardo Mondlane University (UEM), in honor of Eduardo Chivambo Mondlane, the founder of the Liberation Front of Mozambique (FRELIMO).

The creation of the Eduardo Mondlane University is part of a process of profound political and social changes resulting from the country's accession to independence, such as (i) the development of national identity, and (ii) the socio-economic reorganization (MESCT, 2000). According to MESCT (2000), in order to respond to these profound transformations, Eduardo Mondlane University went through several phases between 1976 and 1983. During this period, UEM was oriented towards (i) the renewal and democratization of university structures; (ii) opening of new courses seen as essential in the new phase; (iii) the recruitment and training of a Mozambican faculty (in 1975 the institution had five Mozambican teachers); (iv) the adequacy of the curriculum to the immediate needs of the labor market such as the bachelor level; (v) the rapid preparation of students at pre-university level, the so-called Propaedeutic Courses; And (vi) Teacher Training courses (which led to the creation of the Faculty of Education in 1981). It should be noted that in this period, students did not take entrance examinations and there were no costs for their attendance, it was free. It is also observed at this time, the disappearance of some courses, considered of little importance, such as, biology, chemistry, physics, geology, geography, mathematics, modern languages and educational sciences (Mario et al., 2003).

A second public higher institution is established in 1985 by Ministerial Order No. 73/85 of the Ministry of Education, with the name Higher Pedagogical Institute (ISP). The ISP has its origin in the then Faculty of Education of the UEM and is created with the Mission to carry out the Training of teachers and education technicians for all levels of the SNE (MESCT, 2000; Dias, 2009). In the expansion of higher education in Mozambique, in 1986, another public institution was established named Higher Institute of International Relations (ISRI), which is dedicated to the training of staff in the areas of international relations and diplomacy.

### **2.3 The higher education from the 90's until now**

The period from 1986 to the present is marked by the transition from socialism to multi-party democracy and free-market economy with considerable implications for higher education. The new constitution of 1990 opened the windows for an official change from a single party political system to a multiparty democracy. This transition culminated with an important milestone in this phase which was the end of the civil war in 1992 (war of the sixteen years) that began after the independence between FRELIMO and RENAMO. In this period, the socio-economic, political and military, poverty and war of the sixteen years the country has experienced, aggravated by natural disasters (droughts and floods) led the government of Mozambique to negotiate with the World Bank (WB) and the International Monetary Fund (IMF) for the adoption of an Economic Recovery Program (ERP) so that Mozambique could obtain proper financing, to alleviate the problems the country was facing in all areas of social, economic and educational life (MESCT, 2000; Chilundo, 2003;).

The most remarkable change in higher education was the introduction of the new law 1/93, revised in 2003 (Mario et al., 2003; Beverwijk 2005, Langa 2006). This law opens a new paradigm for higher education since it allows the opening of new private institutions as entities providing higher education, together with the regulatory principles, the principles of autonomy and academic freedom.

As a result of the law and based on the aforementioned principles, the State allows the opening of private Higher Education Institutions and, in 1995, the first two Private Higher Education Institutions were established: (1) The Polytechnic and University Higher Institute (ISPU - Decree n° 44/95 of 13 November) (2) the Catholic University of Mozambique (UCM –Decree n 43/95 of 14 September). The Higher Polytechnic and University Institute currently entitled the Polytechnic University "A Politécnica" (Decree No. 42/2007 of October 5). From 1996 to 1999, three private higher education institutes were established, namely: (i) the Higher Institute of Science and Technology of Mozambique (ISCTEM) in 1996 (Decree No. 46/1996 of 5 November); (ii) Mussa Bin Bik University (UMBB), in 1998 (Decree 13/1998 of 17 March); And (iii) the Higher Institute of Transport and Communications (ISUTC) in 1999 (Resolution of the Council of Ministers no. 33/1999 of 1 November). From 1999 to 2009 more than 20 Higher Education Institutions were created, currently making up more than 30 institutions. According to the Ministry of Education and Culture (2008), the number of HEIs has grown more than four times in a decade, from six in



1998, to twenty-seven in 2008. According to data of the Ministry of Science and Technology, Higher Education and Professional Technician (2015) in forty years of Independence there are 49 Higher Education Institutions.

The decade 2000-2010 is considered as an “explosion period” of new private and public providers of higher education. Surprisingly between 1999 and 2008 the number of HEIs increased significantly from 3 to 17, that is, 14 new public HEIs were created. In this period, the government tended to create professional and polytechnic higher institutes and / or schools rather than traditional universities (Langa, 2013).

According to Langa (2013) only 2 of 14 newly established public HEIs are labeled 'universities', the other 12 being either higher institutions or higher schools and each of them is designed to train professionals in a specific and precisely defined professional area. In this context it is established the Higher Institute of Arts and Culture (ISARC) in 2008 (Decree 45/2008 of 26 November) and has updated its organic status by the Decree n.65 / 2013 of 11 December.

With the expansion of HEIs, there has been a significant increase in the number of students entering HE, the expansion and the increasing number of admissions leads to the so-called ‘massification’ of higher education. The last 20 years the numbers of students in higher education has increased exponentially from just over 5,000 in the 1990s to just over 140,000 in 2014, out of the total number of students in the system with 41 HEIs, in 2013 60.3 % were enrolled in only two institutions, namely the Eduardo Mondlane University (UEM) Pedagogic University (UP).

Thus, it was witnessed a ‘trivialisation’ of this educational subsystem putting into question the aspect of quality in higher education. With the introduction of market-driven economy, there is an unbridled race of HEIs to deal with the HE "competitive" character by using deceptive advertising strategies with claims of excellence without competence or authority.

In Africa, the issue of quality of higher education has become urgent for various higher education systems, especially after the liberalization of supply and the entry of the private sector as a service provider in this area since the 90’s (Wangenge-Ouma & Langa, 2010). In this scenario, quality assurance instruments were introduced, SINAQES created in 2005 and CNAQ in 2007, but due to several factors that we do not intend to mention in this study,

these instruments, have yet shown to be fragile in their performance. However, in the last ten years there is a great concern with the quality factor from different society actors, with a close look at issues of academic success / failure (academic achievement), teaching and learning process, support fields with greater insertion in the relationship student-teaching in order to facilitate the HE adjustment.

#### **2.4 The Higher Institute of Arts and Cultures (ISARC)**

The ISArC began its academic activities in 2010 with three undergraduate programs, in Design, Visual Arts and Cultural Animation. ISArC currently has two faculties, the Faculty of Cultural Studies and the Faculty of Arts, teaching courses in Visual Arts, Design, Management and Cultural Studies, Cinema, Dance and Intermediate Film and Audiovisual Course.

The activities of the Higher Institute of Arts and Culture are also inspired by the principles and assumptions contained in various national and international legislative and normative instruments of a cultural scope. (I) Legislation on the protection of cultural heritage (ii) Recommendations of the First National Conference on Culture (July 1993); (iii) Mozambique's cultural policy and strategies for its implementation (1997); (iv) Recommendations on cultural industries for development in Africa (Dakar, 1992); (v) The Action Plan on Cultural Policies for Development (2008); (vi) the Universal Declaration on Cultural Diversity; (vii) The letter on cultural renaissance in African Cultural; (ix) the recommendations of the World Conference on Artistic Education.

## **CHAPTER 3: LITERATURE REVIEW**

### **INTRODUCTION**

This chapter examines the interpretative framework which has been used in this study, derived from Tinto's theory of departure in higher education. This will direct to the main research question, namely, whether academic and/or social adjustment to higher education influence on academic achievement. Thus, I suggest an overview on Tinto's theory of departure which is the basis of this study and is extremely relevant to higher education (HE).

### **3.1 Theoretical and conceptual framework**

This research draws from studies that analyse the phenomenon of first-year university students using Tinto's theory of departure (1975; 1993) to better understand the academic and social adjustment/integration of first-year university students. His theory (1975) borrowed from Spady's work (1971) that focused on the anthropological "Rites of Passage" model of Van Gennep, which describes one's moving from membership in one community to another. The theoretical developments of Tinto's theory of student's departure and how his academic and social paradigms have been operationalized are examined to further analysis of the university environment of first-year university students.

Tinto's work (1975) and the subsequent studies Bean (1983), and Nora (1996) and associates that extended Tinto's framework provide a macro perspective of student adjustment and offer models of adjustment known as student integration/adjustment models. These models provide the main constructs in university students' personal or interpersonal experiences and persistence decisions which lead to retention and achievement. Tinto's (1975) theory focused on how the student's lack of interaction within the higher education community leads to student withdrawal. According to Tinto (1975) the student's potential and background, together with their academic and social adjustment, may influence retention and subsequently academic success.

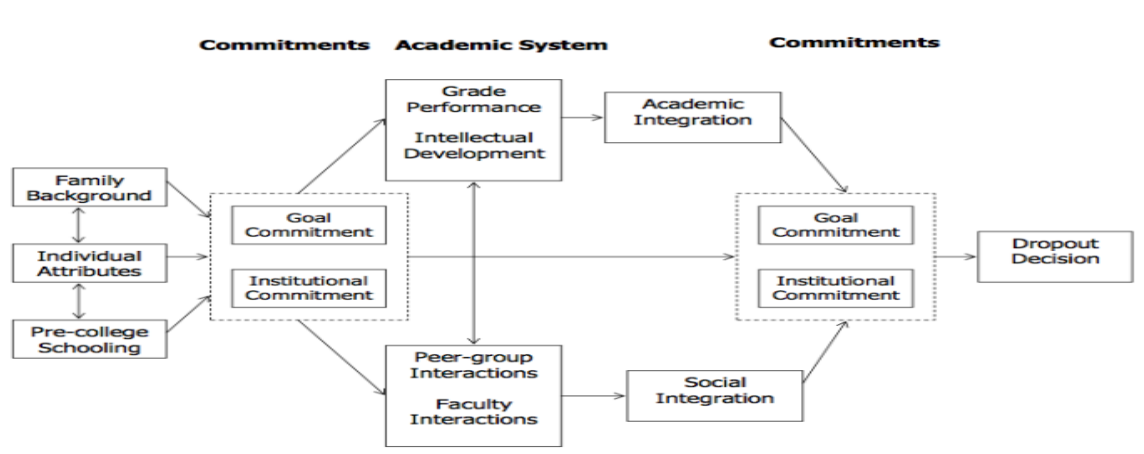
Much of Tinto's findings sought to test two of the main theories on retention and departure in higher education: the students' integration model (grounded on Tinto and Spady) and the model of attrition among students (grounded on Bean and Price work). The first model emphasizes the importance of students' academic and institutional engagement and the second seeks to indicate, in addition to institutional aspects, the relevance of considering factors. There is also a third strand, which seeks to observe what these two supposedly antagonistic theories have in common, that is, the intention is to perform a synthesis of both, stating that they were complementary rather than antagonistic (Nora & Cabrera, 1993).

The article by Vicent Tinto, published in 1975 "Dropout from higher education", is a reference to the various studies on dropout in higher education", is a reference to the various studies on dropout in higher education. In this text, the author formulates a theoretical model of institutional guidance which aims to explain the processes of interaction between individuals and institutions that would lead different individuals to departure from higher education institutions that would lead different individuals departure from higher education institutions. Therefore, comprises departure as a process, developing its model from the theory of Emile Durkheim's Suicide, inspired by the study by Spady (1971) and the economics of education field and its cost-effective ideas to examine the decisions of individuals. Their model applies to dropout in higher education institutions and not at higher education (sub) system. According to Durkheim, suicide is likely to occur when individuals are poorly integrated into society, more specifically, when there is an absence of two types of integration, moral integration (values) and the collective belonging. Durkheim called this egoistic suicide. Nevertheless, higher education institutions are seen by Tinto (1987) as social systems, with its own values and social structure, where the lack of integration or socialisation in the social system of HEI will lead to a low commitment to this system and will increase the odds of departure by these individuals.

Theories of adjustment and academic success (Ratcliff, 1991; Tinto, 1993) suggest two main factors behind students integration: (1) individual or personal factors (2) interactional or interpersonal factors, Maldonado, Rhoads, and Buenavista (2005), Yosso (2006), identify student adjustment and achievement as a dynamic interplay between pre- university features, institutional and HE related experiences and external relations.

However, these models highlight experiences related to identity (e.g., race, gender, class), social capital (e.g., relationships, survival strategies in academia, networks), and cultural aspects (e.g., informal knowledge, external experiences and commitments) and their relevance on student goals and success.

Fig. 1 Tinto's theory of departure framework



In this framework, Tinto proposes a longitudinal model to analyse the dropout process: Individuals enter higher education with certain attributes (Gender, race, social status, ability, values, psychological dispositions, academic preparation) influencing their commitment and initial expectations in terms of goals and involvement with the academia. These, in turn, interfere with their interaction in the academic and social system of the institution (performance, intellectual and academic development, interaction with peers and faculty). As a result, this leads to reestablishment of goals, expectations and commitments to the institution from where decisions on departure are taken.

As aforementioned, Tinto (1975) and Beans (1980) recognize the interference of external factors in the dropout phenomenon, outside encouragement of family and peers but the first states that these will be best observed from changes in students' commitment regarding the institution attended and particular goals. Individuals, in several moments of their academic life, can analyse the costs and benefits involved in continuing studies in higher education and make decisions about it. Tinto's model allows specify under what conditions the various types of dropout take place.

Moreover, it is also observed in addition to these factors, the influence of characteristics of HEIs in the dropout phenomenon. The author realizes that different aspects as institutional resources, facilities, structural arrangements, composition of members, impose limits on the

integration of individuals, academic, social and intellectual development and integration of individuals, academic, social and intellectual development and pressures to which students have to deal with. Emphasised, however, that there are few research on this respect and are very simplistic in general. Given that, we will draw our attention into some factors - academic and social factors for the holistic student adjustment and the way affects the learning outcome.

Although this Tinto's initial model has been somehow modified in later studies (Tinto, 1982, 1987), the core concept of what later became known as Student Integration Model (SIM) was already formulated in 1975.

Briefly, according to this model, the commitment to the institution is the result of a successful articulation between motivation and academic ability of individuals and academic and social characteristics of the institution. The others being equally important, the academic and social integration of individuals to HE environment helps to assert two underlying commitments: the educational commitment (aiming to achieve a diploma in higher education) and the commitment to the institution. The larger these commitments, greater are the chances to successful to successfully accomplish higher education.

Unsurprisingly, several findings of first-year adjustment to higher education indicate that HE adjustment is defined in some extent in terms of academic performance. Numerous studies revealed that SS having better adjustment to HE, particularly academic adjustment, have higher grade point average (Baker & Siryk, 1984, Baker 1993; Yafee, 2000). Therefore, these SS have higher chances of belonging to a privileged academic society (Baker & Siryk, 1984). From this discussion, we can ensure that students ought to be socially and academically adjusted at campus environment so that they will succeed and overcome their challenges and obstacles faced in the university environment.

### **3.2 Academic Adjustment / Integration**

Student Adjustment to university has consistently been over the years, one of the core research topics on higher education (Astin, 1975, 1984, 1993; Pascarella, 1985; Tinto, 1975, 1987). With the emergence of human development theories in the 60s and 70s several conceptualizations emerged around relevant discussion for better understanding and appreciation of structural and functional changes observed in higher education students. Several scholars (Chickering, 1969; Perry, 1970; Kohlberg, 1971; Keniston 1971, Chickering & Reisser, 1993) have studied these developmental changes.

Academic adjustment can be defined as a process that is influenced by many factors including personal, familial and social as well as cognitive, intelligence and academic competence (Pascarella & Chapman 1983). These factors are later stressed by Tinto who looks at the importance of understanding them based on his findings that seventy percent of students who do not complete their university degrees leave in the first second years of university most of them in the first year (Tinto 1993).

A number of studies attempt to indicate individual characteristics as predictors of academic achievement. Therefore, academic adjustment can be seen as a positive attitude toward setting academic goals, completing academic requirements, the effectiveness of their efforts to meet these requirements, and their academic environment (Baker & Siryk 1984).

The changes occurring in individuals during their training in higher education institutions are processed in different areas of development, namely the cognitive and psychosocial level (Ferreira and Hood, 1990). Going into details, Chickering & Reisser (1993) describe seven "vectors" of the so-called young-adult development: sense of competence, integration of emotions, autonomy toward interdependence, interpersonal relationships, identity, sense of purpose and integrity.

The broader conceptualization of academic adjustment indicates motivation for learning, taking actions in order to comply with academic demands, sense of purposefulness and satisfaction from the academic environment (Gerdes & Mallinckrodt, 1994), in addition to practical skills such as developing learning skills, writing and summarizing, thinking and memorizing, coping with masses of reading materials, submitting papers, summarizing

lectures, writing seminars papers, effective time management and taking exams (Zeidner, 1992).

In addition, the literature on adjustment in higher education are constructs positively related to an effective transition, with greater motivation and availability for the learning process, with higher quality and efficiency in the use of potential cognitive, leading to improved achievement and, ultimately, academic success (Taveira et al, 2000).

### **3.3 Social Adjustment /Integration**

Social adjustment of students may be as important as academic factors in predicting persistence (Gerdes & Mallinckrodt 1994). Pascarella and Terenzini (1991) asserted that socialisation is the process of being exposed to and taking on some of the new values, attitudes beliefs and perspectives to which one is exposed at university. For these authors (1991) adjusting to university involves the complementary process of desocialisation and socialisation. Socialisation can be understood as the need to establish new relationships and develop study skills and desocialisation as modifying existing relationships with parents and their families (Parker et al. 2004; Tinto 1996). Pascarella and Terenzini (1991) stated that first year students who are pre-occupied with friends from home struggle to adjust. Contrary, they asserted that students who maintain compatible relationships with their families are more likely to do well at university. Along with, Winter and Yaffe's (2000) found that good interpersonal relations with parents help both male and female students to adjust to the university. Unlike, Tinto (1988) describes the importance of student separation for successful college adjustment. Nevertheless, the importance of social support to students' integration is somewhat unclear.

Social adjustment according to Tinto (1993) involves the student "fitting in" to the social community of the institution. Studies on social adjustment found that first-year university students who report knowing less about the social environment are likely to withdraw from university. Unsuccessful social adjustment can lead to academic failure (Tinto 1993; Roland 2006) and Mayo, Murguia, and Padilla concluded that successful social adjustment indirectly contributes to a higher grade point average (as cited in Hernandez, 2002). Social adjustment involves the student engaging in the social environment of campus activities and gaining membership inside and outside the classroom.



Social adjustment refers to the integration among students (characteristics, values, commitments and expectations) and the remaining elements of the university, particularly classmates and faculty. Likewise includes connectedness with academic community and the kind of social adaptation to the structure and organization of the academic campus (Polydoro, 2001).

In addition to academic aspects, the transition to higher education implies social integration and or acquisition of coping strategies, i.e., cognitive and behavioral strategies used by students to control, reduce or change internal or external demands faced in academia which threaten or exceed their own capabilities (Teixeira et al., 2007).

The transition and adjustment to higher education is thus a complex process where both personal variables and academic/contextual variables interact among them (Adams, Smith & Ferreira, 2000), having an impact on the overall development of the student and their academic performance (Santos, 2000).

Furthermore, factors such as gender, participation in vocational orientation sessions (prior to entering ES) and in extracurricular activities, particularly in the first-university students (practice) seem to influence the Self Concept of students and their perception of adaptation in HE.

### **3.4 Academic Achievement / Performance**

In an extremely competitive world, the university needs to worry about the university student, promoting conditions for their integral development, trying to develop their potential to the fullest so that students may reach their level of personal excellence and be prepared for an active role in society (Santos, 2000).

According to Trow and Good (as cited in Gana et al, 2013 ) academic achievement is the knowledge attaining ability or degree of competence in school tasks usually measured by standardized tests and expressed in a grade or units based on pupils' performance". In addition, the authors stressed out the knowledge obtained or skills developed in the school

subjects usually designed by test scores or marks assigned by the teacher”. Unlike, academic achievement can be defined as academic performance including both curricular and extra-curricular performance of the students (Mehta, 1969). The three perspectives suggest an academic achievement approach which focuses on the students learning outcome.

The notion of academic success is closely linked to the experiences of students in the first year of the course, moving away from focusing only on the logical perspective of school performance. For some authors, the student's academic achievement should be measured by student growth in relation to itself and to the proposed objectives, considering the full development (Ferreira Soares & Almeida, 2001).

Some studies found that parental efficacy and engagement improves student academic efficacy and therefore are regarded to as essentials to student academic achievement (Bandura, et al., 1996; Stewart, 2008). In addition, factors as the student, peers and self-efficacy are also considered as the keys to first-year student success (Bandura et al.1996)

Interest in the subject of academic success at the university has generated much research to identify which factors could predict this success (Parker & al, 2004). Thereby, most of the findings show that a successful adjustment process, especially in the year one, appears as an important predictor of persistence and achievement of students throughout their academic progress, as well as determining patterns of development established by students throughout their university life (Tinto, 1996; Parker & al, 2004).

Since the academic achievement is a complex and multifactorial phenomenon (Baker & Siryk, 1989) which relies on multiple personal and contextual variables, for the purpose of this study, two indicators will be considered: (1) average ratings of first semester main subjects and (2) ratio of subjects performed successfully.

### 3.5 Analytical Framework

This section explores the analytical framework used in this research. The fig.2 below summarizes various elements of academic and social adjustment to higher education designed by Baker in 1989 and derived from Tinto's theory of departure and describes how they relate to academic achievement and their interrelation. The framework presented is a theoretical model, which helps to consider the potential dimensions of university integration.

In this adapted framework, academic adjustment components relative to a standardization sample measure student's effectiveness at coping with the various educational demands and the social adjustment dimension consists of items relevant to the interpersonal-societal demands of higher education.

Fig.2 academic, social adjustment and academic achievement constructs operationalized

<b>VARIABLE A</b>				<b>VARIABLE B</b>	
<b>ST.ADJUSTMENT TO UNIVERSITY (C1)</b>			<b>ACADEMIC ADJUSTMENT (C2;D3)</b>		
<b>Academic Adjustment (D1)</b>		<b>Social Adjustment (D2)</b>			
Component	Indicator	Component	Indicator	Component	Indicator
<b>1.1 Motivation</b>	(a) Class attendance (b) Updated with academic work (c) Participation in class (d) Enthusiasm (e) Interest related to Major field (f) Interest in learning (g) Hard-working	<b>2.1 Social Ties Connectedness</b>	(a) Ability to make friends (b) Informal student-faculty interaction (c) Student-roommate relation (d) Feels at ease in making friends (e) Relation with opposite sex (f) Self-esteem (g) Has a loyal friend	<b>1. Degree of Competence</b>	(a) First-year grade point average  (b) Ratio of subjects performed successfully
<b>1.2 Academic Engagement</b>	(a) Perception of academic work (b) Writing and submitting academic papers (c) Summarizing lectures (d) Accomplishment of tasks on time (e) Collaborative learning (f) Coping with reading materials (g) Application during tests (h) Study time	<b>2.2 Engagement in Social Activities</b>	(a) Participates in sports (b) Cultural workshops attendance (c) Art exhibition attendance (d) Drama societies connectedness (e) Concert tour attendance (f) Participation in dancing sessions/workshops (g) Student Union connectedness		

	<ul style="list-style-type: none"> <li>(i) management</li> <li>(j) Homework accomplishment</li> <li>(k) Contact with faculty</li> </ul>	
<b>1.3 Academic Environment</b>	<ul style="list-style-type: none"> <li>(a) Satisfaction with courses within major field</li> <li>(b) Satisfaction with program of courses</li> <li>(c) Satisfaction with faculty field of knowledge</li> <li>(d) Satisfaction with faculty time availability after class</li> <li>(e) Satisfaction with academic situation</li> </ul>	<b>3 Nostalgia</b> <ul style="list-style-type: none"> <li>(a) Perception of living in a dormitory</li> <li>(b) Feels lonesome for home</li> <li>(c) Feels lonely</li> <li>(d) Would rather be home</li> </ul>

This conceptual framework includes a range of variables, namely academic (D1) and social (D2) variables (independent variable) in order to measure adjustment to higher education (concept1) and the dependant variable academic achievement (Concept 2;D3) consisting of components for each dimension and a range of indicators.

The vast range of variables and indicators in each variable suggest that researchers of adjustment to HE should not limit their variants, however they should on one hand take into account that adjustment to HE is a complex and multifactorial phenomena which occurs with first year students having its implications on their academic success. Tinto (1987) suggested that multiple variables that impede college persistence, thus achievement, exist within the context of academic and social integration.

On the other hand, researchers should be encouraged to use instruments tested for reliability and validity which allow them to maintain and control the given diverse variables and indicators in the study having always in mind the objectives to be achieved. In addition, these instruments provide the researcher greater precision in approaches used throughout the study which will allow clarity and synthesis capacity in the results.

Grounded on Tinto's retention theory, the Higher Education Research Institution (HERI) created the national survey assessment tool in measuring students' satisfaction and adjustment 'your first college year'. HERI (2005) perceives academic adjustment analysing

closely the following predictors: (a) understanding faculty expectations (b) effective study skills development (c) academic demands (d) not being frightened by professors. HERI (2005) established the predictors of social adjustment as follows: (a) managing time effectively (b) close peer friendship (c) make friends easily (d) not feeling isolated at campus.

Unsurprisingly, several findings on first-year adjustment to HE indicate that HE adjustment is defined to some extent in terms of academic performance. Numerous studies revealed that students having better adjustment to HE, particularly academic adjustment have higher grade point average (Baker & Siryk, 1984 b; Baker 1993; Beyers, 2001; Yafee, 1997, Wintre & Yafee, 2000). Besides, these students have higher chances of belonging to a privileged academic society (Baker & Sirk, 1984).

Adjustment to HE particularly academic adjustment can be seen in students' behaviour and attitudes towards commitment to academic purpose. According to Hurtado et. al (1996) academically better adjusted sophomore students were more likely to report having perceived their academic work in the first year of college as manageable, having managed their resources well (e. g., time, money), and having interacted with faculty. Therefore, students who are better adjusted are more concerned about their major field (Baker & Schultz, 1992), more satisfied with their courses (Chartrand et al., 1990); more committed with their future academic plans (flowers 2006); have a clear understanding of the academic programs and university degree (pascarella and Terenzine, 1997) are less likely to skip classes (Keenan, 1992).

Stage and Richardson (1985) defined academic adjustment as academic development, faculty concern, grade point average (GPA), credits earned, hours spent in academic activities. However, some factors thought to predict academic adjustment such as high school performance and scores on standardized tests (e.g. scholastic aptitude test; SAT) failed to identify students who are likely to dropout from school showing that this is not an effective predictor.

Social adjustment involves the student engaging in campus activities in and out of the classroom, build support networks, and negotiate the new liberty afforded by the university life. Findings in social adjustment to HE reveal that students who are well adjusted are those students who are more involved in the life of their university; therefore, they are engaged more in extracurricular activities (Baker & Siryk, 1984).

Student engagement in extracurricular activities tends to be associated with higher levels of development, learning and academic staff (Kuh, 1993) and better interpersonal and intrapersonal relations. Feeling at ease in coming to know the university environment is seen as an indicator of social adjustment. Moreover, social integration and adjustment can be measured through students reported satisfaction with (and quality of) informal interactions with faculty, staff, peers (Pascarella & Terenzini, 1980). Students who reported having difficulties in adjusting socially to higher education are more likely to suffer from feelings of loneliness, anxiety and depression that will prevent its integration and persistence, which may lead to situations of dropout.

Many studies reveal that students are socially well-adjusted when they meet with a number of predictors inside the campus environment. Regarding to interpersonal relations, students who are socially better adjusted have the ability to make new friends, have peer groups relation, have more informal faculty relations (Pascarella & Terenzini, 1983), are more likely to have relations with opposite sex, have romantic partners and loyal friends, see themselves as having high quality relations with others (Bett. et al.,1999) . likewise, students who have high levels of social adjustment are those who participate in extracurricular activities and engage with their fellow students in various social activities (Pascarella & Terenzini, 1983) such as music, choir, drama, or other fine arts activities, participation in sports (varsity or non varsity, intramural), concert and workshop attendances (Flowers, 2006).

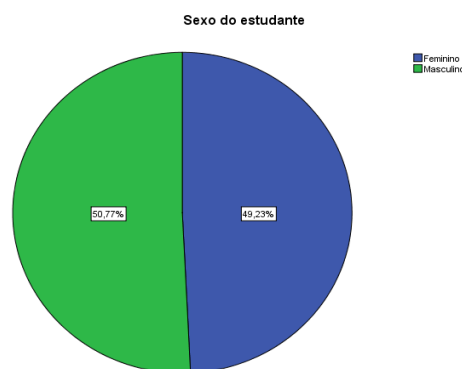
## CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

### BRIEF INTRODUCTION

To thoroughly examine the relationship between social and academic adjustment variables and academic achievement, the researcher will conduct this study to discover whether a statically significant positive influence of social and academic adjustment persist on academic achievement during the first semester at ISArC. The sequential explanatory design strategy comprises both quantitative and qualitative instruments.

### 4.1 POPULATION AND SAMPLE

Study participants were 65 first year students of Management and Cultural Studies at ISARC where 32 (49.23%) are female and 33 (50.77%) are male students. It should be noted that 40 (61.5%) students are full-time resident students holding a full scholarship, 8 (12.3%) students are partial scholarship students and 8 (12.3%) are merit scholarship students from the Ministry of Defense and the remaining 9 (13.8%) students who pay the fees with their own means. Regarding their ages, these ranged between a minimum of 17 years and a maximum of 40 years Old, with 86.1% (56) students aged between 17 and 30.



Graph.1 students sex percentage

The total usable responses were N=2550 and M=155 missing responses with high rates of missing responses in social variables with a total of 116 (74.8%) of that total 34 (29.3%) did not answer the items *I enjoy living in a dormitory* and 31 (26.7%) *I am getting along with my roommates* by the fact that these questions are closely linked to resident students.

## 4.2 MEASURING INSTRUMENTS

To assess the adjustment variables to higher education we used an adapted questionnaire from Student Adjustment to College Questionnaire (SACQ), a reliable and authentic instrument developed by Baker & Siryk 1989; 1992;1999 consisting of 40 verbal-statement items in likert format of five alternatives divided in two dimensions (academic and social) which are subdivided in three components each to measure students' adjustment experiences in higher education. These dimensions are intended to measure separately, academic and social adjustment. In table I are the components grouped according to each dimension. Other subscales containing some items regarding the student's commitment to higher education experience, especially connectedness to the particular institution enrolled will be considered. Moreover, three dimensions will be considered in the study: personal, intrapersonal and contextual.

**Table I: Description of components by dimension**

Dimension	Component	No of items
1. Academic	1.1 Motivation	7
	1.2 Academic Engagement	10
	1.3 Academic Environment	5
2. Social	2.1 Social Ties Connectedness	7
	2.2 Engagement in Social Activities	7
	2.3 Nostalgia	4

The questionnaire consists of statements and response options, where the student should mark the answer which is closest to their reality. Possible answers vary from the scales: **A** Very



closely to me, **B** Closely to me, **C** neither, **D** Not Closely to me, **E**. Not Closely to me At all with a significant weight of 1 to 5 respectively .

To assess the academic achievement of students, a survey was first conducted with lecturers who teach 1st semesters subjects to identify among all the subjects those which make up the 1<sup>st</sup> semester curriculum, five essential subjects to the formation of Cultural Managers.

The results of this survey helped to identify the five most important subjects of this stage (1<sup>st</sup> semester) of the course. Then, the first-semester grade point average of three disciplines identified will be calculated. The data from both instruments allowed a close examination of social and academic adjustment and its influence on students' academic performance.

### **4.3 PROCEDURES**

The questionnaire was held at the end of May of the same school year in which it was considered the academic achievement of students. The application was collective and administered to all students in the sample in a single session, with an average time of response of around 45 minutes. The objectives and purposes of using the research instrument, the reliability of answers given and other relevant information was then provided to Students.

The administration of questionnaire was performed as recommended by the authors. For the statistical analysis we used univariate and multivariate analysis of variables, through the descriptive narrative using tables of frequency, contingency and correlation through SPSS software, where we proceeded to Pearson correlation.

## **CHAPTER 5: DATA ANALYSIS AND RESULTS**

### **INTRODUCTION**

This fourth chapter presents the discussion of the results of the study, recalling the guiding research questions of the study, their respective objectives and taking the hypotheses raised, as well as the variables we considered in the study. In the light of the chapter on the conceptual and theoretical framework of instruments used and results obtained, we bring in this last chapter the reflections we seek to raise and ground, once again understanding the relevance and timeliness of the influence of the adjusting experiences on academic achievement in higher education. By assigning students a more active role in the performance of academic activities (within academic engagement), building new social ties, social activities and even more, in acquiring and developing competences which are transversal to their intellectual, personal and social development, academic and social variables are decisive for the permanence and persistence of students which in turn leads to significant academic achievement.

## **5.1 Analysing academic adjustment**

### **5.1.1 Constructing an academic adjustment index**

#### **INTRODUCTION**

According to Baker & Siryk (1984) academic adjustment is a positive attitude toward setting academic goal, completing academic requirements and academic environment. As mentioned above this study considers merely motivation, academic engagement and academic environment as forms/components of academic adjustment.

We begin by the assumption that a well adjusted first year university student is one that is academically integrated, that is, is highly motivated, participates actively in class, attends classes regularly, spend hours in academic activity, therefore, is highly committed towards accomplishing his academic prospects. Secondly, a well adjusted student is the one who perceives that being engaged (academically) means coping with the various educational demands, such as writing papers, summarise lectures, coping with reading material, assignments and more.

Last but not least, on the basis of the literature academic adjustment is measured by student's satisfaction on academic environment/experiences and looks closely at student's satisfaction with courses, program of courses, field of knowledge, and faculty time availability after class, academic situation.

#### **5.1.1.1 Motivation**

Motivational variables play a crucial role for first generation students (retention on campus) perception of their academic prospective and retention and success. Goals are accomplished if the students have the motivation needed to initiate and maintain activities directed and this goal must be of an appropriate difficulty, that is must be motivating. According to Atkinson (1964) the most motivational goal is one that is not too difficult and not too easy, and adjusts with students' own personal interests and goals.

However, in order to demonstrate these variables, a student needs to get acquainted with the environment he/she is exposed to. Weiner (1990), states that to understand motivation for learning, the social context must be examined. This means that the environment plays a crucial role for a behavioural attitude towards a goal, for example, one's motivation might be based at others performances in the environment; these performances may influence one another.

The table shows the motivation index describing how first-year students experience academic adjustment and as can be seen in the five highest rates, and therefore having higher percentage in the scales 1,2 (closely to me, very closely to me), the first three items, 1. Class attendance (M=1.16), 2. update with academic work (M=1.18) and 3. Interest in learning (M=1.23) embedded in motivation component, followed by 4. Enthusiasm (M=1.28) and 5. Participation in class (M=1.33).

Table II Descriptive statistics of Motivational Component

		Class attendance	Updated with academic work	Participation in class	Enthusiasm	Interest related to Major field	Interest in learning	Hard-working
N	Valid	64	62	61	64	61	65	62
	Missing	1	3	4	1	4	0	3
Mean		1.16	1.18	1.33	1.28	2.67	1.23	1.66
Median		1.00	1.00	1.00	1.00	2.00	1.00	2.00
Mode		1	1	1	1	2	1	2
Std. Deviation		.366	.385	.651	.453	1.193	.425	.723
Variance		.134	.148	.424	.205	1.424	.180	.523
Range		1	1	3	1	4	1	3
Minimum		1	1	1	1	1	1	1
Maximum		2	2	4	2	5	2	4

The result shows that first generation students are motivated to learn in this new environment and are engaged academically.

It is noted that the values obtained in the questionnaire show a homogenous range of results, per component, suggesting approximate levels of motivation among students.

Surprisingly, we did not find the same levels in the item 'Interest related to Major field' as it can be assumed that students still do not have much information regarding their major field, due to two factors: 1. They have just finished the first semester.

2. This institution is the first and the unique HEI in Mozambique in the area of specificity (arts and culture). Therefore, notwithstanding the dissemination work in force, there is a huge lack of knowledge regarding the courses conferred by this HEI.

### **5.1.1.2 Academic Engagement**

The first findings on came from organizational and occupational means (Schaufeli & Bakker, 2003, 2010). Initially, engagement was conceptualized as being the opposite of "Burnout", constituting the two, poles of the same continuum. Maslach and Leiter (1997) assert that engagement would be a state defined by energy, implication, and efficacy in the individual's activity, opposing, respectively, three dimensions of burnout: exhaustion, cynicism, and professional ineffectiveness. Currently, there is no unanimity regarding the conceptualization of involvement as opposed to the Burnout, it is accepted that they are negatively correlated constructs (J. Maroco et al., 2012).

In the academic context, particularly in HE, interest in studying student engagement increased as evidence was found of its relation to academic success, the decision to complete academic degrees and the well-being of students (Astin, 1984; Tinto, 1993; Gerdes & Mallinckrodt, 1994). According to Pascarella and Terenzini (2005), student engagement in academic experiences is "the critical determinant of the university's impact" on academic success. Thus, several instruments have been developed for the evaluation of students' academic engagement.

More recently, the literature shows that student's engagement in the various experiences provided by the institution is one of the important variables in the prediction of academic achievement (Astin, 1993; Cunha & Carrilho, 2005) and persistence in higher education (Kuh,2008). In addition, other works highlight the role of engagement in the development of

vocational and cognitive aspects, in the construction of autonomy and in the expansion of academic and interpersonal skills (Kuh 1995; Pascarella & Terenzini , 2005).

As we mentioned above, academic engagement is an index that combined academic identification refers to interacting with faculty, having an perception of academic tasks and subject matter, and related behaviours and attitudes and academic participation which embraces the student's work attempts both inside and outside of university, including writing assignments, summarize lectures, meeting deadlines, collaborative learning, coping with reading materials, application on tests, hours spent on assignments and contact with faculty. Academic engagement presupposes that student learning and development is closely associated with actions and active participation in activities in academic life, both within and outside the classroom, and which are associated with desirable educational outcomes (Harper & Quaye, 2008). Therefore, for the purposes of this study we looked closely at these indicators.

As it can be seen in table II, highest rates were found in the items 'perception of academic work' (M=1.29)'summarizing lectures' (M=1.70) and 'writing and submitting academic papers' (M=1.73) followed by 'accomplishment of tasks on time' (M=1.81) 'coping with reading materials' (1.83) 'study time management' (1.85) 'application during tests' (1.89) 'collaborative learning' (2.05).

These results reveal that there is homogeneity in the students' options in connection with this component, which leads us to assert that there are high rates of academic engagement among this population.

It was found that students are clear about the nature of the academic work in their area of specificity (management and cultural studies), since they are students of arts and culture, it is assumed that a HE candidate in the field of arts and culture has some domain of the intended course. In addition, it should be noted that in the application process, these students present a portfolio of some work or activity carried out or assisted by them, which will subsequently be evaluated, being one of the evaluation criteria for admission and thus contributes to HE transition and integration.

Nevertheless, as it can be seen, students have adjustment difficulties in the items ‘Home Work accomplishment’ (M=3.12) and ‘Contact with faculty’ (M=2.75). Despite the abstention of six students this result is justified by the fact that students encounter difficulties in doing home work for the following reasons:

1. Lack of time due to lots of tasks given at the same time.
2. Lack of interest in the topics given.

On the other hand, a considerable number of students (30.8%) do not have contact with faculty.

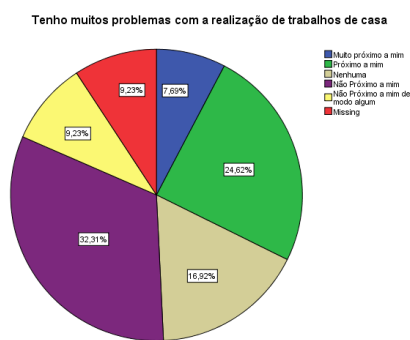


Chart 2 Difficulties with home work accomplishment

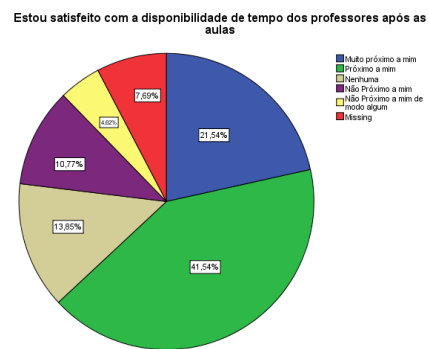


Chart 3 Contact with faculty

Table III Descriptive statistics of Academic Engagement

	Perception of academic work	Writing and submitting academic papers	Summarizing lectures	Accomplishment of tasks on time	Collaborative learning	Coping with reading materials	Application during tests	Study time management	Homework accomplishment	Contact with faculty
N Valid	65	62	63	64	63	64	61	62	59	61
Missing	0	3	2	1	2	1	4	3	6	4
Mean	1.29	1.73	1.70	1.81	2.05	1.83	1.89	1.85	3.12	2.75
Median	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00
Mode	1	1	1	2	2	2	2	2	4	2
Std. Deviation	.458	.961	.994	.814	.958	.808	.661	.827	1.176	1.105
Variance	.210	.924	.988	.663	.917	.653	.437	.684	1.382	1.222
Range	1	3	4	3	3	4	3	3	4	4
Minimum	1	1	1	1	1	1	1	1	1	1
Maximum	2	4	5	4	4	5	4	4	5	5

Literature in the field suggests that positive faculty-student contacts (relational engagement), completing academic requirements and taking advantages of tools to meet these requirements (cognitive engagement) have been shown to contribute positively on achievement.

Furthermore, on the concept of academic engagement, Kuh et al. (1991) emphasized that the relationship between engagement with academic activities, particularly those conducted outside the classroom, and personal learning and growth is probably curvilinear. This means that students who spend a lot of time with some activity or those who are not involved with it, benefit little from this experience when compared to students who engage in a moderate level. In this sense, correlation or predictive studies of dimensions of the Academic Engagement Scale about the academic achievement of university students, including academic performance, cognitive development and persistence in higher education become pertinent. With such studies, there is scope for further discussions related to the limits and possibilities in understanding the academic engagement, as well as the implications of this construct in research and interventions with students enrolled in higher education, since the literature is still very restricted.

### **5.1.1.3 Academic Environment**

Nico (2000) suggests the need to promote an environment which allows for academic comfort, that is, a climate of greater confidence, commitment and success, with the maintenance of necessary imbalances and development drivers and the minimization of occurrence of uncomfortable systems. In this way the academic environment is configured as a context that interferes with the student's development by enabling substantial experiences, tasks and challenges for changes and reorganizations (Pascarella & Terenzini, 1991).

It is important to emphasize that this development depends not only on objective conditions, but also on the personal characteristics of the student, especially their adaptive capacity, degree of vulnerability and capacity for confrontation. These aspects are confirmed by observation of the uniqueness of formation lived between



each individual in the same university environment (Polydoro, 2000). As mentioned in this study, academic environment involves students' perception and satisfaction with courses within major field, program of courses, faculty field of knowledge, faculty time availability after classes and academic situation.

The important role of this component can be verified in the theoretical propositions of the impact models that analyze the university's changes, considering mainly the environmental and relational context as sources of students' cognitive and affective changes (Pascarella & Terenzini, 1991).

As shown below we noticed that students satisfaction high rates were in the items, 'satisfaction with courses within major field' (M=1.52), 'satisfaction with program' (M=1.82), 'satisfaction with faculty field of knowledge', 'satisfaction with academic situation' (M=1.97) although is registered a considerable number of missing responses and 'satisfaction with faculty field of knowledge' (M=2.02) with highest Std.deviation rate (1.118).

Table IV Descriptive statistics of Academic Environment

		Satisfaction with courses within major field	Satisfaction with program of courses	Satisfaction with faculty field of knowledge	Satisfaction with faculty time availability after class	Satisfaction with academic situation
N	Valid	62	62	61	60	58
	Missing	3	3	4	5	7
Mean		1.52	1.82	2.02	2.30	1.97
Median		1.00	2.00	2.00	2.00	2.00
Mode		1	2	2	2	2
Std. Deviation		.620	.713	1.118	1.109	.955
Variance		.385	.509	1.250	1.231	.911
Range		3	3	4	4	4
Minimum		1	1	1	1	1
Maximum		4	4	5	5	5

Research results show that perception of the current learning environment is even a stronger predictor of learning in university than their prior achievement in school and therefore students' perception is measured by their satisfaction with the elements above.

## **5.2 Analysing Social Adjustment**

### **5.2.1 Constructing a Social Adjustment Index**

#### **5.2.1.1 Social Ties Connectedness**

If students go home after class without being engaged to campus activities, sports, workshops, exhibitions, campus societies without having interaction, either faculty-student interaction or classmate-student interaction developing loyal friends they are likely to develop feelings of loneliness, insecurity, alienation, homesickness, stress and subsequently departure from university. According to Pascarella & Terenzini, (1991) first-year students who are preoccupied with friends from home struggle to adjust.

The experiences during the first year in the university are very important for integration and persistence in higher education and, therefore, for academic achievement of students (Pascarella & Terenzini, 2005). The way students integrate into the context of higher education makes it possible for better advantage of opportunities offered by the university, both for their professional training and for their psychosocial development.

Students who integrate academically and socially from the beginning of their courses are more likely to grow intellectually and personally than those who face the most difficulties in transitioning to university. The entrance to university implies a series of transformations in friendship and social support networks of students. Adjusting to university implies, therefore, integrating socially with people in this new context, participating in social activities and developing satisfactory interpersonal relationships.

The quality of relationship that the university student has with his / her parents during and even before entering higher education is a factor that also influences adjustment to higher education. Peer relationship includes friendships, the expression of feelings, intercultural tolerance, and cooperation with peers. This dimension has gradually been

recognized as important, above all at the level of academic adjustment. As a rule, admission to university provides new interpersonal investments by students (Winston et al., 1987) The perception of parental emotional support for reciprocity in parent-child relationships, dialogue, parental support on adjustment issues, seem to contribute to students adjustment (Wintre & Yafee, 2000).

Some studies also indicate that young people who have developed a pattern of secure attachment tend to be less self-critical, which leads them to become more involved in social interactions and experience less solitude and less depression in the first year of university (Wisema & Sharabany, 2006).

The university is a distinct environment of the school, in it the monitoring and the interest of institution on the student's view is notably diminished. This makes the academic engagement to be more dependent much more on the student rather than on the university environment. The responsibility for learning, once school-centered, and now shifted to learner-centered. It expects autonomy in learning, time management and definition of goals and strategies for studies (Almeida *et al.*, 2006).

Despite this increase in expectation of individual responsibility on the part of the student in his / her formation and adherence to the course, it is verified that certain characteristics of the university environment, such as the opportunity of interaction with teachers and involvement in extracurricular activities, favor the adjustment of the Student to the university context (Kuh, 1995).

The student's choice of friends with whom they spend time with is important, therefore, having repercussions to what they do in university and how they feel about their experiences (Kuh, 1993). A great number of the impact in university is determined by one's interactions with principal 'actors' of socialization in the university context, namely, students, peers and faculty member (Pascarella & Terenzini, 1991).

As it can be seen on the table V the highest means were found in the items 'ability to make friends' (M=1.61) and 'Feels at ease in making friends' (M=1.73) and 'self-

esteem' (M=2.17), 'student-roommate relation' (M=2.21) and 'relation with opposite sex' (M=2.23) on this component indicating to be the most social favorable experiences of students in this sample. However fewer students admitted having loyal friends, peers that give them support and care in whom they can fully trust.

According to Kuh (1993) student interaction with peers can positively influence overall academic development, knowledge acquisition, analytical and problem - solving skills, and self esteem.

Based on Astin (1993) peer interaction involves:

- Discuss course and major field content with other students;
- Working on group tasks with other students;
- Tutoring/helping other students;
- Participating in intramural, varsity, non-varsity sports;
- Being a member of social fraternity or sorority;
- Discussing racial or ethnical issues;
- Socializing with someone from a different racial or ethnic group;
- Being elected to a student office, and
- Spending time each week socializing or in student clubs or organisations

Surprisingly, as shown in fig. 4, a smaller number of students showed to have 'informal student-faculty interaction' (M=3.10). However, a great number of educators and researchers have stressed that close student-faculty interaction are a major determinant to which college impacts ( persistence, intellectual development, intellectual skills, behavioral dimensions, critical thinking ability, a sense of self) occur. Student-faculty interaction includes the dialogue with teachers, the possibility of contacts inside and outside the classroom, the perception of the availability of time to students. It is an important factor both to course adjustment and, above all, to academic achievement, especially when it includes their appreciations in relation to methods of teaching and evaluation of teachers (Ramsdem, 1988).

Tenho relacionamento pessoal e informal com os meus professores

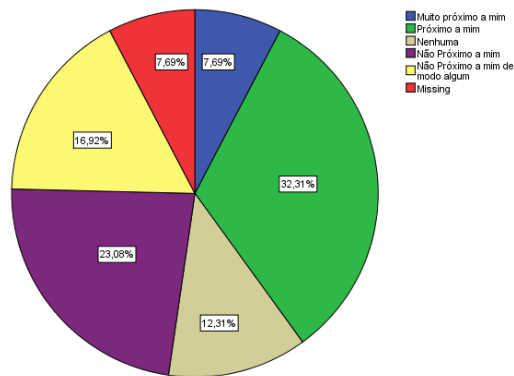


Chart 4 Informal student-faculty interaction

Spady (1970) in the process of developing a theoretical explanatory model of the university ‘drop-out’ process has concluded that student’s patterns of interactive relation and interaction with faculty will have an indirect and direct influence not merely on the development of intellectual interests and concerns, but also on more objectively assessed indicators of their academic achievement, e.g. grade performance. In short, informal faculty relations contribute to student’s academic achievement by enhancing their levels of personal intellectual growth which increases learner’s levels of confidence, self-esteem and optimism and therefore levels of permanence and satisfaction in higher education.

Table V Descriptive statistics of social ties connectedness

	Ability to make friends	Informal student-faculty interaction	Student-roommate relation	Feels at ease in making friends	Relation with opposite sex	Self-esteem	Has a loyal friend
N Valid	62	60	34	62	65	64	64
Missing	3	5	31	3	0	1	1
Mean	1.61	3.10	2.21	1.73	2.23	2.17	2.58
Median	1.50	3.00	2.00	2.00	1.00	1.00	2.00
Mode	1	2	1	1	1	1	1
Std. Deviation	.754	1.298	1.225	.908	1.766	1.723	1.753
Variance	.569	1.685	1.502	.825	3.118	2.970	3.073
Range	3	4	4	3	4	4	4
Minimum	1	1	1	1	1	1	1
Maximum	4	5	5	4	5	5	5

Peer interaction plays a very crucial role in influencing one's attitudes towards academic goals, affecting all aspects of development – affective, cognitive, behavioral and psychosocial. Truly, students experiences vary from one another, for example, commuters are less likely to have solid social connectedness in campus compared to resident students who have greater opportunities of having interaction with faculty, staff and peers.

#### **5.2.1.2 Engagement in social activities**

The university entrance implies a series of transformations in friendship networks and social support as well as social activities (extracurricular) of young freshers. Friendship networks and activities practiced previously at the secondary level are no longer compatible with the new academic context; there is a need to establish new bonds of friendship and social activities. Adjustment to higher education implies, therefore, integrating socially with the people in this new context, participating in social activities and developing satisfactory interpersonal relationships (Pascarella & Terenzini, 2005).

Participation in extracurricular activities (social activities) reveals an indispensable variable in the question of adjustment to higher education, psychological, moral, civic and social development and therefore academic achievement. Included here is a wide variety of services and groups, provided that they are organized in or linked to the institution, for example, student participation in service or volunteering programs on campus or in the community has been thought of as having a positive impact on personal and educational development, on the acquisition of life skills, on the student's civic and cognitive development (Astin & Sax, 1998). Includes participation in associative initiatives, cultural and recreational activities and sports. This component emerges as one of the most frequent indicators of the degree of interpersonal relationship achieved by the student, as well as their academic adjustment (Baker & Schultz, 1992).

Referring to social activities, the 3 highest rates were found in 'concert tours' (M=2.25), 'art exhibitions attendance' (M=2.36), 'student union connectedness'

(M=2.50) ‘cultural workshops attendance’ (M=2.50) considered as moderate rates according to the scales values assigned in this study.

Table VI Descriptive statistics of engagement in social activities

	Participates in sports	Cultural workshops attendance	Art exhibition attendance	Drama societies connectedness	Concert tour attendance	Participation in dancing sessions/workshops	Student Union connectedness
N Valid	63	64	64	65	64	65	64
Missing	2	1	1	0	1	0	1
Mean	2.68	2.50	2.36	2.68	2.25	2.57	2.50
Median	2.00	2.00	1.00	3.00	2.00	2.00	2.00
Mode	2	1	1	3	1	1	1
Std. Deviation	1.060	1.671	1.722	1.288	1.414	1.436	1.501
Variance	1.123	2.794	2.964	1.660	2.000	2.062	2.254
Range	4	4	4	4	4	4	4
Minimum	1	1	1	1	1	1	1
Maximum	5	5	5	5	5	5	5

Unsurprisingly, these rates suggest that students are moderately engaged in social activities taking into account that these activities with a greater focus on *concert tours* and *art exhibitions* take place monthly on the ISARC university campus and in other cultural spaces and are usually organized by students (student union) with the aim of having students and individuals daily present have direct contact with different types of information and cultural diversity. In these concerts sometimes organized by a group of students, singer and dancer students and other invited artists perform, as well as at art exhibitions, in different forums we find students exhibitors and visitors with the same intention to promote culture and to create cultural networks. These events, whether carried out within a discipline, by an institutional academic event, by students association (or other unions), besides contributing to the creation of cultural and peers networks, to interpersonal relationships and social adjustment reveal in their events creativity, customs, traditions, values, popular artistic-cultural expressions.

On the contrary, lowest rates in this category, *participation in sports*, *drama societies connectedness*, *participation in dancing sessions/workshops* can be explained by the fact that these activities do not occur frequently in this academic sphere with a greater focus on the last two. The low participation in sport is explained by the fact that

students claim to have little time to be involved in this activity due to the burden of academic work imposed on them during the academic year.

Engagement in social activities is generally associated with high levels of development, learning and academic satisfaction (Kuh, 1993), contributing to more effective and lasting interpersonal and intimate interactions (Hood, 1984). Leadership activities in various academic and social (extracurricular) activities demonstrate a connection with altruistic and social values, as well as realistic and lasting life projects (Williams & Winston, 1985; Pascarella et al., 1988,).

Not least, participation in sports (intramural, varsity, non-varsity), whether in terms of competitions or leisure, is associated with self-esteem, leadership development, academic achievement and reveals itself as a good predictor of emotional and physical health (Astin, 1993), although the sport practice can also cause problems for first-year students. Authors in the field, alert to difficulties that may arise in the degree of participation in these activities, i.e., the student may not be able to reconcile the time and energy spent with the items of academic adjustment (motivation, academic engagement) previously discussed: class attendance, learning activities, participation in class, application, study time management and others. In addition, students should not lose focus; Are they athletes, union leaders, artists or students? However, such activities as sports, give a certain status and immerse the image of the student on campus, these are the aspects that explain their impact on the psychological development of these population.

Therefore, *peer interactions* seem to affect the academic experience of students in different ways and in different areas. However, as with the effects of extracurricular engagement, its impact can be both positive in cognitive and learning terms; For example, when in the form of tutoring and mutual teaching, discussions on different topics, application of materials given in class, discussion of new ideas and projects, cooperative learning (Pascarella & Terenzini, 1991; Kuh, 1993) and time spent in activities Impact on student performance and development (Astin, 1993a).



In addition, along with the time spent, the question on the type of activities that the groups devote themselves to has also arisen. The high rates of alcohol consumption by some groups of students, especially at certain times and academic festivities are now known to the public. These practices are not exclusive to 'academic praxis' in Mozambique. High levels of alcohol consumption are no longer uncommon in the United States (Alva, 1998). Usually, these practices are associated with problems of depression and anxiety. In fact, these students have a poorer interpersonal relationship and more unrealistic expectations and demands on themselves and others and generally have a lower motivation for learning (O'Brien & Krames, 1988).

Furthermore, these students also present coping strategies that are poorer to deal with the demands of their life contexts, and these difficulties may increase during the school year. However, the truth is that engagement in social activities, and groups of peers that may be constituted for the purpose of greater investment of students in associative, academic, cultural and sports activities, can have an interesting preventive effect in relation to students Personality and mental health problems.

### **5.2.1.3 Nostalgia**

The student's relation with their family can be an element which facilitates the student's adjustment to HE as well as inhibiting element of adjustment when freshmen feel distant of their family. Admission to higher education often demands that the student leave their parents' home, including moving from one city or province to another, this is the case of Isarc students who emigrate from all provinces of Mozambique, making up multicultural classrooms where learning ( Centered on the student) counts on elements of this then cultural diversity.

These feelings of distance from the family, that is, homesickness, generate moments of longing, despair and depression that can lead to suicide thoughts. As pointed in this study, in an analogy to Durkheim's suicide theory, Tinto (1993) states that departure stems from the influences which social and intellectual communities exert on students' willingness to remain in college. In its longitudinal model, the author presents the

influence of, roughly, some sets of factors on the decision to evade: attributes prior to entering college, such as family background, ability and schooling;

Nostalgia can generate abnormal behavior in individuals who have been removed from their homeland or separated from their family. There is a strong desire to return home or to review their relatives. It is a feeling similar to homesickness but it tends to increase.

Nostalgic thoughts can also be associated with moments of happiness experienced in a certain period of life, in some cases they are idealized

As it can be observed in the table below there are no indexes of negative nostalgic effects since the data indicates that respondents opted for scales *not next to me* (4) and *not next to me at all* (5), which shows that students have an equilibrium and continuity between family background and the present academic situation showing a strong sense of belonging, enthusiasm and perception of getting higher education degree, in sum these students are highly motivated academically. These results lead us to conclude that a great part of students had the beneficial psychological effects of nostalgia.

Table VII Descriptive statistics of Nostalgia

		Perception of living in a dormitory	Feels lonesome for home	Feels lonely	Would rather be home
N	Valid	31	55	54	54
	Missing	34	10	11	11
Mean		3.06	2.75	2.87	3.04
Median		3.00	3.00	3.00	3.00
Mode		4	3	2	4
Std. Deviation		1.459	1.336	1.100	1.063
Variance		2.129	1.786	1.209	1.131
Range		4	4	4	4
Minimum		1	1	1	1
Maximum		5	5	5	5

It is noted below that the values obtained in the questionnaire (SACQ) show a wide range of results per components suggesting a variability of experiences. In this respect, it should be highlighted that the indexes “motivation” (M=1.50), “academic environment” (M=1.94), “academic engagement” (M=1.99) presented the highest

means. Regarding social adjustment indexes, “Social ties connectedness” (M=2.38) “engagement with social activities” (M=2.49) presented moderate values and “nostalgia” (M=2.93) not significant value.

Table VIII Descriptive statistics of components

	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Motivation	1.29	1.00	2.29	1.5065	.28679	.082
Academic Engagement	2.80	1.10	3.90	1.9923	.49462	.245
Academic Environment	2.60	1.00	3.60	1.9418	.58711	.345
Social Ties Connectedness	2.00	1.57	3.57	2.3839	.62895	.396
Engagement in Social Activities	3.43	1.00	4.43	2.4918	.79262	.628
Nostalgia	3.00	1.25	4.25	2.9310	.84223	.709
Valid N (listwise)						

a. Multiple modes exist. The smallest value is shown

Contrary, engagement with social activities and social ties connectedness had the highest standard deviations indicating that the experiences in these areas were most differentiated in relation to other components.

With regard to academic and social dimensions it can be seen that the academic dimension (M=1.84) showed a highest mean and least std. deviation compared to social dimension (M=2.60) regarded as having a low value.

Table IX Descriptive statistics of components

	N		Mean	Std. Deviation	Variance	Range	Minimum	Maximum
	Valid	Missing						
Academic Dimension	44	21	1.8408	.37282	.139	1.66	1.23	2.89
Social Dimension	22	43	2.6012	.56677	.321	2.25	1.37	3.62

These data suggest that students when describing their university experiences at dimensions level (academic and social) were more closely to academic adjustment dimension components, i.e., the most representative university experiences of these group in the process of adjustment / integration can be embedded in this category. However, it does not mean that social adjustment dimension plays a less important role nor has no influence on the issue of adjustment to HE.

### 5.3 Grade point average

Comparing the grade point average from the five disciplines, three were characterized as having the highest averages: ‘Introduction to Sociology’ (M=14.19), ‘Theory of knowledge’ (M=12.49) and ‘Introduction to History and Theory of Arts’ (M=12.35). The discipline ‘Introduction to Sociology’ showed the highest average with low std. Deviation (1.067) and range (5) showing that students’ grades in this particular

discipline varied less and students had more homogenous achievements i.e. the students had positive averages ranged 11-16 with large number of students with averages above 13 points.

Secondly the discipline ‘Theory of Knowledge’, curiously, indicated the highest std. deviation (2.44) and therefore highest variance (5.95), followed by the discipline Cultural Anthropology (3.10), with highest values of variance, revealing that students’ grades in this particular discipline varied more (1-19) and students had less homogenous achievements.

With regard to the discipline ‘History and Theory of Arts’ there is a notably variance (1.83) not as high as the previous discipline, and we can notice moderate means revealing a balance in students results.

Contrary, the discipline ‘Study Skills’ showed to have the lowest average (10.42) and std. deviations and variance (.820) values and similarly with a range of 4.

Table X Descriptive Statistics of results per discipline

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Final grade Intro. History. Theory of Arts	57	5	10	15	12.35	1.356	1.839
Final grade Theory of Knowledge	61	18	1	19	12.49	2.440	5.954
Final grade Cultural Anthropology	62	7	9	16	11.74	1.762	3.103
Final grade Study Skills	50	4	10	14	10.42	.906	.820
Final grade Introduction to Sociology	64	5	11	16	14.19	1.067	1.139
Valid N (listwise)	43						

#### **5.4 Correlations between components and Academic achievement**

In the table XI is presented the correlation between 6 components of the SACQ and final averages of the disciplines selected as the most important in this semester. With the aim of testing if the academic experiences of students in higher education have implications in academic achievement.

The component “social ties connectedness” is found to have a positive correlation with the discipline Intro. History and Theory of Arts (0,276) eventually the highest grade point averages discipline.

In relation to the components of SACQ and the disciplines we found a moderate correlation in the components “academic environment” and “nostalgia” and the disciplines ‘Study Skills’ and ‘Theory of Knowledge’. When analyzing the data it can also be observed that the disciplines ‘Study Skills’ and ‘Theory of Knowledge’ showed moderate correlations with more than one component in the sample.

The analysis of the table below reveals that there is a positive correlation with statistic significance between the component “motivation” and the disciplines ‘Study Skills’, ‘Theory of Knowledge’ and ‘Introduction to History and Theory of Arts’ and. It is observed in the data analysis that this motivational component presents more correlations with the disciplines than the other five components of this study. This result showed that this component is the most expressive of this sample in the influence of academic achievement. In addition, this result suggests that better motivation indexes on the part of the students interfere in a positive way in students’ academic achievement.

Table XI Correlation between components of SACQ and academic achievement

		Intro. History. Theory of Arts	Theory of Knowledge	Cultural Anthropology	Study Skills	Introduction to Sociology
Motivation	Pearson Correlation	.341*	.412**	.087	.417**	-.043
	Sig. (2-tailed)	.017	.003	.533	.005	.755
	Sum of Squares and Cross-products	6.172	21.702	2.359	4.638	-.741
	Covariance	.129	.452	.045	.110	-.014
	N	49	49	54	43	54
Academic Engagement	Pearson Correlation	-.017	.113	.024	.047	.100
	Sig. (2-tailed)	.911	.430	.866	.768	.484
	Sum of Squares and Cross-products	-.540	3.277	1.093	.700	2.665
	Covariance	-.012	.066	.022	.017	.053
	N	45	51	51	42	51
Academic Environment	Pearson Correlation	-.019	.209	-.016	.223	.048
	Sig. (2-tailed)	.897	.138	.911	.141	.732
	Sum of Squares and Cross-products	-.750	16.031	-.871	5.000	1.600
	Covariance	-.016	.314	-.016	.114	.030
	N	48	52	54	45	54
Social ties connectedness	Pearson Correlation	.177	.144	.069	.153	.276
	Sig. (2-tailed)	.378	.457	.713	.474	.133
	Sum of Squares and Cross-products	4.048	5.325	2.066	2.012	5.696
	Covariance	.156	.190	.069	.087	.190
	N	27	29	31	24	31
Engagement with social activities	Pearson Correlation	-.121	.183	.133	.160	.007
	Sig. (2-tailed)	.384	.174	.314	.284	.959
	Sum of Squares and Cross-products	-6.571	14.754	10.979	5.185	.343
	Covariance	-.124	.263	.189	.113	.006
	N	54	57	59	47	60
Nostalgia	Pearson Correlation	.222	.245	.083	.218	.188
	Sig. (2-tailed)	.296	.218	.676	.417	.339
	Sum of Squares and Cross-products	6.094	10.667	2.964	2.313	4.312
	Covariance	.265	.410	.110	.154	.160
	N	24	27	28	16	28

## 5.5 Correlations between dimensions and Academic achievement

The table XII shows the results obtained in the six components which comprise the questionnaire grouped accordingly to the dimensions to which they belong (academic and social) in relation to students' academic achievement.

In order to analyse the relation between the dimensions and the academic achievement of students we proceeded to correlation analysis calculation of Pearson correlation coefficient.

The most significant components in this relation are *motivation* (sig. 0,017; 0,005) and *academic engagement* (sig.0, 003).

A great body of the literature suggest that motivation (intrinsic) is determinant for university adjustment, quality of learning and academic achievement, motivated students demonstrate to be participative and active (enthusiasm and interest) in the learning process, seek to grasp the information ( Updated with academic work) and expending hard-working to develop and improve strategies for understanding and mastering the content which is being provided to them and includes class attendance and participation in class.

In the same way, researchers have used as indicators to evaluate motivation in relation to academic achievement the following: curiosity to learn, students persistence on tasks, the time spent on tasks, the desire to accomplish a given task and finally, the combination of all these variables.

According to Lavery, (1999) motivation is one of the most important concepts in academic achievement and therefore in higher education training, having been widely demonstrated that it influences learning and performance. Students with higher motivation tend to persist when they face difficult problems and tend to learn from their mistakes.

In the table XII becomes apparent that there is only a correlation of positive significance between the “Academic Dimension” and the discipline ‘Theory of Knowledge’ (0.478) as well as a moderate correlation between the same dimension and the disciplines of ‘Study Skills’ (0.319) and ‘Introduction to Sociology’ (0.256), the discipline with highest scores.

On the other hand there is some positive although weak correlation between “Social Dimension” and the disciplines of ‘Study Skills’ (0.246), ‘Theory of Knowledge’ (0.195) and ‘Cultural Anthropology’ (0.171).

Table XII Correlation between dimensions of SACQ and academic achievement

		Intro. History. Theory of Arts	Theory of Knowledge	Cultural Anthrop.	Study Skills	Introduction to Sociology
Academic Dimension	Pearson Correlation	.189	.478*	.010	.319	.256
	Sig. (2-tailed)	.438	.033	.947	.062	.263
	N	19	20	43	35	21
Social Dimension	Pearson Correlation	.082	.195	.171	.246	.048
	Sig. (2-tailed)	.623	.222	.447	.396	.759
	N	38	41	22	14	43



## CHAPTER 6

### DATA ANALYSIS: THE MAIN FINDINGS

#### INTRODUCTION

Analysing the coefficients obtained with respect to the use of the adapted questionnaire (SACQ) in a sample of students not usual in the studies carried out to the present with this instrument, we assume that the internal consistency and variance indicators of items are appropriate; it was observed the consistency of high means in four of the six components.

Taking into that the main objective of this study was to investigate the influence of academic and social adjustment to higher education on academic achievement through a validated and reliable scale that for the purposes of this study has been adapted (contextualized), which evaluates the adjusting (social and academic) variables of a population sample of Mozambican university students, taking their usual behaviors and attitudes of study and their learning strategies, we want to highlight how important is, for the development of this field-research, to have and use validated instruments for data collection.

Thus, the research questions and the research problem are answered and are also given practical recommendations to different actors HE actors, with focus on HEIs. We recall that these considerations were based on the results obtained from a sample of 1st year students of Cultural Studies and Management, and as such the inference of these results and conclusions should always bear in mind these specificities in the construct of the given sample. Therefore, in concluding comment, we highlight some data from the validation of this scale and we give considerations on the results. Likewise, in a perspective of using this research for psychopedagogical practice among university students, we provide a strong thinking of these aspects, namely describing their academic and social behaviors in the scope of their studies in higher education.

## 6.1 Research question 1

Regarding academic experiences in the field of academic dimension, it can be noted that the academic dimension (1.84) is the one that shows greater values of adjustment to higher education. The most significant component “motivation” (1.50) is the one that shows the highest indexes in the indicators class attendance ( $M = 1.16$ ), update with academic work ( $M = 1.18$ ) and Interest in learning ( $M = 1.23$ ) embedded in motivation component, followed by Enthusiasm ( $M = 1.28$ ) and participation in class ( $M = 1.33$ ). These results suggest that students are highly motivated, that is, they know the purpose of being in higher education, are interested and pleased in doing academic tasks and have a positive level of happiness and personal fulfillment.

On the other hand, appreciating the component “academic engagement” (1.99), it can be observed that the values obtained suggest high levels of engagement which are translated from the effort (intrinsic motivation) into the application of this effort in academic activities such as perception of academic work ( $M = 1.29$ ), summarizing lectures ( $M = 1.70$ ), writing and submitting academic papers ( $M = 1.73$ ) followed by accomplishment of tasks on time ( $M = 1.81$ ), application during tests ( $M = 1.89$ ) and collaborative learning ( $M = 2.05$ ). These results demonstrate that students' preferences in this component are almost the same and suggest that students are academically engaged in the adjustment to higher education.

Nevertheless, students find it difficult to do homework ( $M = 3.12$ ) and be in contact with faculty ( $M = 2.75$ ). Regarding the first item, it is important to mention that students claim to have shortage of time to perform the academic tasks in general due to enormous amount of academic work delivered by teachers with similar deadlines. With regard to contact with faculty, students expressed some difficulty in approaching the lecturers for the fact that some of them have showed some rigidity in the relationship with the students.

In relation to the component “academic environment” (1.94) measured by the perception and satisfaction of students in relation to the academic environment, it can be concluded that this index presents significantly positive values, with higher indexes

in four indicators of the same framework ‘satisfaction with courses within major field’ (M = 1.12), ‘satisfaction with program’ (M = 1.82), ‘satisfaction with academic situation’ (M = 1.97) and ‘satisfaction with faculty field of knowledge’(M=2.02) with the exception of indicator ‘satisfaction with faculty time availability after class’ (M = 2.30) which denotes an unsatisfactory mean, with a variance of 1,231. The values of the latter item refer us to the indexes of ‘contact with faculty’ previously seen, since it presents very similar means. This leads us to conclude that the academic contact with faculty (relationship with teachers) both within and outside the classroom is not satisfactory and may negatively interfere with academic achievement.

## **6.2 Research question 2**

Regarding the dimension “social adjustment” (2.60), the university experiences of students presents moderate values in the components “social ties connectedness” (2.38) and “engagement in social activities” (2.49) and values not positively significant in the component “nostalgia” (2.93).

Appreciating the values of “social ties connectedness” (2:38), highest rates were found in the items ‘ability to make friends’ (M = 1.61), ‘feels at ease in making friends’ (M = 1.73), ‘self-esteem’ (M = 2.17), ‘student -roommate relation’ (M = 2.21) and ‘relation with opposite sex’ (M = 2.23). These values suggest good levels of interaction, easiness in building friendships, both among classmates and roommates, and we also found that a moderate number of students get along very ll to colleagues of the opposite sex (66.1%), but almost half of students lack loyal friends (44.5%). On the other hand, a significant number of students (67.7%) affirm that their self-esteem contributes on building genuine friendships.

Thus, it is important to highlight the role of self-esteem on relationship building and academic achievement. Students with good levels of self-esteem rely on themselves to achieve long-desired goals and to overcome the difficulties of adjustment that may come up on campus. Those who have good self-esteem know that even if problems show up, they have value and can invest more in themselves to overcome the challenges imposed in academic life.

Overcoming the adversity moments is classified by Branden (2000) as competence or self efficiency; For this author, to be efficient is to be able to produce a desired result, rely on our basic efficiency and our ability to learn what we need and to do what it takes to achieve our goals since success depends on our own efforts. In turn, self esteem is the foundation of motivation by which a person becomes productive in learning, at work and in relationships. Thus, it is becoming increasingly noticeable how much a high self-esteem indicator is important in terms of productivity that will contribute to the student's relationship with the environment, academic work with classmates and lecturers. The latter two, according to Branden (2000) are very important factors for the measurement of self-esteem in the university context.

Repeatedly, it is noted that interaction with faculty ( $M = 3.10$ ) thus informal interaction, appears to be below expectation. It is important to point out that, in addition to the causes of this weak interaction previously mentioned, one should not ignore the fact that these students are attending the first semester of the first year, which naturally, although there is lack of greater openness on the part of some teachers, makes students feel embarrassed and shy about possible contacts with lecturers, particularly, opposite sex lecturers.

Concerning the experiential experiences in the index “engagement in social activities” ( $M = 2.49$ ) it can be observed that only the items ‘concert tours’ ( $M = 2.25$ ), ‘art exhibitions attendance’ ( $M = 2.36$ ) obtained moderately significant values and the remaining ‘cultural workshops attendance’, ‘participation in sports’, ‘cultural workshops attendance’, ‘drama societies connectedness’, ‘participation in dancing sessions / workshops’ weak values (null). According to students, the low participation in these activities is due to two factors: shortage of time to join such activities due to the burden of academic work, either individual or in groups;

No calendar of such events with the exception of concert tours and art exhibitions held by students not in their entirety; This leads to lack of interest and motivation towards these activities, with low levels of participation and information search.

In relation to the component “nostalgia” ( $M = 2.93$ ), the indicators are highly moderate with lower values in the items ‘Perception of living in a dormitory’ ( $M = 3.06$ ), ‘Would rather be home’ ( $M = 3.04$ ), Feels Lonesome for home ( $M = 2.75$ ) and

‘feels lonely’ (M = 2.87). However, these values are acceptable due to the fact that they are students who have recently left their relatives, and a great number comes from other cities and Provinces throughout Mozambique. These results suggest that there is a balance and continuity of nostalgic feelings with the present academic context; therefore, it is assumed that there are no direct negative impacts from this factor. On the contrary, it is clear that this group benefits from the psychological effects of nostalgia, that is, nostalgia positively influences students' interpersonal relationships contributing to higher levels of sense of belonging, enthusiasm and perception of academic goals.

### **6.3 Research question 3**

Regarding the correlations between components of questionnaire and subjects, it can be observed in this study that the highest levels of positive correlation are between components of the academic dimension “motivation” with the disciplines of ‘Study Skills’ (0,417), ‘theory Of Knowledge’ (0,412) and ‘Introduction to History and Theory of Arts’ (0,341). In the same dimension, there were found positive moderate correlations between the component “academic environment” measuring the perception and satisfaction of students in the academic environment, and the disciplines of ‘theory of knowledge’ (0,229) and ‘study skills’ (0,223).

On the other hand, in the social dimension window we find moderately positive correlations between the components “nostalgia” and the disciplines ‘theory of Knowledge’ (0,245), ‘Intro. History. Theory of Arts’ (0,222) and ‘Study Skills’ (0,218) and finally the component “social ties connectedness” and the discipline Introd. to Sociology (0,276).

Regarding the correlation between academic and social dimensions, it can be verified that there is a correlation of positive significance between the “academic dimension” and the discipline of ‘Theory of Knowledge’ (0,478), ‘Study Skills’(0,319) and ‘Introduction to Sociology’ (0,256). Taking into account that the first two disciplines present higher grade point averages of the five disciplines and the latter presents the lowest grade point average.

Nevertheless, in the scope “social dimension” we can observe a moderate positive correlation with the discipline ‘study skills’ and a weak positive correlation with the other four disciplines namely ‘Intro. to History and Theory of Arts’, ‘Theory of Knowledge’, ‘Cultural Anthropol.’ and ‘Introduction to Sociology’. In a nutshell, as mentioned before, the academic experiences (D1, 1.84) are the ones that stood out the most in relation to experiences in social dimension scope (D2, 2.60), regarding the variable adjustment to higher education, and it may be noted that these are the experiences that most represent the students' experiences. Likewise, we can observe that, in comparison with social dimension, the academic dimension shows higher values of correlation between the variable adjustment to HE (A) and the variable academic achievement (B), and it can be concluded that there is a strong influence between adjustment to HE and academic achievement.

## 6.4 Concluding comment

The results of this study reveal that there is a strong influence between academic and social adjustment on academic achievement. The results showed that students are well adjusted with higher adjustment rates in the academic adjustment dimension, where the components of “motivation”, “academic engagement” and “academic satisfaction” play a fundamental role in adjusting to higher education and therefore in academic achievement. Thus, it is observed that a well-adjusted student is the one who is highly motivated and translates this motivation into application to studies, through their commitment in the various activities of academic domain having a high level of satisfaction with the academic environment and the faculty body.

Therefore, motivational indicators such as: ‘Participation in class’, ‘being updated with academic work’, ‘Interest in learning’, ‘Enthusiasm’, ‘Class attendance’ and “academic engagement” such as ‘perception of academic work’, ‘summarizing lectures’, ‘writing and submitting academic papers’, ‘accomplishment of tasks on time’ and the perception and satisfaction with: ‘program faculty field of knowledge’, ‘academic situation’, ‘faculty field of knowledge’ demonstrated to be of great importance in this study bringing homogeneous results among students, becoming important as they are for adjustment to university.

However, adjustment difficulties were found in the fields ‘contact with faculty’, ‘satisfaction with faculty-time availability’ and ‘home-work accomplishment’. The results of this study suggest that high levels of adjustment to higher education can be translated into high academic achievement indexes, with a greater focus on academic adjustment; in other words, the higher the index of adjustment (academic and/or social), the higher will be the performance and academic achievement.

On the other hand, and not least, the results of this study also indicate that “connectedness with social ties”, “engagement in social activities”, and “withdrawal from the family” also contributes significantly to higher education adjustment as well as to persistence. It was observed in this study that students have had positive indexes in making new friends, in the easiness of building friendships (with classmates and roommates) and self-esteem, the latter contributing positively in the construction of social ties in campus. Some adjusting difficulties in this framework were found in the

indicators opposite sex friends, have a loyal friend and Informal student-faculty interaction. Wherein, the latter has already been seen in the formal academic environment, “academic engagement” component (contact with faculty) and surprisingly, approximate values are observed, revealing that in general there is no satisfactory interaction experiences with lecturers.

Concerning the component “engagement in social activities”, higher participation rates were observed in the indicators ‘concert tours’ and ‘art exhibitions attendance’ and lower rates in the activities or unions such as ‘participation in sports’, ‘cultural workshops attendance’, ‘drama societies connectedness’, ‘participation in Dancing sessions / workshops’, ‘student Union connectedness’.

Finally, the “nostalgia” aspect presents a mean of 2.93 but denotes moderate values suggesting that there is a balance in the nostalgic feelings of lonesome for home, loneliness and the desire to departure from university and return home. In other words, it can be asserted that these students developed skills that enabled them to be less dependent on their families and to look at nostalgic feelings as an impediment to be overcome in order to pursue their academic goals positively, what in other terms is referred as the positive psychological benefits of nostalgia.



## **CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS**

### **INTRODUCTION**

This research study carried out with 1st year students on 1st semester attending the Higher Institute of Arts and Culture in the academic year 2015 had as the main aim to investigate if academic and social adjustment to higher education influence on academic achievement. In order to perceive the relationship between academic and social adjustment to higher education and academic achievement, as well as to propose strategies that can minimize the negative consequences of this important period in the trajectory of university students based on the understanding and analysis of students' perceptions in connection towards this problem.

The investigative questions that guided this study have been as follows:

- (1) How Mozambican first-year students experience academic adjustment?
- (2) How Mozambican first-year students experience social adjustment?
- (3) How adjustment to higher education influence on academic achievement?

The universe of the students interviewed is balanced, in which 49.2% are female and 50.8% are male; 73.8% are scholarship students, where 61.5% are full-time resident students holding a full scholarship. The majority of students 81.2% come from other provinces and cities.

## 7.1 Conclusion

The transition and entrance to higher education implies a series of transformations in study habits in the friendship networks and social support of young students (Hanberger & Spencer, 2000). Friendship networks and activities previously practiced at the secondary level are no longer compatible with the new academic context; there is now the need to establish new bonds of friendship (social ties) and social activities. Adjustment to HE thus implies integrating academically and socially with the people of this new context, having a high level of motivation, academic engagement, satisfaction with the academic environment participating in social activities and developing satisfactory interpersonal relationships.

The respondents' reports showed a great diversity of experiences related to admission and adjustment to HE. However, this study focused on the academic and social variables of adaptation, considering that they are more significant in the process of adjustment to higher education in this academic context leaving aside, for the purposes of his study, the institutional (attachment) and emotional variables for future research in the field.

Hence, we begin from that assumption that a well academically and/or socially adjusted student has positive academic achievements. Thus, the experiences found in this study, seem to reflect a range of possibilities that are more or less common to most university students in Mozambique and particularly to Isarc, where the study was conducted.

Throughout this study, It was observed that the entrance to HE, brings a series of more academic changes (than social) to students, where new paradigms at the level of demands are imposed on them, and these, in turn, need to develop coping strategies to deal with different obligations of academic nature, developing a sense of responsibility in both academic and social spheres. The entrance to university, in this case, is a potentially stressful experience creating in the young student adverse or challenging situations that bring the opportunity of autonomous development and personal growth (Pascarella & Terenzini, 2005).

Nevertheless, entrance into the university itself is perceived as a potentially shocking event in the student's life. The first university requirements can be perceived as very abrupt, causing one to feel lost in everyday university life. This abrupt change perception reveals the unpreparedness that the first-generation university student generally presents in response to university's demands and mode of operation. A shortage of follow-up, greater knowledge about what the university is, what to expect from it, both academically and personally are factors that may contribute to adjusting difficulties (Bardagi, 2007).

Adjustment difficulties lead students not to engage in studies, to have feelings of frustration and despair leading to situations of attrition and intentions to departure from university. In this regard, the degree of motivation for the specific course (evaluated in this study) as well as the student effort followed by the application of this effort (academic engagement) and the student's perception and satisfaction about the academic context (academic environment), besides the aspects of social interaction and participation in social activities, are factors that differentiate those who persist in their major and consequently achieve good results (academic achievement) from those who give up in the face of difficulties.

However, the majority of study participants did not present difficulties in adjusting to university which suggested failure to meet with academic requirements, although feelings of 'loneliness', 'dissatisfaction with faculty time availability after class', 'lack of formal and informal student-faculty contact', 'home work accomplishment', 'relation with opposite sex', 'lack of loyal friends', besides low participation in social activities and sports have been identified.

The values obtained in this study emphasize a varied range of results by components, however more or less homogeneous values are found in different indicators. It is concluded based on a distribution of the scores in a likert scale of five points that the students present positive indexes in the components: "Motivation", "Academic Environment", "Academic Engagement" and "Social Ties Connectedness". Thus it is concluded that, after a more or less afflicted process of application and entry into Higher Education, under the existing policy of Higher Education in Mozambique, the students after 6 months at ISARC are positively "adapted" from the academic

adjustment point of view including the social adjustment variable “social ties connectedness”.

The students present lower levels of satisfaction and commitment (around the intermediate value 3) in the following components: "Engagement in social activities" and "Nostalgia". The weak involvement of students in social activities including sports, among others may be associated with the following key factors: insufficient time for involvement to greater knowledge and participation in this type of activities or lack of timing and emphasis given to these activities.

The homesickness of family and friends can be explained due to the adjustment phase (1<sup>st</sup> semester) in which they are and as we refer in this study they do not represent alarming indexes, on the contrary, reveal equilibrium values. Likewise, the weak indicators ‘ formal and informal student-faculty contact’ and ‘faculty time availability after class’ can also be explained by the temporal issue (1<sup>st</sup> semester) apart from the problem of non-opening and readiness by the teachers. The causes for adjustment difficulties in the items ‘homework accomplishment’, ‘relation with opposite sex’ and ‘lack of loyal friends’, though regarding the first item students claim the burden of academic works, are unknown, requiring a future research to analyze a cause-effect factor .

## **7.2 The Research problem: "How academic and / or social adjustment to higher education influence on academic achievement?"**

Regarding the research problem of this study, correlation values of positive significance were observed between the component “motivation” and the subjects of ‘Study Skills’, ‘Theory of Knowledge’ and ‘Introduction to History and Theory of Arts’, which surprisingly revealed to be the index that had positive correlations with more than one discipline. In addition, moderate positive correlations were found between the components "academic environment" and the disciplines ‘Theory of Knowledge’ and ‘Study Skills’; "Social ties connectedness" and the ‘discipline Introduction to Sociology’ and finally "Nostalgia" with the disciplines ‘Introduction to History and Theory of Arts’, ‘Study Skills’ and ‘Theory of Knowledge’, presenting higher values of moderate positive correlation.

The "academic dimension" is the one that presented correlation values of positive significance with the subject of 'Theory of knowledge' and moderate positive correlation with 'Introduction to Sociology', surprisingly the disciplines with higher grade point averages. Contrary, the "social dimension" is the one that presented lower correlation values, although positive with the subjects of 'Study Skills' and 'Theory of Knowledge'. The latter presents a correlation with two adjustment dimensions to HE.

The results of this study show, on one hand, that students who have experienced the best academic experiences in the academic dimension have better academic performances and achievements. On the other hand, the components related to social dimension showed less related to academic performance in comparison with the components that make up the academic dimension.

Nonetheless, social adjustment dimension plays a core role in the issue of adjustment to HE, indeed, without the social interaction component students experience many difficulties in the academic context, these in turn inhibit student's adjustment/integration, leading to attrition rates, weak social, psychological and moral development. Throughout this scenario, innumerable characteristics of failure arise which then prevent the development mentioned above and finally leading to situations of dropout, evasion and even suicide in many cases. Evasion rates in HE have been increasing with greater focus in the first-generation university students. Tinto (1975), asserts that evasive behavior consists of a process of longitudinal interactions. Thus, the individual with a set of characteristics interacts in the social and academic system at campus and the result of this interactive process will lead to permanence [and thus persistence] or to various forms of evasion.

A growing body of literature points out in this direction that motivation to learn, academic demands, clear sense of purpose and general satisfaction with academic environment are closely related to academic performance (Baker & Sirk, 1984a, 1984b, 1989). Kuh et al. (2007) proposed that student success can be defined broadly to include academic achievement, engagement in educationally purposeful activities, satisfaction, and acquisition of desired knowledge, skills and competences and attainment of educational objectives.

To sum up, in relation to these results, the literature in the area has already confirmed that the challenges brought by transition and adjustment into higher education subsystem have implications in the academic life of the student, particularly, academic performance. The transition from secondary education to higher education can be seen as a source of crisis and vulnerability, as well as a source of developmental challenges. The academic success of university students is intrinsically linked to several factors, that is, results from an interaction between personal, emotional, institutional, social and academic factors. Thus, for the purposes of this study the latter two factors were analysed whereby it was concluded that the students are academically and socially well adjusted, with greater indexes of adjustment in the academic dimension.

### 7.3 Recommendations

This study amplifying the knowledge about the impact of the university adjustment on the academic achievement in higher education courses aims to promote psychosocial intervention strategies that facilitate the resolution of conflicts generated at the moment and that stimulate academic success. The strategies of psychosocial support directed to students could be elaborated through a range of forms and contents with the aim of giving the student the opportunity to stimulate the development of their potential and to improve the adjustment to academic life.

In this regard, this study serves as a reference for universities to understand the importance of creating a space which contributes to the integral formation of the human being, mainly considering that the emotional and cognitive components are constituent parts. In addition, with the aim of promoting the student's overall development, the university should expand its functions, allowing the preparation of proposals for preventive interventions to ensure academic achievement. To this purpose Boyd *et al.*, 1998) emphasize the importance of preventive services to reduce the incidence of a certain problem detected with the university population. The main goal of these services is to serve students providing counselling services to address student's stress from personal, academic, social, and/or career pressures which may interfere with their academic performance, thus, leading to situations of attrition and therefore later to situations of departure.

Working in the identification and resolution of these risk factors would minimize the impact of the difficulties experienced by the students due to the entry into higher education and would facilitate the integration of the student in the university life and consequently their academic performance. Many authors point out as relevant for this moment the planning of training programs for strategies of academic self-regulation (Boyd *et al.*, 1998; Zenorine e Santos, 2004)

In addition, the results of this study on academic achievement, suggest greater pedagogical concerns by course directors, the faculty and managers of higher education. Thus, the importance of attending the academic preparation of students - not always enough - for the course they will attend and to support for instance, developments of study competence, bibliographic consultation or handling computer

resources. It is also important to organize and update the pedagogical dossiers of curricular units, to encourage students to participate in volunteer and research projects in the training areas, create mechanisms for faculty interconnection or elder students, and to use new technologies in the teaching and learning process.

Nonetheless, the specificities of the academic environment and their demands suggest the need for higher education institutions to create psycho-socio-educational support services, paying special attention to certain specific groups of students without stigmatizing them. At the same time it would be relevant to pay more attention to the extracurricular activities that take place on or off campus. The frequency, intensity and typology of activities do not always stimulate students' development and feeling of belonging to their course and their institution, justifying more research in the field. Encouraging participation of students in campus services, volunteering in the community, sports and leisure activities (interpersonal skills, leadership and satisfaction and self-esteem) or in teacher research activities can be a much more dignifying and developmental alternative than a great number of occurrences (academic praxes and parties) that are annually repeated in our higher education institutions.

Therefore, It is important to emphasize that even considering the limitations of this study, both due to reduced number of the sample and for the fact that the place which the study was carried out, a higher education institution with very specific characteristics (Arts and Culture Studies), requiring further research with the population mentioned, we found results similar to the literature available. The results presented justify the continuity of this study in our country, since studies addressing this topic are scarce, as in fact the literature attests on the importance of students academic experiences in higher education to retention and therefore to academic success and psychosocial development.

The main objective of the present study was to analyze the relationship between academic experiences (adjustment to HE) and academic achievement. Based on the results presented, it can be concluded that the university should give greater attention to new students, implementing psychosocial support interventions in order to minimize the factors of difficulty in the transition and educational adjustment, and thus facilitate academic achievement.



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## Appendix1: Higher Education Institutes in Mozambique (2015)

### Public Institutions

Nº	Institution	Year of creation
1.	Academia de Ciências Policiais (ACIPOL)	1999
2.	Academia Militar (AM)	2003
3.	Escola Superior de Ciências Náuticas (ESCN)	2004
4.	Escola Superior de Jornalismo (ESJ)	2008
5.	Instituto Superior da Administração Pública (ISAP)	2005
6.	Instituto Superior de Artes e Cultura (ISArC)	2008
7.	Instituto Superior de Ciências de Saúde (ISCISA)	2003
8.	Instituto Superior de Contabilidade e Auditoria de Moçambique (ISCAM)	2005
9.	Instituto Superior de estudos de Defesa, Armando Emilio Guebuza	2011
10.	Instituto Superior de Relações Internacionais (ISRI)	1986
11.	Instituto Superior Politécnico de Gaza (ISPG)	2005
12.	Instituto Superior Politécnico de Manica (ISPM)	2005
13.	Instituto Superior Politécnico de Songo (ISPS)	2008
14.	Instituto Superior Politécnico de Tete (ISPT)	2005
15.	Universidade Eduardo Mondlane (UEM)	1962
16.	Universidade Lúrio (UniLúrio)	2006
17.	Universidade Pedagógica (UP)	1985
18.	Universidade Zambeze (UniZambeze)	2006

### Private Institutions

Nº	Institution	Year of creation
1.	Escola Superior de Economia e Gestão (ESEG)	2004
2.	Escola Superior de Gestão Corporativa e Social (ESGCS)	2013
3.	Instituto Superior Cristão (ISC)	2005
4.	Instituto Superior de Ciência e Gestão (INSCIG)	2009
5.	Instituto Superior de Ciência e Tecnologia Alberto Chipande (ISCTAC)	2009
6.	Instituto Superior de Ciência e Tecnologia de Moçambique (ISCTEM)	1996
7.	Instituto Superior de Comunicação e Imagem de Moçambique (ISCIM)	2008
8.	Instituto Superior de Educação e Tecnologia (ISET)	2005
9.	Instituto Superior de Estudos de Desenvolvimento Local (ISEDEL)	2012
10.	Instituto Superior de Formação, Investigação e Ciência (ISFIC)	2005
11.	Instituto Superior de Gestão de Negócios (ISGN)	2011
12.	Instituto Superior de Gestão, Administração e Educação (ISG)	2013
13.	Instituto Superior de Gestão, Comércio e Finanças (ISGECOF)	2009
14.	Instituto Superior de Tecnologia e Gestão (ISTEG)	2008
15.	Instituto Superior de Transportes e Comunicações (ISUTC)	1999
16.	Instituto Superior Dom Bosco (ISDB)	2006
17.	Instituto Superior Maria Mãe África (ISMMA)	2008
18.	Instituto Superior Monitor (ISM)	2008
19.	Instituto Superior Mutasa (ISMU)	2012
20.	Instituto Superior de Ensino à Distancia (ISEAD)	2014

21. Instituto Superior de Ciências e Educação à Distância (ISCED)	2014
22. Instituto Superior de Gestão e Empreendedorismo Gwaza-Muthini	2014
23. Universidade Adventista de Moçambique (UAM)	2011
24. Universidade Católica de Moçambique (UCM)	1995
25. Universidade Mussa Bin-Bique (UMB)*	1998
26. Universidade Jean Pieget (UJPM)	2004
27. Universidade Nachingwea (UNA)	2011
28. Universidade Politécnica (A POLITÉCNICA)	1995
29. Universidade São Tomás de Moçambique (USTM)	2004
30. Universidade Técnica de Moçambique (UDM)	2002
31. Universidade Metodista Unida de Moçambique (UMUM)	2014

Adapted from source: Higher Education and Research Institutions Statistical Data (Ministry of Science and Technology, Higher Education and Technical-Professional, 2015)

## Appendix2: Student Adjustment to University Questionnaire

Name \_\_\_\_\_ Date \_\_\_\_\_

Sex:  F  M Date of Birth: \_\_\_\_\_

Semester 1  2

**Instructions:** The 40 statements that contain this form attempt to describe the students' college experience. Read each option and decide how close it applies to you right now. For each statement, mark the one that best represents your experience. Mark only one option for each statement.

Statements	A Very closely to me	B Closely to me	C Neither	D Not closely to me	E Not closely to me at all
<b>1.1 Motivation</b>					
1. I attend classes regularly.					
2. I keep up to date with academic work.					
3. I participate in class regularly					
4. I am satisfied with my decision to attend this Higher Education Institution.					
5. Most of the subjects of my interest are related to my course.					
6. I know why I am in Higher Education and what I want with the training.					
7. I have been working hard as I ought with regard to academic work.					
<b>1.2 Academic Engagement</b>					
8. I enjoy performing the tasks required in my course.					
9. I usually write and submit academic papers.					
10. I usually take notes in the class					
11. I usually do my tasks on time.					
12. I usually carry out my tasks with my classmates.					
13. I like reading a variety of teaching materials related to my course.					
14. I have good performances during tests.					
15. I have been very efficient in managing my study time.					
16. I have many difficulties with doing homework.					
17. I am often in contact with my lecturers.					

<b>1.3 Academic Environment</b>					
18. I am satisfied with the variety of discipline available in my course.					
19. I am satisfied with the curricular program of the disciplines in this semester.					
20. I am satisfied with the faculty field of knowledge					
21. I am satisfied with the availability of faculty' time after classes.					
22. I am satisfied with my academic results.					
<b>2.1 Social ties connectedness</b>					
23. I have met many people and made many friends as I expected					
24. In general, have personal and informal relations with my lecturers.					
25. I get along with my roommates (please omit if you do not have roommates).					
26. I feel at ease in making friends					
27. 27. I get along with people of opposite sex.					
28. My self-esteem helps me for building friendships.					
29. I have good friends or acquaintances with whom I can talk about any problems I may have.					
<b>2.2 Engagement with social activities</b>					
30. I am involved in sports at university.					
31. I usually attend cultural workshops.					
32. I usually attend art exhibitions at the university.					
33. I am involved in theater societies.					
34. I participate in regular concert tours.					
35. I participate in dance and workshops sessions at the university.					
36. I participate actively in meetings / assemblies or other activities of the Students' Association.					
<b>2.3 Nostalgia</b>					
37. I like to live in the dormitory (please					

omit if you do not live in the dormitory).					
38. The separation from the family contributes negatively to my studies.					
39. I usually feel lonely at campus.					
40. Comparing, I would rather be at home than here in ISARC.					