

**The Effects of Academic Adjustment, Social  
Adjustment and Personal-Emotional Adjustment of  
Students on Their Academic Performance in  
Universities of Northern Cyprus**

**Niusha Eivazzadeh Kaljahi**

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Approval of the Institute of Graduate Studies and Research

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Prof. Dr. Cem Tanova  
Acting Director

I certify that this thesis satisfies the requirements as a thesis for the degree of Master of Business Administration.

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Prof. Dr. Mustafa Tümer  
Chair, Department of Business Administration

We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Master of Business Administration.

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Prof. Dr. Cem Tanova  
Supervisor

---

Examining Committee

1. Prof. Dr. Sami Fethi

---

2. Prof. Dr. Cem Tanova

---

3. Asst. Prof. Dr. Dogan Unlucan

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## ABSTRACT

Improving academic performance of students during their educational life is a considerable issue for administrators of universities, professors, students and the whole education system. Students face to a new stage of their life while starting their higher education period. This study investigates whether the ability to adapt to higher education is a significant factor in student academic performance. We examine the academic performance of higher education students in Northern Cyprus and we investigate how it may be related with their adjustment to the educational life academically, socially and personally-emotionally.

A total number of 200 students participated in the survey. Data on academic-, social- and personal-emotional adjustment of students (Baker & Syrik, 1999) were collected and constituted the study's independent variables and students' academic performance was the dependent variable of the study. Exploratory factor analysis, correlation coefficients and hierarchal multiple regression analysis were applied to test the hypotheses. Implications of the results and suggestions for future research are discussed.

**Keywords:** Academic Performance, Academic Adjustment, Social Adjustment, Personal-emotional Adjustment, Northern Cyprus

## ÖZ

Öğrencilerin akademik başarısının eğitim sürecinde artırılması konusu üniversite yönetimleri, öğretim üyeleri, öğrenciler ve tüm eğitim sistemi açısından önem taşımaktadır. Yükseköğretime başlarken öğrenciler yeni bir aşamaya girmektedirler. Bu yeni aşamaya uyum gösterme becerileri eğitimlerinin sonuçlarını etkileyebilmektedir. Bu çalışma öğrencilerin yükseköğretime uyumunun önemini, nasıl oluştuğunu ve etkisini incelemektedir. Kuzey Kıbrıs'ta eğitim görmekte olan üniversite öğrencilerinin eğitim yaşamına akademik, sosyal ve kişisel açılardan ne derecede uyum sağlayabildikleri ve bu uyumun akademik başarılarına katkısı incelemektedir.

Toplam 200 öğrenciden veri toplanmıştır. Akademik, sosyal ve kişisel uyum ilgili literatürde (Baker & Syrik, 1999) daha önce kullanılmış ölçeklerden oluşturulan anketlerle ölçülmüş ve çalışmanın bağımsız değişkenlerini oluşturmuştur. Öğrencilerin akademik başarısı ise çalışmanın bağımlı değişkenini oluşturmuştur ve öğrencinin üniversitedeki genel not ortalaması ile ölçülmüştür. Faktör analizi, korelasyon ve regresyon analizleri ile hipotezler test edilmiştir. Çalışmanın sonuçları tartışılmış ve ileride yapılacak çalışmalar için öneriler verilmiştir.

**Anahtar Kelimeler:** Akademik Başarı, Akademik Uyum, Sosyal Uyum, Kişisel Uyum, Kuzey Kıbrıs

*To my warm-hearted father, Hosein*

*and*

*my compassionate mother, Susan*

*For their endless love, strong support and abundant encouragement*

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## LIST OF ABRIVIATIONS

A	Age
AE	Academic Environment
BUN	British University of Nicosia
CIU	Cyprus International University
CIQ	Community Integration Questionnaire
EIG	Educational-Institutional Goals
EMU	Eastern Mediterranean University
EUL	European University of Lefke
GAU	Girne American University
GPA	Grades Point Average
G	Gender
I	Income of the respondents
ICT	Information and Communication Technology
IR	Interpersonal Relations
ITU-TRNC	Istanbul Technical University-Turkish Republic of North Cyprus
L	Level of study
METU-NCC	Middle East Technical University-North Cyprus Campus
M	Motivation
M'	Major of study
N	Nationality
NEU	Near East University
PF	Perceived Fit
PHE	Physical Efficacy

PSE	Psychological Efficacy
SACQ	Students Adaptation to College Questionnaire
SC	Self-Confidence
SP	Social Participation
SPSS	Statistical Package for Social Science
TRNC	Turkish Republic of Northern Cyprus

# Chapter 1

## INTRODUCTION

### 1.1 Relevance of Current Topic

Successful performance of students is understood not only by their hardworking effort, but also, by their highly well situation of adjustment to the environment which they choose to start their educational life. Plenty of studies have been conducted to determine the modality of such incident as students' adaptation (Standing & Parker, 1964; Stern, 1966; Shaw, 1968; Baker, McNeil & Siryk, 1985; Hoffman & Weiss, 1987; Campbell & Watkins, 1988; Lapsley, Rice & FitzGerald, 1990; Plaud, Baker & Groccia, 1990; Blustein, Walbridge, Friedlander & Palladino, 1991; LopezKenny & Donalson, 1991; Baker & Schultz, 1992; Mallinckrodt, 1992; Gerdes and Mallinckrodt, 1994), students' academic adjustment (Tinto, 1975; Baker & Siryk, 1999; Thomas, 2002; Bok, 2003; Gloria, Castellanos, Lopez & Rosales, 2005; Zhou, Jindal-Snape, Topping & Todman, 2008; Russell, Rosenthal & Thomson, 2010; Rienties, Beusaert, Grohnert, Niemantsverdriet & Kommers, 2011), students' social adjustment (Furnham & Alibhai, 1985; Bochner, Mcleod, Lin, 1997; Ozga & Sukhnandan, 1998; Tinto, 1998; Ward, Okura, Kennedy & Kojima, 1998; Cokley, Bernard, Cunningham & Motoike, 2001; Christie, Munro & Fisher, 2004; Zepke & Leach, 2005; Attewell, Lavin, Domina & Levey, 2006; Wilcox, Winn & Fyvie-Gauld, 2006; Severiens & Wolf, 2008; Meeuwisse, Severiens & Born, 2010), students' personal-emotional adjustment (Chickering 1969; Henton, Lamke, Murphy & Haynes, 1980; Pappas & Loring, 1985; Baker & Syrik, 1999; Keating et



al., 2010; Rienties et al., 2011) and students' academic performance (Gerdes and Mallinckrodt, 2001; Wilcox et al., 2006; Rienties et al., 2011). Also a review on previous literatures were carried out based on comparing international students' situation with domestic students' situation in the matter of adaptation and acculturation (Jochems et al., 1996; Ward et al., 1998; Berry, 1999; Ward & Rana-Deuba, 1999; Beyers & Goossens, 2002; Ward et al., 2004; Asmar, 2005; Morrison et al., 2005; Sam & Berry, 2006; Barrie, 2007).

Having well adjusted students is one of the purposes of any university since it has been found that students' adjustment can have a remarkable effect on students' academic performance, and having students with better academic performance give more successful image of the university (Rienties, Beusaert, Grohnert, Niemantsverdriet & Kommers, 2011). A student's academic performance counts as one of the core factors which shows the university's efficiency (Asmar, 2005; Barrie, 2007). The result of "Students Adaptation to College Questionnaire" (Baker & Siryk, 1999) has disclosed three main contributors of students' adjustment to their educational life and stated that adjusting academically, socially and personal-emotionally is very essential for students. Therefore, the relationship between students' academic, social and personal-emotional adjustment with their academic performance can be concentrated by universities to catch better results, having more successful students and being a more prosperous university (Baker & Siryk, 1999; Rienties et al., 2011). Students' adjustment has been found to be a fundamental component of students' academic performance by lots of investigators (Asmar 2005; Baker & Siryk, 1999; Barrie 2007; Jochems et al., 1996; Morrison et al., 2005; Russell et al., 2010).

According to Rienties et al. (2011) latest studies has discovered students' adjustment happen hardly specially between international students and it may become a reason for students' poor learning outcome. This phenomenon mostly occurs when students' integration do not make higher education institutes satisfy, and the reason is students are not well-adjusted in order to the universities requirements (Asmar 2005; Barrie 2007; Jochems et al., 1996; Morrison et al., 2005; Russell et al., 2010).

## **1.2 Aim of the Study**

Lots of theories and many conceptions have been previously brought up about academic adjustment, social adjustment, personal-emotional adjustment and academic performance of higher education students. Though, existence of a notable overlap has been noticed in earlier literatures which declaring the impact between variables mentioned above, and it has guided the investigator to create a survey that would give a hand to the study's progress and illumination.

The primary goal of this dissertation is to assess and find how students' academic, social and personal-emotional types of adjustment to the educational life have impact on their academic performance. Thus, the following research questions have conducted in respect to the developed hypotheses and the theoretical model:

1. How do various types of adjustment influence a student's academic performance?
2. How the elements of different types of adjustment can affect a student's academic performance?

Thereby, the other goals of the current study are to give ideas to future researches and to afford guidance to the whole higher education system.

### **1.3 Outline of the Study**

Seven chapters conduct this dissertation. As it had been seen already, the first chapter has been created to demonstrate the relevance of the selected subject to provide the required information based on the aims and objectives of the present research. Chapter 2 consists of investigations and provided information by previous literatures that have been composed by all around the world researchers about academic, social and personal-emotional adjustment and higher education students' academic performance, as well as reviews of former analyses of impacts and relationships between the variables mentioned. Chapter 3 introduces universities of Northern Cyprus as the current study's population, introduces universities of the sample where this thesis has been carried out and identifies existent problems in educational system of Northern Cyprus with regard to the major concept of the research. Chapter 4 is devoted to develop the hypotheses and to clarify the theoretical model of the dissertation. Chapter 5 expresses the methodology of the present survey, data collection methods and forming sample process, as well as improvement of questionnaire procedure have been explained. Chapter 6 describes the study's analyzing system in respect with the hypotheses and the theoretical model. This chapter includes descriptive statistics, factor analysis, correlation analysis and hierarchical multiple regression. The last chapter presents the discussions about the results have been reached to, derived conclusions, the investigator's suggestions for higher education institutes' administrations and limitations of the research.

## **Chapter 2**

### **LITRETURE REVIEW**

#### **2.1 International Students versus Domestic Students**

Previous literatures contains theoretical models of international students' adjustment to their academic environment in higher education level of study and concepts of students' acculturation, retention and adaptation (Baker & Siryk, 1999; Berry, 1999; Beyers & Goossens, 2002; Sam & Berry, 2006; Ward & Rana-Deuba, 1999; Ward et al., 1998; Zhou et al., 2008). Adaptation of students with various cultures is a challenge in an evolutionary way to acculturate themselves with the host country's culture and environment, while they contact with students from another culture such as local students (Berry, 1999).

Near half of a sample of international students in a study in Australia felt a remarkable amount of anxiety which usually was caused by cultural shocks, self perceived of racial discrimination and feeling homesickness (Russell et al., 2010). International students usually are not associated well with the necessities of higher education institutes of the host country (Asmar, 2005; Barrie, 2007; Jochems et al., 1996; Morrison et al., 2005; Russell et al., 2010). During working in a group with local students, they need to acculturate and adjust themselves with them, this happen to domestic students as well, they need to learn how adapt themselves during working with international students to have a successful result of a group working at the end (Russell, Rosenthal & Thomson, 2010). While students with various cultures

work as a group (including two or more cultures), cultural changes happen in every student from domestics to internationals, but mostly one group differs less than the other one, this group is called the dominant ones (Berry, 1999).

International students are mostly taken in a position that required more attention and further attempt in comparison to domestic students, in order to adapt themselves socially to their new educational situation (Bochner et al., 1977). One reason of harder social integration of international students is related to unreachably of their family, their home country's friends and even social communities of the home country (Zhou et al., 2008). In addition, it should be mentioned that social communities of international students do not have enough chance to completely know the explicit and implicit culture, customs and tradition of the host country or/and the host university. This happens especially for the international students who start their educational life by attending at a higher education institute located in a country which have a different culture with their home country (Asmar, 2005; Bochner et al., 1977; Rienties et al., 2011; Russell et al., 2010; Zhou et al., 2008).

According to Baker and Siryk (1999) there are several concepts which play important roles on the students' academic fulfillment. Three types of adjustment are indicated between these concepts, they are academic adjustment, social adjustment and personal-emotional adjustment. A positive relation was detected by Baker and Siryk (1999) between progress of students in their studies and these three types of adjustment in a huge number of researches in United States' universities. Therefore, academic performance of higher education students is influenced by the amount of their adjustment to their educational life academically, socially, personally and emotionally (Baker & Siryk, 1999). Some further concepts may affect well academic

adjustment, perfect social acculturation and successful personal and emotional adaptation of students particularly in the case of international students (Russell et al., 2010; Sam & Berry, 2006; Ward et al., 2004; Zhou et al., 2008).

## **2.2 Adjustment of Higher Education Students**

Students experience several different situation during their educational life. They face various conditions while coming to higher education level from high school or passing under-graduation and coming to graduated level and so on in each upper levels. Sometimes they are forced or choose themselves to leave their home country for continuing higher education to achieve their future goals. When these processes happen, students should try to find their feet in the new environment. According to Gerdes and Mallinckrodt (1994) adjusting to the new environment for higher education students can cause problems for achieving their expected fulfillment of studying.

There are a huge number of factors recognized by scholars which establish adjustment of higher education students and affect their academic performance. These elements include social and emotional support from family, relationship of parents with the student, even affiliation between parents (Hoffman & Weiss, 1987; Lopez, Campbell & Watkins, 1988), self-perception and self-confidence of students, having motivation to achieve academic goals, having an internal sense of controlling their self-concentration, psychological and physical health (Kenny & Donalson, 1991; Lapsley, Rice & FitzGerald, 1990; Mallinckrodt, 1992), their interest to coping with their future career and their commitment to the career (Blustein, Walbridge, Friedlander & Palladino, 1991), the academic and social environment of the university (Gerdes & Mallinckrodt, 1994) and high expectation of students from their

own capabilities (Baker, McNeil & Siryk, 1985; Baker & Schultz, 1992; Plaud, Baker & Groccia, 1990; Stern, 1966; Shaw, 1968; Standing & Parker, 1964).

Consequently, students' adaptation to university is formed by an extensive range of components which were determined by previous studies. While it seems the factors are in one area subjectively but there are certain differences between them as well, although these differences are not distinct sharply but it is preferred to separate them and put related factors in same dimensions (Gerdes & Mallinckrodt, 1994). This classification help to apply more systematic analyses.

Baker and Siryk (1999) with regard to adaptation model of Tinto (1975) divided adjustment of college students to three types named academic adjustment, social adjustment and personal-emotional adjustment. Therefore, it has been decided to examine the effect of these three types of adjustment on students' academic performance in the current dissertation.

### **2.2.1 Academic Adjustment of Higher Education Students**

Tinto (1975) described academic adjustment of higher education students as the degree of students' adaptation to academic manner of their educational life. The amount of accomplishment of students in their studies displays by academic adjustment, this accomplishment defines by students' success in dealing with different kinds of educational demands (Baker & Siryk, 1999). Students adjusts academically well, if they have motivation, believe their capabilities, implement their abilities, be satisfied with their chosen universities and even the level of loyalty to their academic aims (Rienties et al., 2011).

The pleasant precedent or appreciated perception of an academic environment in the perspective of people impacts students' social adjustment, these people could be family members, friends and the general public (Gloria et al., 2005; Thomas, 2002). During the process of selecting a higher educational program/institute, students pay attention to international ranking lists significantly and universities are aware of this influence, and it has found that academic suitable protection of universities and appropriate facilities of institutes have the ability to increase students academic performance (Russell et al., 2010; Zhou et al., 2008). In this manner, universities try to differentiate themselves in comparison to other higher education institutes by equipping their environment by academic and even non-academic but useful facilities for students such as campus life instruments, ICT centers, provided study plots, social programs and intercultural life (Bok 2003; Thomas 2002).

### **2.2.2 Social Adjustment of Higher Education Students**

Social adjustment of higher education students defined as the degree of students' adaptation to social manner of their educational life (Rienties et al., 2011). Students' social adjustment shows the amount of their ability to cope with the societal requirements and interpersonal demands of their educational life, such as taking part in group works, forming friendship with other students and involving themselves in extra-curricular programs of their college (Baker & Siryk, 1999). According to Rienties et al. (2011) social adjustment can affect by the reputation of the university in social activities participation of students by the social communities, social relations of students with their friends in the same social networks of students and students' perception of their own social integration.

Students who try to connect to teachers and other students well and who show more passion to participate in social activities have more chance to graduate (Severiens &



Wolf, 2008). Family relations, friends communications, sharing accommodation with other students and even informal connections with personnel of the higher educational institute help students adjust socially with their educational environment in a positive way (Wilcox, Winn & Fyvie-Gauld, 2006). Several researches determined that there is a huge impact on students' adjustment by colleges and students' social communities specially for freshmen (first-year students) (Christie et al., 2004; Rienties et al., 2011; Severiens & Wolff, 2008; Tinto, 1998; Wilcox et al., 2006; Zepke & Leach, 2005). Students who are not capable enough to adjust themselves with the university's social networks, will be in higher risk to incomplete their education (Ozga & Sukhnandan, 1998).

learning outcomes of students are influenced by social relations and interpersonal supports of students' family members and friends (Wilcox et al., 2005). Students' attitudes are impacted by their family members, their study-success can derive from the motivation given by their social and interpersonal relations and these effects were concluded in educational psychology (Attewell et al., 2006; Cokley et al., 2001; Ozga & Sukhnandan, 1998). Having unsatisfactory relations with social communities in universities, is one of the reasons students claim to cause them leaving their higher education program (Bochner et al., 1997; Christie et al., 2004; Meeuwisse et al., 2010; Ozga & Sukhnandan, 1998).

Fitting in social style of educational life causes students to socially adjust well in their academic environment and this process has a strong impact on their study performance (Rienties et al., 2011). According to Ward et al. (1998) living in a same accommodation with other friends, taking part in the programs of students' social networks such as study communities, students' unions or sports clubs (Bok, 2003;

Ozga & Sukhandan, 1998; Russell et al. 2010; Severiens & Wolf, 2008) and being friend with adequate number of students who have the same nationality or culture can establish more effective social adjustment of students and at last improve outcome of their studies (Bochner et al., 1977; Furnham & Alibhai, 1985). Tinto (1998) declared these activities make students to fit better to social environment of the universities, which is expected by higher education institutes.

### **2.2.3 Personal-Emotional Adjustment of Higher Education Students**

Personal-Emotional adjustment of higher education students describes as the degree of students' adaptation to personal and emotional manner of their educational life (Rienties et al., 2011). This adaptation includes the amount of physical and psychological anxiety or peace when students try to adjust with their educational environment (Baker & Syrik, 1999). Chickering (1969) claimed personal and emotional adjustment of higher education students to their educational life is a challengeable process.

Physical treatment of someone's body is a direct road to his mental, emotional, psychological and personal feelings (Keating, Guan, Pinero & Bridges, 2010). Thus, students' physical health can be a vital factor in their personal-emotional adjustment. When high school students shift to higher education level try to know their self-worthy and the correct arrows to their educational goals (Chickering, 1969). Students who face with inner distress may ask themselves about their educational identity and the result can be emotional crisis which may cause problems during their emotional adjustment process (Henton, Lamke, Murphy & Haynes, 1980).

According to Keating et al. (2010) well physical situation of college students and doing regular physical activities take their morality and mentality in a better personal emotional adjusted condition. Psychological turmoil such as anxiety, depression and low amount of self-esteem can be caused by personal and emotional problems of students, these factors prevent them to well adjusted personally and emotionally during their education (Gerdes & Mollinkrodt, 2001; Rienties et al., 2011; Pappas & Loring, 1985).

### **2.3 Academic Performance of Higher Education Students**

Academic performance of students is defined as the outcome of their studying process and the final result of their academic effort during education (Rienties, Beusaert, Grohnert, Niemantsverdriet & Kommers, 2011). This performance is assessed differently based on the higher education institutes' standards, rules and regulations. One of the main ways of appraising students' academic achievement is the average of their grades points known as GPA. GPA is used as an international evaluating method in the most education institutes around the world (Gerdes & Mallinckrodt, 2001). GPA was enough useful to measure students' academic performance in previous studies (Rienties et al., 2011). The current study choose students' GPA as a scale to compute their academic performance, as well.

#### **2.3.1 Academic Performance and Academic Adjustment**

Based upon interaction model of Tinto (1975), an effect found by Baker and Siryk (1999) on academic performance of students by their academic adjustment. According to Rienties et al. (2011), Gerdes and Mallinckrodt (2001), Baker and Siryk (1984a, 1984b & 1989) and Wessell et al. (1978) academic achievement of a student is not only determined by his scholarly ability or mental talent, but also it is distinguished by a student's motivation to fulfill his academic aims, believing his

capability to accomplish educational demands, trying to attain his academic goals and feeling satisfied of the academic environment. All these activities are main issues which assist students to adjust better in academically manner during education (Baker & Siryk, 1999).

### **2.3.2 Academic Performance and Social Adjustment**

During educational life of a student, he would be involved in a social and academic environment of the higher education institute. Social integration and adaptation in academic environment were recognized by previous scholars as effective factors on the student's academic achievement during the studying process (Mallinckrodt, 1988; Pantages & Creedon, 1978; Spady, 1970; Tinto; 1975). Social adjustment of higher education students includes several important elements such as trying to develop into social integration with other students, applying social activities together, socializing with each other, professors and the college's staffs, creating friendly communities which protect students in social manner and supporting by university when students involve in social difficulties, feeling loneliness or homesickness (Hays & Oxley, 1986; Houston, 1971; Lennig, Beal & Sauer, 1980; Lokitz & Sprandel, 1976; Pascarella, 1980; Rich & Scovel, 1987; Terenzini et al., 1981; Terenzini & Wright, 1987).

According to Hays and Oxley (1986) and Wilcox et al. (2006) a positive impact is determined on the success of students' academic performance who supported socially by their family and even their friends (such as their classmates in same social communities at the university). Social adjustment of students influences their academic performance, this effect determined by Tinto's interaction model (Baker & Siryk, 1999). This research would examine the impact of the students' social adjustment on their academic performance, as well.

### **2.3.3 Academic Performance and Personal-emotional Adjustment**

Students' personal and emotional issues during their educational life stay on an important area of adaptation to college which is named personal-emotional adjustment as the third type of students' adjustment (Pappas & Loring, 1985; Baker & Siryk, 1999; Rienties et al., 2011). According to Pappas and Loring (1985), this type of adjustment relates to students somatic condition and psychological situation such as physical health, feelings, self-esteem and mental matters.

Students' personal-emotional adjustment has found to affect their academic achievements (Baker & Siryk, 1999; Gerdes & Mallinckrodt, 2001; Rienties et al., 2011). Based upon previous literatures, some scholars determined students' feelings and bodily status such as self-worth, mental and physical distresses, self-crisis, anxiety, depression, self esteem and corporal health manage their academic performance and give direction to their studying outcome during their educational life (Chickering, 1969; Henton, Lamke, Murphy & Haynes, 1980; Pappas & Loring, 1985; Sherer, 1985; Vredenburg, O'Brien & Kramer, 1988).

## Chapter 3

### UNIVERSITIES OF NORTHERN CYPRUS: EASTERN MEDITERRANEAN, NEAR EAST AND GIRNE AMERICAN UNIVERSITIES CASES

#### 3.1 The Case Study

In the purpose of becoming familiar with the cases of the current dissertation, this section was allocated to a brief review on general demographic information of Northern Cyprus.

##### 3.1.1 Cyprus

Cyprus (Turkish: Kıbrıs, Greek: Κύπρος) is an island country located in the north east of Eastern Mediterranean Sea (The National Geographic Encyclopedia, 2015) which known as the third largest (Economic and Social Council of United Nations, 1987) and third most populous island of the sea (World Population Prospects, 2015). According to United Nations Statistical Division (1987), the country is officially called the island Republic of Cyprus (Turkish: Kıbrıs adası Cumhuriyeti, Greek: το νησί Δημοκρατία της Κύπρος).

According to Solsten (1991), after Cypriot inter-communal violence period, the island Republic of Cyprus was divided in two southern and northern parts. There are two main different governments apply rules of the country separately, one of them is known as the Republic of Cyprus (Greek: Κυπριακή Δημοκρατία) and the other one is called Turkish republic of Northern Cyprus (TRNC) (Turkish: Kuzey Kıbrıs Türk Cumhuriyeti; KKTC) (United Nations Statistical Division, 1987). The Republic of

Cyprus which is the southern part of the country is governed by Greek Cypriots and the northern part is governed by Turkish Cypriots (Kliot & Mansfield, 1997).

### **3.1.2 Northern Cyprus**

According to State Planning Organization of Northern Cyprus (2014) the Turkish Republic of Northern Cyprus covers approximately 36% of the island's area (around one third) which is populated in amount of 301,988 inhabitants. The economy of TRNC mostly leads by service sector which typically controls by public sector and consists of tourism, trade and education industries (Central Intelligence Agency of United States, 2015). Education as an economic sector which plays an important role in the revenue of the country attained \$400 million in 2011 (Ocakoglu, 2011).

### **3.1.3 Higher Education in Northern Cyprus**

Due to two important reasons, Northern Cyprus universities are chosen by the current research as the case to study on. One reason was the availability of data which was needed to collect for the investigator and the other more important reason was the quality of higher education in Northern Cyprus and the amount of international and domestic students which grows year by year.

In order to the quality of higher education of TRNC, it is enough to state that Higher Education Planning Evaluation Accreditation and Coordination Council of Northern Cyprus (Turkish: Yuksekogretim Planlama Denetleme Akreditasyon ve Koordinasyon Kurulu; YÖDAK) is one of the members of International Network for Quality Assurance Agencies in Higher Education (INQAAHE, 2015). In order to the amount of students in Northern Cyprus, according to Higher Education and External Relations Department of the country (2014), statistics proves there were 70,004 students from 114 countries in ten universities of Northern Cyprus in 2014. 18,646 of

this amount were internationals and 51,358 of them were domestics (15,210 Turkish Cypriots and 36,148 from turkey). In 2013 this amount was 63,765 students totally, which shows 4.66% growth rate in comparison with 2014 (Gusten, 2014).

### **3.2 Universities of Northern Cyprus and Their Place in the Country's Education System**

It would be valuable to introducing universities of Northern Cyprus in this section. There are ten universities in the whole area of Northern Cyprus which provides the demands of students who are willing to continue their education in higher levels.

#### **3.2.1 British University of Nicosia**

British university of Nicosia (BUN) is one of the youngest universities of Northern Cyprus which was established in 2013. BUN has five faculties and three schools. Engineering, economics, educational sciences, law and health sciences are the majors taught in this university. The mission of the university is transmission of cultural, scientific, technological and economic knowledge of the society and the vision includes the aim of changing the world dynamically, training qualified academicians and producing knowledge (<http://www.bun.edu.tr/en>).

#### **3.2.2 Cyprus International University**

Cyprus International University (CIU) was founded in 1997. CIU has eight faculties and four schools which afford various majors such as arts and science, economics, education, engineering, pharmacy, law and tourism management. The mission of the university is the aim of creating an experience of education in a real international environment and publicizing achieved knowledge for all societies' benefit, the vision consists of attracting international academicians from all over the world, providing skillful and equal atmosphere for a diverse range of students from all around the world, working with international academic institutes to present more



valuable curriculum and emphasizing on students' independence, sociability and responsibility (<http://www.ciu.edu.tr/en>).

### **3.2.3 Eastern Mediterranean University**

Eastern Mediterranean University (EMU), the governmental university of Northern Cyprus, was established in 1979. EMU has eleven faculties and five schools which offer different majors such as architecture, art and science, business and economics, communication and media studies, education, engineering, health science, law, medicine, pharmacy and tourism. The mission of the university is the aim of supplying suitable educational system with applying international standards to conduct and contribute knowledge for solving the society's needs and the vision includes training students as innovative and responsible professionals in their future career, contributing welfare in the area and preparing scientific atmosphere and facilities for students and academicians in order to developing and producing science and technology for wellbeing of creatures (<http://www.emu.edu.tr/en>).

### **3.2.4 European University of Lefke**

European University of Lefke (EUL) was established in 1990. EUL has nine faculties and three schools which offer various majors such as education, engineering, economic and administrative sciences, art and sciences, communication sciences, health sciences and tourism. The mission of the university is the aim of supporting global education and focusing on students' satisfaction without losing quality and the vision consists of creating multi-cultural environment for students and providing high quality of academic service for them (<http://www.eul.tr/en>).

### **3.2.5 Girne American University**

Girne American University (GAU) was established in 1985. GAU has ten faculties and seven schools which present various majors such as architecture,

communication, law, politics, pharmacy, health science, humanities, education, engineering, business and economics and tourism and hospitality. The mission of the university is the aim of producing the American model of learning which is based on challenging academic activities between students and focusing mostly on innovation of the students and the vision consists of trying to gain the unreachable and encouraging worldwide educational development (<http://www.gau.edu.tr/en>).

### **3.2.6 Istanbul Technical University - TRNC**

The Northern Cyprus branch of Istanbul Technical University (ITU-TRNC) was founded in 2008. ITU-TRNC has three undergraduate programs which are marine engineering, maritime transportation management engineering and naval architecture. The mission of the university is the aim of training students to become successful in their future career and providing quality for the global level of academic competitions and the vision includes leading to the future by the power of education, innovation, research, collaboration and preparing adequate amount of work forces for supplying the country's needs in maritime transportation system and naval architecture (<http://www.kkctc.itu.edu.tr/en>).

### **3.2.7 Middle East Technical University - TRNC**

The Northern Cyprus campus of Middle East Technical University (METU-NCC) was established in 2000. METU-NCC offers programs in engineering and social sciences in English. The mission of the university is the aim of conducting and discovering new knowledge and the vision consists of supporting students academically, communicating with the society in order to recognize its needs for research matters, trying to train qualified people and preparing academic atmosphere and facilities for students, professors and staffs for achieving their research goals (<http://www.ncc.metu.edu.tr/en>).

### **3.2.8 Near East University**

Near East University (NEU) was established in 1988. NEU has sixteen faculties and six schools which present diverse majors such as education, dentistry, pharmacy, arts and science, arts and design, law, economics and administrative sciences, engineering, medicine, physical education, sports and tourism management. The mission of the university is the aim of emphasizing the principles which refer to the existence of the university and its national and universal objectives and the vision consists of acting in accordance with their policy based on Turkish education system, arranging scientific studies with high level academic quality and developing the social and academic relations with international higher education communities (<http://www.neu.edu.tr/en>).

### **3.2.9 University of Kyrenia**

University of Kyrenia was found in 2013. This university has four faculties and one school which focused on aviation and maritime studies. The mission of the university is the aim of educating individuals in a qualified environment to prepare for their future career in maritime fields and the vision includes improving societal awareness, creating and disseminating new knowledge through innovate research and pedagogical learning, teaching core maritime studies and ocean sciences through theoretical and applied educational strategies by utilizing facilities and technologies and offering qualified expertise for the benefit of the regional and international higher education communications (<http://www.kyrenia.edu.tr/en>).

### **3.2.10 University of Mediterranean Karpasia**

University of Mediterranean Karpasia was established in 2012 in Northern part of Cyprus. This university has three faculties and four schools which offer various majors such as tourism and hotel management, food and beverage industry, business

management, aviation studies and law. The mission of the university is the aim of educating students for their future career based on ethical awareness and academic values and the vision consists of creating new knowledge based on international studies by qualified academicians in technological environment of the university (<http://www.akun.edu.tr/>).

### **3.2.11 Higher Education System of Northern Cyprus**

These days higher education is one of the vital factors of Cypriot education system, contributing to improving the quality of knowledge, growing experts for human resource needs, creating future carrier for youth and absorbing international students for protecting the economy of the country. The higher education system of Northern Cyprus making the huge amount of revenue (near 12% of GDP in 2009) for the northern part of the country and is the second provider of its economy (Katircioglu, 2010).

Cypriot education system plays a key role in the region to attract students of neighbors and same region countries such as Turkey, Azerbaijan, Iran, Nigeria, some other Asian countries, African countries and so on. More than fifty thousand students from more than 100 countries choose Cypriot universities for continuing their higher education (Kliot & Mansfield, 1997).

Universities of Northern Cyprus got around the 650th place in the Mediterranean and Europe region and around 1830th place in the world based on the university ranking system of URAP (2015). Universities of Northern Cyprus are the main education institutes of the country's education system and under the Ministry of higher education control (Nadiri, Kandampully & Hussain, 2009).

Eastern Mediterranean (EMU) is the state administration university while Girne American (GAU) and Near East (NEU) are the private administration universities. They provide centralized educational service of the system in domestic and in some international demands. All these three universities are divided into majors which are presented in English and/or Turkish for organizing domestic and international students.

Based upon the statistics driven from Higher Education Ministry of Turkish Republic of Northern Cyprus (2015) more than 87% of local students from Northern Cyprus and Turkey and international students study in these three universities. The whole number of students in EMU is approximately 20,000 in 2014, 26,000 students in NEU and 15,000 students in GAU that makes these universities as main universities in Northern Cyprus (Higher Education and External Relations Department of Turkish Republic of Northern Cyprus, 2014). As it has seen these three universities are the most important elements of higher education system of Northern Cyprus, therefore their students have been selected for further survey and analyses.

### **3.3 Eastern Mediterranean, Near East and Girne American Universities as The Most Important Elements of Higher education System and Leading Students of Northern Cyprus**

Today Eastern Mediterranean, Near East and Girne American universities are three powerful higher education centers of Northern Cyprus which serve the most amount of students in the country. The 28.57% amount of students study at EMU, 37.14% at NEU and 21.42% at GAU (Higher Education and External Relations Department of Turkish Republic of Northern Cyprus, 2014). These three universities are the ones which have well esteem and reputation in the sight of students due to their effort to

be in the range of high qualified international universities. In order to keep the positive images of these universities and the authority of higher education system of Northern Cyprus, they try to operate in several main areas: improving professionalism of instructors, enhancing academic quality, providing comfortable social atmosphere and try to enable enjoyable activities for students' leisure time.

## Chapter 4

### THEORETICAL MODEL AND HYPOTHESIS

#### 4.1 Theoretical Model

In the current study, it has been supposed to watch the relationships between academic performance of students with external and internal factors. And how these factors can influence the students' performance academically, is an essential issue which need more systematic deliberation. The effect of these various factors had been examined by other researches (Tinto 1975, 1998; Baker and Siryk, 1999; Rienties et al. 2011). The importance of these factors' impression has been verified by previous literatures (Severiens and Wolf, 2008; Gerdes & Mallinckrodt, 2011).

The issue which gained attention by researchers was students' adjustment (Rienties et al. 2011). Students have become habituated to living in new situation, therefore adjusting to the new condition could affect their academic performance (Wilcox et al. 2006). The students' adjustment has several directions (Baker and Siryk 1999). Based on the interaction student attrition model of Tinto (1975, 1998) and according to understanding academic performance of international students published by Rienties et al. (2011) and relying on the students adaptation to college questionnaire of Baker and Siryk (1999), this dissertation attempt to test the effect of three types of student's adjustment, academic, social and personal-emotional, on students' academic performance.

Therefore, a conceptual theoretical model was assumed based upon the studies of Baker and Syrik (1999) and Rienties et al. (2011). The model was conducted with the aim to investigate the probable relationships between academic performance of students with academic adjustment, social adjustment and personal-emotional adjustment. These possible relationships were considered as the basic potential connections in this theoretical model. Each isolated factor of this model (academic, social and personal-emotional adjustment) has its own subsets of variables which will be discussed further in this chapter. The basic theoretical model of the current research is shown as Figure 1. The academic performance of students was considered as the main impressionable subject in the model.

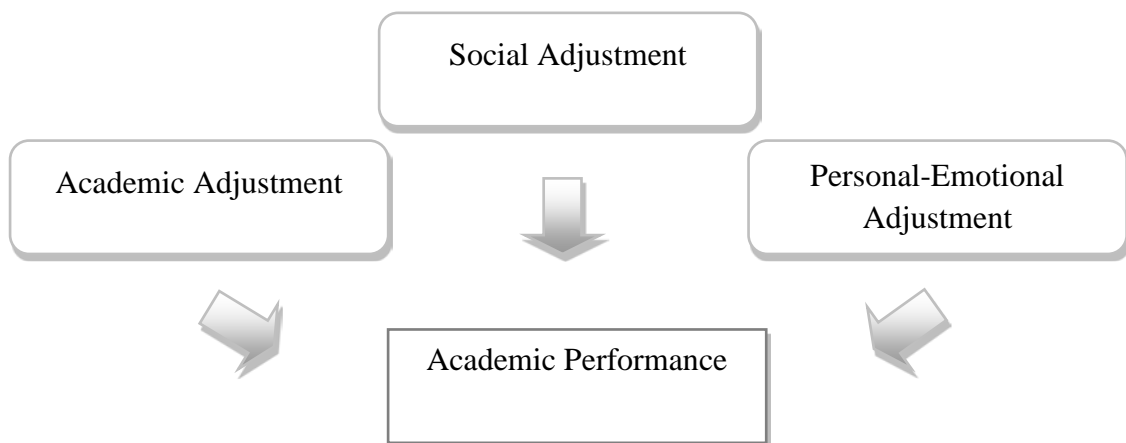


Figure 1. The theoretical model: The hypothesized relationships between students' academic performance with academic, social and personal-emotional adjustment

#### 4.1.1 The Detailed Theoretical Model

The theoretical model of this study is displayed part by part in following sections. This model was constructed step by step by applying exploratory factor analysis which will be explained completely in chapter 6. The combination of all these sections created the final main theoretical model. It has been tried to show every



detailed establishment of the steps which caused the entire finishing model (see Figure 5).

#### 4.1.1.1 The Academic Adjustment Section

According to the result of exploratory factor analysis (see Chapter 6), the first section, academic adjustment, was combined of four separated main variables named motivation, academic environment, self-confidence and educational-institutional goals based on their integrants. The relations between the academic adjustment and its components are shown below in figure 2.

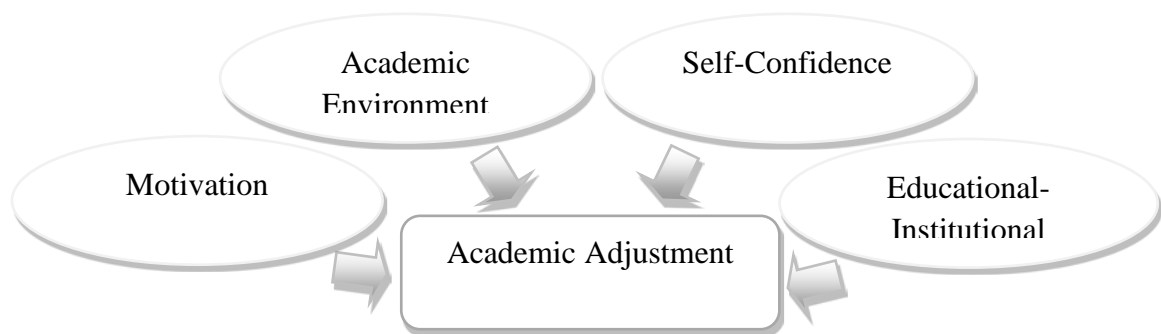


Figure 2. The theoretical model; Academic adjustment section

#### 4.1.1.2 The Social Adjustment Section

According to the result of exploratory factor analysis (see Chapter 6), Social adjustment, as the second section, was built of three major separated variables which named social participation, Interpersonal relations and perceived fit with attention to their constituents. The relations between the social adjustment and its components are shown below in figure 3.

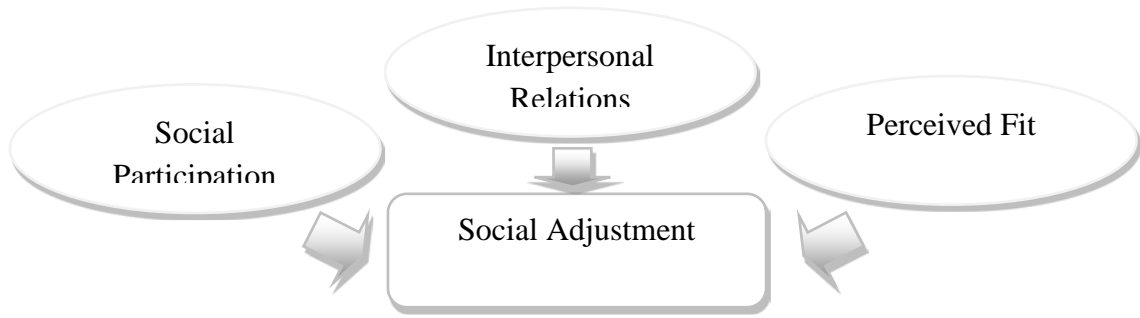


Figure 3. The theoretical model; Social adjustment section

#### 4.1.1.3 The Personal-Emotional Adjustment Section

According to the result of exploratory factor analysis, two core separated variables named physical efficacy and psychological efficacy put up personal-emotional adjustment. The labeling has done based on variables constituents.

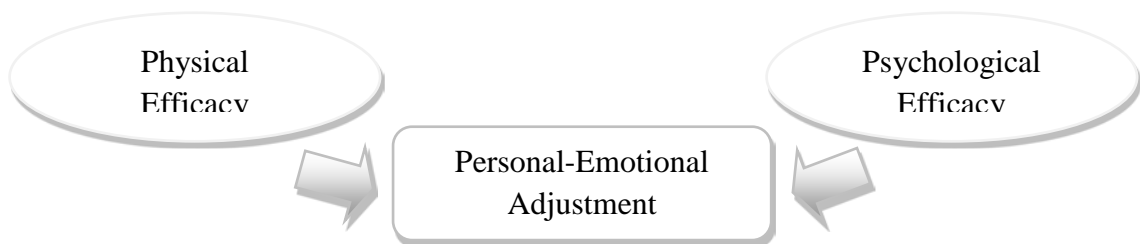


Figure 4. The theoretical model; Personal-emotional adjustment section

#### 4.1.2 Reliability and Validity

The Cronbach's Alpha coefficient in academic adjustment for motivation, academic environment, self-confidence and educational-institutional goal were 0.855 , 0.780 , 0.783 and 0.843. In social adjustment for social participation, Interpersonal relations and perceived fit were 0.844 , 0.802 and 0.746. In personal-emotional adjustment for physical efficacy and psychological efficacy were 0.843 and 0.886 .

#### 4.1.3 The Final Theoretical Model

The final resulting theoretical model was drawn (Figure 5) by putting together the whole sections.

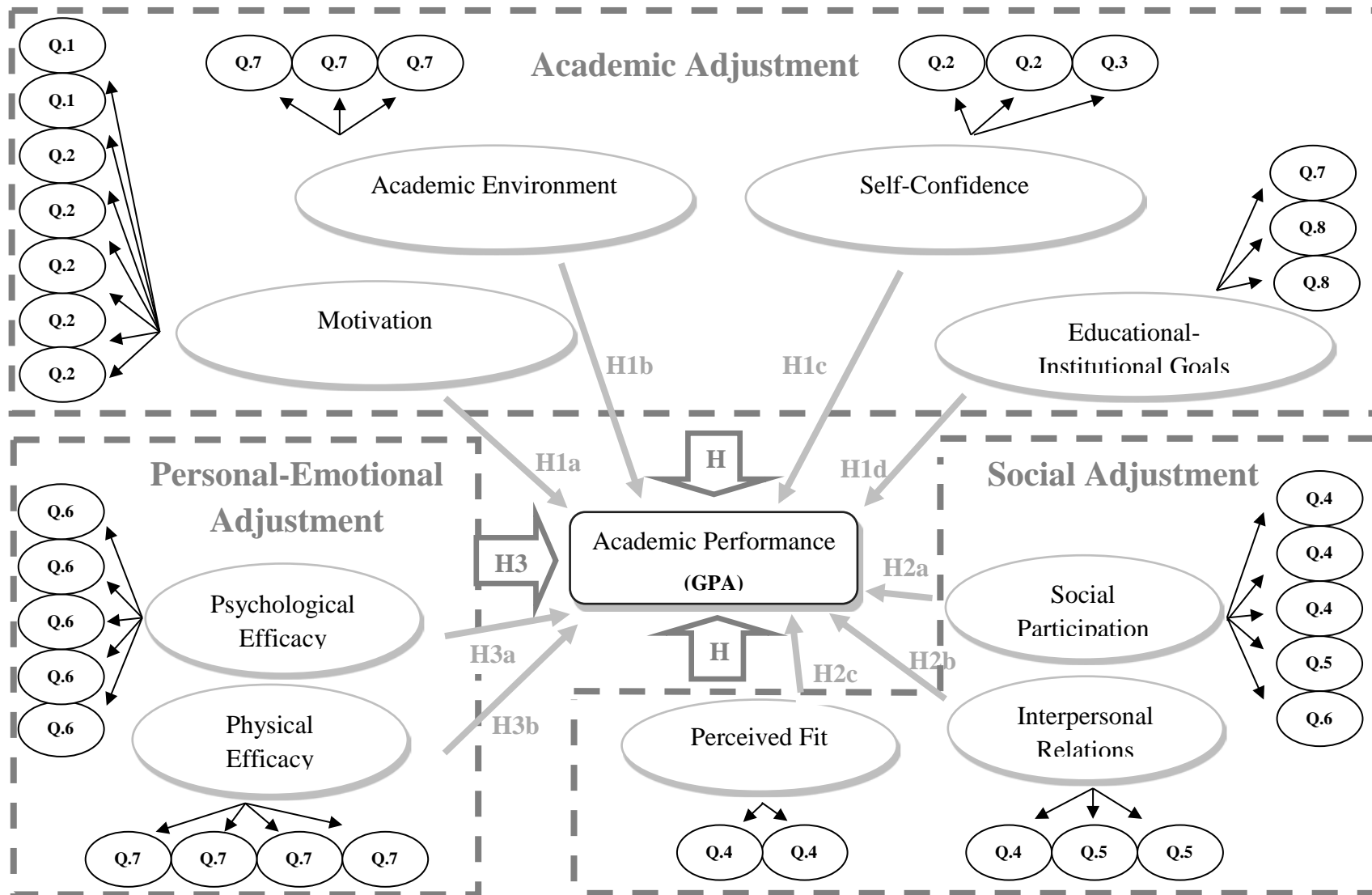


Figure 5. The theoretical model

## **4.2 Hypotheses**

During this section, derivation of theoretical hypotheses from the relationships between academic adjustment, social adjustment and personal-emotional adjustment with academic performance will be discussed. Each type of adjustments has its own hypotheses which were derived from the relationships between their components and academic performance.

Students' academic performance during their educational life is one of the most essential responsibilities that must be noticed so much by students, teachers, universities and other academic affairs' members of a educational society (Wentzel & Wigfield, 1998; Baker & Syrik, 1999; Rienties et al. 2011). Consequently the importance of knowing the relation of effective variables on academic performance is clear.

Based on the previous literature has been discussed in Chapter 2, adjustment of students to their educational life is one of the factors affects their academic performance. In the current study, effects of three types of adjustment known as academic-,social and personal-emotional adjustment, on student's academic performance, are investigated. In this section, it is tried to define the relationship between academic performance as dependent variables and types of adjustments as independent variables.

### **4.2.1 Academic Adjustment and Academic Performance**

The effect of academic adjustment of students on their academic performance is a matter was paid attention a lot by previous researchers (Gerdes & Mallinckrodt, 2011). Therefore, finding a mechanism of students' academic adjustment and their academic performance seems as an important issue (Chemers, Hu & Garcia, 2001). Academic adjustment of students makes them more successful in coping with the outcome of their

study (Baker & Siryk, 1999; Rienties et al., 2011). Thus, the first hypothesis of this research has derived.

**H1:** Academic adjustment of a student has a strong positive relationship with his/her academic performance.

As what has been found in the previous section and according to the result of exploratory factor analysis (see Chapter 6), academic adjustment has four subsets which named motivation, academic environment, self-confidence and educational-institutional goals. These subsets are the factors which erected academic adjustment, so it is supposed these factors have strong positive relationships with academic performance as well as academic adjustment. Therefore, their probably affections on academic performance will be tested in the current study.

#### **4.2.1.1 Motivation and Academic Performance**

Motivation of students in their educational affairs is one of the factors cause them to have more passion, looking for more succession (Barrie, 2007), trying to achieve their expected academic fulfillment and setting personal-educational goals (Zimmerman et al., 1992). Since it has been assumed academic adjustment has strong positive relationship with academic performance, motivation as one of its factors will be proposed that is in the same condition.

**H1a:** A student's motivation has a strong positive relationship with his/ her academic performance.

#### **4.2.1.2 Academic Environment and Academic Performance**

According to (Ramsden 1979; Beyers & Goossens, 2002) rising and falling of academic performance of students can be caused by their positive and negative relationships with

the academic environment which they spend their educational life at. Academic environment was set as one of the academic adjustment components, so it has strong positive relation with academic performance as well as academic adjustment.

**H1b:** Academic environment has a strong positive relationship with a student's academic performance.

#### **4.2.1.3 Self-Confidence and Academic Performance**

The students' self-confidence is their beliefs in their own capability to achieve expected academic fulfillment during their educational life (Bok, 2003). It is counted as a noticeable issue due to the optimism and pessimism can be caused by the confidence and the emotional rising and falling that may come after (Bong & Skaalvik, 2003). This process caused progress or regress in students' performance (Chemers, Hu & Garcia, 2001). Then, watching the relationship between self-confidence and academic performance is considered to examine. As one of academic adjustment's factors, the relationship of self-confidence and academic performance will be assumed as a strong positive one too.

**H1c:** A student's performance self-perception has a strong positive relationship with his/her academic performance.

#### **4.2.1.4 Educational-Institutional Goals and Academic Performance**

One of the imperative factors that has enough potential to encourage students be more dynamic in their academic achievement, more sensible in their academic performance (Christie, Munro, & Fisher, 2004) and help them to catch more information about their future career is the impact of their mutual goals with the college they choose to study there and their loyalty to the institute (Pascarella and Terenzini 2005). Thus, the impact of educational-institutional goals of students on their academic performance, as one of

academic adjustment's components, is a enough essential matter to be hypothesized to have a strong positive relationship with academic performance of the students.

**H1d:** College impact on a student has a strong positive relationship with his/her academic performance.

#### **4.2.2 Social Adjustment and Academic Performance**

Based upon what this research has been got, beside academic adjustment, another type of adaptation named social adjustment supposed to play an important role in academic performance of a student. Socialization during educational life is rooted core feelings of courage and ambition which are well motivators to achieve high qualified academic performance (Hays & Oxley, 1986; Xinyin, Kenneth and Dan 1997). So in the current study it is imagined social adjustment affects academic performance directly and strongly.

**H2:** Social adjustment of a student has a strong positive relationship with his/her academic performance.

According to the result of exploratory factor analysis (see Chapter 6), social adjustment is created from three factors which named social participation, interpersonal relations and perceived fit. Due to the effect of the social adjustment on academic performance, it seems necessary to test its factors effects on academic performance as well. Hypotheses 2a, 2b and 2c will refer to the probably relationship between social participation, interpersonal relations and perceived fit of students with their academic performance.

##### **4.2.2.1 Social Participation and Academic Performance**

Insisting to socialization, involvement of students in social tasks, issues and activities makes them to adapt socially in a more comfortable way (Lent, Brown and Hackett

1994). Being in friends networks and taking part in social events of the university encourage students to work on their performance during education (Lapsley, Rice & FitzGerald, 1990). It has been assumed social adjustment has a strong positive relation with academic performance, So social participation as one of its components will be proposed to have a strong relationship with academic performance in a positive manner, as well.

**H2a:** A student's social participation has a strong positive relationship with his/ her academic performance.

#### **4.2.2.2 Interpersonal Relations and Academic Performance**

According to Schutte et al. (2001) interpersonal relations of students in the academic environment improve their emotional intelligence. One of the effective factors cause students' ascent to a higher academic performance is their intelligence in their connections socially and emotionally, due to the ability of emotional intelligence to manipulate the relationship between cognitive ability and academic performance (Petrides et al. 2004). Then, interpersonal relations as one of the social adjustment's factors is supposed to have a strong positive relationship with academic performance.

**H2b:** A student's interpersonal relations has a strong positive relationship with his/her academic performance.

#### **4.2.2.3 Perceived Fit and Academic Performance**

If students' comprehension of their own social fitting degree with the academic environment be well, it leads them to appoint more social relations and feel more confident to socialize (Wessel, Ryan and Oswald, 2008). Fitting well in social atmosphere of the academic environment assists students to gain better achievement in their studies (Lent, Brown and Hackett, 1994). It has been investigated perceived fit is



one of the social adjustment's components and it has been assumed social adjustment has a relationship with academic performance strongly and positively, so it is hypothesized perceived fit has a strong positive relationship with academic performance as well.

**H2c:** A student's perceived fit has a strong positive relationship with his/her academic performance.

#### **4.2.3 Personal-Emotional Adjustment and Academic Performance**

The other type of adaptation called personal-emotional adjustment is another fundamental issue that may affect academic performance through what it has been investigated by the current research. Therefore, finding a mechanism between personal-emotional adjustment and academic performance is important as well. According to Gerdes and Mallinckrodt (2011) academic performance of students relates to their emotional condition and personal situation. Reducing stress, enhancing passion and raising the mood up can help students to catch a better result in their academic performance (Stewart, Lam, Wong, C. and Wong, A. 1999). So it has been supposed personal-emotional adjustment has a strong positive relationship with academic performance.

**H3:** Personal-emotional adjustment of a student has a strong positive relationship with his/her academic performance.

Personal-emotional adjustment, on the basis of what it has been found in this study and according to the result of exploratory factor analysis (see Chapter 6), has two main components. These components has labeled physical efficacy and psychological efficacy based on their constitute. Therefore, due to the hypothesized relationship of

students' personal-emotional adjustment with their academic performance, the relationship of these two factors with academic performance will be examined too.

#### **4.2.3.1 Psychological Efficacy and Academic Performance**

Psychological situation of students has the ability to affect their mood and mental actions (Attewell, Lavin, Domina & Levey, 2006), being in a well psychological situation permits better concentration for students to study (Richardson, Abraham and Bond, 2012). On the basis of what it has been gained in the current research, the second factor of personal-emotional adjustment is psychological efficacy. Then, the strong positive relationship of psychological efficacy with academic performance is supposed.

**H3a:** Psychological efficacy on a student has a strong positive relationship with his/her academic performance.

#### **4.2.3.2 Physical Efficacy and Academic Performance**

The effect of physical situation of students on their academic performance is the matter seems substantial in the students' educational life (Sallis, Mckenzie, Kolody, Lewis, Marshall and Rosengard 1998). Their somatic condition and health status affect their mental function and their academic achievement(Pappas and Loring, 1985). Thus, it has been imagined physical efficacy as one of the personal-emotional adjustment's factors has a relationship with academic performance strongly and positively.

**H3b:** Physical efficacy on a student has a strong positive relationship with his/her academic performance.

## **Chapter 5**

### **METHODS**

#### **5.1 Sample and Data Collection**

The current dissertation has been carried out among students of Northern Cyprus universities in all levels, from freshmen to doctorate students, to acquire precise result. Gathering of the data has been done based on the sample which represents the entire students of North Cyprus universities impartially. This chapter displays information about data collection process and measurement.

##### **5.1.1 Population, Sample and Data Collection Procedures**

The whole international and domestic students of Northern Cyprus universities in any level of academic position are considered as the target population in this study. The most three high-ranked universities of Northern Cyprus (URAP ranking by country, 2014), Eastern Mediterranean University (Dogu Akdeniz Universitesi), Near East University (Yakin Dogu Universitesi) and Girne American University (Girne Amerikan Universitesi), were selected as the accessible population.

Combination of two methods of sampling, convenience and stratified, were chosen to use in framing the sample. The survey were conducted among the Northern Cyprus universities' students those accessible conveniently first, after checking demographic information, it was preferred to place participants in homogeneous subsets, in order to control the balance of the data needs to collect. These strata permits to compare traits of factors symmetrically.

Questionnaires were distributed among 200 students with different nationalities who study in various levels of different majors in these three Northern Cyprus universities, after they were fulfilled by respondents, each person was asked interview questions, at the end questionnaires were brought together. There are 199 questionnaire were answered almost completely and suitable for using as raw data. Data collection procedure was done in 4-16th of June 2015. Appendix section is explained the issue in detail.

### **5.1.2 Confidentiality and Ethical Issues**

The respondents participated voluntary and anonymously. In questionnaire conduction process, there were no question asked the name, student number or any other type of questions which determine the identity of the participants and tried to respect to privacy right of the respondents. All the questions were designed to gather just the necessary data for the research. All surveys are kept in a safe, secure and confidential way. The only person that have accessibility to the obtained data is the investigator.

### **5.2 Questionnaire Measures**

The questionnaire was planned to gain demographic information, to obtain the grade point average (GPA) and to acquire data about students' academic adjustment, social adjustment and personal-emotional adjustment during their educational life. All these sections were designed in one set but separately. And two following techniques were used for collecting the data:

1. The students adaptation to college questionnaire (SACQ) focused on assessing adjustment of students academically, socially and personally-emotionally (Baker & Siryk, 1999).
2. An additional set of questions were used based upon the social integration section of the Community Integration Questionnaire (CIQ) which is used for measuring social integration of college students (Willer and Rosenthal, 1993).

### **5.2.1 Demographic Questionnaire**

Demographic questions section aimed at appraising demographic information of students in Northern Cyprus universities. This section was specially designed to investigate the information about nationality, age, gender, major of study (1 = Architecture, 2 = Business and Economics, 3 = Education, 4 = Law, 5= Tourism and Hospitability, 6 = Medicine, 7 = Pharmacy, 8 = Art and Science, 9 = Communication and Media studies, 10 = Engineering, 11 = Foreign Language, 12 = Computer and Technology, 13 = the other majors of study), level of study (1 = first year, 2 = second year, 3 = third year, 4 = fourth year, 5 = masters, 6 = PH.D.) and income (seven boxes which separately shows less than \$500, between \$500 and \$3000 and more than \$3000).

### **5.2.2 Academic, Social and Personal-Emotional Adjustment Questionnaire**

The rest sections of the questionnaire was assigned to the assessment of the academic adjustment, social adjustment and personal-emotional adjustment of higher education students. The Student Adaptation to College Questionnaire (SACQ), had the opportunity to fulfill the purpose of measuring these variables. The reason of choosing this survey for using in the current study, is its ability to evaluate effects of adjustment, the quality and the quantity of various types of students adjustment to their new educational lifestyles (Baker and Siryk 1999).

The last version of SACQ was used with the official permission of the publisher. The copy right permission is represented in appendix. The questionnaire generally has several parts which composed of questions related to academic behavior of students, the impact of academic environment upon students, students' social life and relations, the effect of social activities on students and the situation of students' physical and psychological health. The three following sections are established to conduct SACQ:

The first section, academic adjustment, contains four clusters called "motivation" which computes students' enthusiasm and has five questions, "application" which appraises students' function and has four questions, "performance" which evaluates students' accomplishment and has nine questions and "academic environment" which judges students' satisfaction of their academic environment and has five questions.

The second section, social adjustment, includes four clusters called "general" which assesses students' participation in social activities and has seven questions, "other people" which calculates students' convenience in social communicating and has seven questions, "nostalgia" which gauges students' feeling and homesickness and has three questions, "social environment" which appraises students' pleasure of their social environment and has three questions.

The third section, personal-emotional adjustment, comprises of two clusters called "psychological efficacy" which computes students' psychological condition and has nine questions and "physical efficacy" which evaluates students' physical health and has six questions.

The last section, attachment, consists two clusters called "general" which assesses students' contentment of attending college and has three questions and "this university" which judges students' gratification of their decision to choose their university and has four questions.

Each factor was measured with the liker scale consisted of five items, which 1 = "strongly disagree", 2 = "disagree", 3 = "neutral", 4 = "agree" , 5 = "Strongly agree". In order to respect of reliability and validity of questions with the issues (factors), the

Cronbach's Alpha coefficient and correlation coefficient were computed and will be discussed in next chapter (see Chapter 5).

### **5.2.3 Academic Performance**

In this dissertation academic performance of students is defined as the students' achievements in their grade scores, therefore the grade point average (GPA) represents academic performance. Each participant was asked to write the current GPA they have got. Question number 12 in demographic part is allocated to the grade point average. 173 respondents wrote the exact amount of their current GPA and others checked one of the boxes written below the question. Eight boxes ranged separately from 0.00 to 4.00. The average of each box which was checked, counted as the exact amount of the current GPA for the respondents who did not write the exact figure.

### **5.2.4 Social Integration**

Social integration of students in Northern Cyprus universities was measured using Community Integration Questionnaire (CIQ) which has three sections with fifteen items. One section which was suitable to use in current study was social integration (Willer and Rosenthal 1993). It has three items which catch information about students' financial handling, students' leisure activities, students' social activities and communication.

This scale has been used and validated by various studies (for overview, see Willer and Rosenthal, 1993). The data from the interview was used to review descriptive information about social integration. It demonstrates 59.5 % of students who participated, look after their personal finances themselves alone, 66.5 % take part in leisure activities with others and 58.5 % have a best friend whom they confide with.

## Chapter 6

### ANALYSIS AND RESULTS

The study has been continued by data analyzing process with the aim of inducting the result. This dissertation as an quantitative analyst research chose the Statistical Package for Social Science (SPSS) as the predictive analytical software to use by the investigator for analyzing the raw data, extracting the result and transferring it to information. These new-catching information may assist the social science to add new useful parts to the current knowledge. According to IBM® (<http://www.ibm.com/us-en/>), the Statistical Package for Social Science (SPSS) is counted as appropriate and popular software which has used by most of previous analyst literatures.

Academic performance is the dependent variable of this study and the main independent ones are academic adjustment, social adjustment and personal-emotional adjustment. Based upon what it has been found in the study, these three main independent variables have their own constituent variables which can have significant effect on the dependent variable as well. Motivation, academic environment, self-confidence and educational-institutional goals are four of these independent variables which formed academic adjustment. Social participation, interpersonal relations and perceived fit are the independent variables which constructed social adjustment. Physical and psychological efficacy are the independent variables which structured personal-emotional adjustment.

All three main independent variables namely academic adjustment, social adjustment and personal-emotional adjustment have hypothesized to positively relates to the



dependent variable, academic performance. Thus, all their constituent variables (motivation, academic environment, self-confidence, educational-institutional goals, social participation, interpersonal relations, perceived fit, physical and psychological efficacy) follow the main independent variables' orientation and have positive impact on academic performance.

Mean, standard deviation, the Cronbach's Alpha test, correlation analysis and hierarchical multiple regression analysis are the statistical analytical methods which used to catch reliability, validity, correlation, the final result and other necessary information during the research. It has been completely discussed about reliability and validity in chapter 4. Other statistical information will be clarified in this chapter. And in order to find the accuracy of the research's hypotheses and to investigate the relationships between independents with the dependent variables, the correlation analysis and the hierarchical multiple regression analysis will be argued.

## **6.1 Descriptive Statistics**

Descriptive statistics of the data collected are determined as the controlling factors. Therefore, it is necessary to pay attention to them in the current study to control the relationship between them with the study's dependent and independent variables. Nationality, age, gender, Educational major and level of study and income of the respondents are the elements which will be discussed as descriptive statistics of this research.

### **6.1.1 Nationality of the Respondents**

In order to nationality of the respondents which shown in Table 1, based on statistics of the sample of the research, there are various range of nationalities study in North Cyprus universities. The most populous nationalities of the sample belongs to Turkish

students includes Turkish Cypriots and students from Turkey (domestic students), Iranian students, Nigerian students and Azeri students.

Near the half of the sample, 48%, are students from Turkey and North Cyprus, 11% are from Iran, 7.5% are from Nigeria, 3.5% are from Azerbaijan and 29.5% are from other countries (Albania, Bangladesh, Cameroon, Iraq, Kazakhstan, Kenya, Kyrgyzstan, Lebanon, Pakistan, Palestine, Russia, Saudi Arabia, South Africa, Syria, Tajikistan, Tanzania and Yemen).

Table 1. Nationality of the respondents

		<b>Frequency</b>	<b>Percent (%)</b>
<b>1</b>	Turkish	96	48.0
<b>2</b>	Iranian	22	11.0
<b>3</b>	Nigerian	15	7.5
<b>4</b>	Azeri	7	3.5
<b>5</b>	Others	59	29.5
	Missing	1	0.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>

### 6.1.2 Age of the Respondents

In order to age of the respondents shown in Table 2, 1.5% of the students which formed the sample are below 20 years old, 91.5% are between 20 till 30 years old and 6.5% are over 31 years old. The range starts with the minimum point of a 17 years old bachelor student and ends with the maximum point of a 35 years old doctorate student. These figures shows a normal statistics in the range of students' ages, very low amount of university students are below 20 years old, mostly are in their 20s and there is a small group of students over 30 years old too. According to the deliberation of the Ministry of higher education of Turkish Republic of North Cyprus in 2014-2015 academic year,

these statistics display a close proportion of the range of students' ages in comparison of the sample with the population (higher education students in universities of Northern Cyprus).

Table 2. Age of the respondents

		<b>Frequency</b>	<b>Percent(%)</b>
<b>1</b>	Below 20 years	3	1.5
<b>2</b>	20-30 years	183	91.5
<b>3</b>	Over 31 years	13	6.5
	Missing	1	0.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>

### 6.1.3 Gender of the Respondents

In order to gender of the respondents shown in Table 3, number of the male students, 125 (62.5%), takes over number of the female students, 74 (37%), in this study's sample. According to the announcement of the Ministry of higher education of Turkish Republic of North Cyprus in 2014-2015 academic year, the sample's proportion of male students to female students which is 1.68, approximately matches to the proportion of the population which is 1.05 males to females.

Table 3. Gender of the respondents

		<b>Frequency</b>	<b>Percent(%)</b>
<b>1</b>	Male	125	62.5
<b>2</b>	Female	74	37
	Missing	1	0.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>

#### 6.1.4 Educational Major of the Respondents

In order to educational major of the respondents shown in Table 4, the statistics are stated from the most populated major according to the sample, sequentially, to the least populous major. 21% of the students study Engineering, 18% study Business and Economics, 17% study Architecture, 15% study Law, 12.5% study Tourism and Hospitality Management, 5.5% study Pharmacy, 5% study Education, 2.5% study Computer and Technology, 1.5% study Art and Science, 1% study Medicine, 0.5% study Nutrition and the rest 5% students study other majors.

Table 4. Educational major of the respondents

		Frequency	Percent (%)
1	Engineering	42	21.0
2	Business and Economics	36	18.0
3	Architecture	34	17.0
4	Law	30	15.0
5	Tourism Management	25	12.5
6	Pharmacy	11	5.5
7	Education	10	5.0
8	Computer and Technology	5	2.5
9	Art and Science	3	1.5
10	Medicine	2	1.0
11	Nutrition	1	0.5
	Missing	1	0.5
	Total	200	100.0

#### 6.1.5 Educational Level of the Respondents

In order to educational level of the respondents shown in Table 5, 17.5% of the sample are the first year of bachelor students, 33.5% study in the second year, 19% are the third year students, 13.5% belongs to the fourth year students, 13% master students and 3%

are doctorate students. The most populous level is the second year of bachelor students and the least populous level belongs to doctorate students in this study's sample.

Table 5. Educational level of the respondents

		<b>Frequency</b>	<b>Percent (%)</b>
<b>1</b>	1st year of bachelor	35	17.5
<b>2</b>	2nd year of bachelor	67	33.5
<b>3</b>	3rd year of bachelor	38	19.0
<b>4</b>	4th year of bachelor	27	13.5
<b>5</b>	Master	26	13.0
<b>6</b>	PH.D.	6	3.0
	Missing	1	0.5
	Total	200	100.0

### 6.1.6 Incomes of the Respondents

In order to the incomes of the respondents which shown in Table 6, the incomes of students of the sample are mostly below \$1000 in one month. 41% of the students have below \$500 incomes in one month, 42.5% of students have the incomes between \$500-\$999 in one month, 12.5% of students' incomes are in the range between \$1000-\$1500 in one month and just 3% of students have the incomes amount of more than \$1500 in one month.

Table 6. Income of the respondents

		<b>Frequency</b>	<b>Percent(%)</b>
<b>1</b>	Below \$500	82	41.0
<b>2</b>	\$500-\$999	85	42.5
<b>3</b>	\$1000-\$1500	25	12.5
<b>4</b>	Over \$1500	6	3
	Missing	2	1.0
	Total	200	100.0

## **6.2 Exploratory Factor Analysis**

For the purpose of detecting a systematic structure between factors, exploratory factor analysis demonstrates the statistical latent and underlying relationship between variables. The process of exploratory factor analysis applies several extraction methods to find a construction of a theoretical model. The principal axis factoring procedure is one of these extraction methods that is suitable to detect the structure. The principal axis factoring expresses the quantity of components is needed to represent for each variable. The other responsibility of the principal axis factoring is to recognize each factor stands for which variable.

For the current research, the principal axis factoring procedure used as an extraction method of the exploratory factor analysis to explore the variability in the data and count them as components, to look for the quantity of these components, to investigate their connections and finally to draw a relationship between all the components. The whole process gave an image of a conceptual model that has the potential to achieve the main theoretical model which shows the affection of independent variables on the dependent variable.

This section contains the result of the principal axis factoring procedure in exploratory factor analysis process. Firstly Tables 7, 8 and 9 illustrate the results and figures and at the next part each process will be explained by details.

Exploratory factor analysis applied separately for academic adjustment, social adjustment and personal-emotional adjustment and it became evidence for detecting components of each types of adjustments.

### 6.2.1 Academic Adjustment

Table 7 demonstrates the result of exploratory factor analysis for academic adjustment.

Table 7. Factor analysis of academic adjustment

Items	Factors			
	F1	F2	F3	F4
<b>Factor 1: Students' Motivation</b>				
Having reasons for being in university	.766			
Defining their academic goals well	.874			
Considering that university degree is important	.775			
Enjoying academic work	.742			
Relating work-courses to their interests	.573			
Keeping up-to-date with academic work	.476			
Having motivation to study	.480			
<b>Factor 2: Students' academic environment</b>				
Pleasuring with their decision to go to university		.696		
Preferring to drop out of university		.955		
Preferring to take off from university		.752		
<b>Factor 3: Students' self confidence</b>				
Believing to their well-being of their academic function			.802	
Believing to their well-being of their academic result			.906	
Believing that they are smart enough			.343	
<b>Factor 4: Students' educational-institutional goals</b>				
Pleasuring to have attended their chosen university				.609
Preferring to be at another university				.837
Preferring to transfer to another university				.865
<b>Eigenvalue</b>	5.540	2.901	2.191	2.008
<b>Percentage of variance</b>	18.468	9.668	7.305	6.693
<b>Total Variance explained</b>	18.468	28.137	35.441	42.134
<b>KMO measure of sampling adequacy</b>	.701			
<b>Approximate chi-square</b>	2286.279***			

\*\*\*p < .001

### 6.2.2 Social Adjustment

The result of the principal axis factoring procedure in exploratory factor analysis process for the second main independent variable of the study, social adjustment, is disclosed below in Table 8.

Table 8. Factor analysis for social adjustment

Items	Factors		
	F1	F2	F3
<b>Factor 1: Students' social participation</b>			
Involving with the university's social activities	.904		
Adjusting well to the university	.827		
Being satisfied with social life	.745		
Being satisfied with their chosen university	.302		
Being satisfied with extracurricular activities	.852		
<b>Factor 2: Students' interpersonal relations</b>			
Meeting people and making friends		.606	
Feeling at ease with others hardly		.925	
Feeling different from others		.741	
<b>Factor 3: Students' perceived fit</b>			
Fitting well with the university environment			.714
Being satisfied with social participation			.777
<b>Eigenvalue</b>	3.654	2.310	1.844
<b>Percentage of variance</b>	18.268	11.549	9.220
<b>Total Variance explained</b>	18.268	29.817	39.037
<b>KMO measure of sampling adequacy</b>	.629		
<b>Approximate chi-square</b>	1119.644***		

\*\*\*p < .001

### 6.2.3 Personal-Emotional Adjustment

Table 9 demonstrates the result of the principal axis factoring procedure in exploratory factor analysis process for the third main independent variable of the study, personal-emotional adjustment.



Table 9. Factor analysis for personal-emotional adjustment

Items	Factors	
	F1	F2
<b>Factor 1: Psychological efficacy</b>		
Feeling tense or nervous	.548	
Feeling blue and moody	.764	
Seeking psychological help recently	.384	
Getting angry too easily lately	.476	
Getting muddled too easily	.858	
<b>Factor 2: Physical efficacy</b>		
Feeling tired a lot lately		.417
Having good appetite		.849
Sleeping well		.533
Feeling to be in good health		.966
<b>Eigenvalue</b>	5.790	1.528
<b>Percentage of variance</b>	38.597	10.189
<b>Total Variance explained</b>	38.597	48.787
<b>KMO measure of sampling adequacy</b>	.796	
<b>Approximate chi-square</b>	1576.616***	

\*\*\*p < .001

#### 6.2.4 Kaiser-Meyer-Olkin and Bartlett's Tests

For using exploratory factor analysis and for running the principal axis factoring procedure, it is needed to test the data by Kaiser-Meyer-Olkin measure of sampling and Bartlett's test of sphericity. The Kaiser-Meyer-Olkin and Bartlett's tests allow the investigator to use the analysis if the values of these tests be acceptable enough. The acceptable value is considered as the amount of 0.6 in its minimum and it should be in the significant level.

The values of KMO test for the components which represent the academic adjustment variable was 0.701, for the factors which stand for the social adjustment variable was 0.629 and for the components which characterize the personal-emotional variable was 0.796. All the values are greater than 0.6, therefore, as the sight of KMO, the exploratory factor analysis could be useful to run for discovering a structure.

The all values of the Bartlett's test for the factors of the three main variables were in significant level. As the indication of the values gained by Bartlett's test, the principal axis factoring as a procedure of exploratory factor analysis is practical for distinguishing a structure. Finally, all these quantities together made the permission to use the exploratory factor analysis process and the principal axis factoring procedure as one of its extraction method to identify a structure.

### **6.2.5 Communalities**

The initial figures shown by communalities indicated the proportion of each variable's variance with the rest of variables and the extraction variables stated the estimated proportion of each variable's variance with the rest of variables. Communalities diagnosed factors with the values less than 0.30 to claim that these components perhaps will be dropped from the analyses. The values which were less than 0.30 in initial stage and they did not change in extraction stage possibly did not fit well in the common factors space.

In this study, academic adjustment included 30 components and 7 components' values of it were below 0.30. Social adjustment incorporated 20 factors and its 6 factors' values were less than 0.30. Personal-emotional adjustment integrated 15 components and 3 components' values of it were under 0.30. As communalities noticed 16 factors were not well represented in the existence factors set.

### **6.2.6 Total Variance Explained**

The total variance explained table which shown after running the principal axis analysis, tried to recognize how many factors exist in one cluster. Each single factor stood for a single variable. Consequently, the table notified the quantity of variables keep going in each cluster. The result caught from total variance explained table was vital enough to give a general information of the amount of each clusters' variables.

In the initial eigenvalues column of the total variance explained table, at the academic adjustment cluster, 10 factors had total values more than 1, therefore, there were 10 sets of components which were suitable enough to count as variables. This amount was 7 at the social adjustment cluster which meant 7 sets of factors counted as 7 variables and at the personal-emotional adjustment cluster, the figure was 5 which displayed there were 5 variables in this cluster. All these figures lent a hand to draw a first schema of the theoretical model segment by segment separately. Based on the figures, the academic adjustment as a first segment has 10 arms, the social adjustment as a second segment has 7 arms and the personal-emotional adjustment as a third segment has 5 arms.

### **6.2.7 Scree Plot**

The scree plot as the graphic formation of eigenvalues in total variance explained table, confirmed the truth of the result gotten by the table. This plot exhibits the relationship between eigenvalues and factor numbers in vertical and horizontal axes. The vertical axis represented the eigenvalue against the horizontal axis which displayed the factor number. The amount of total variance became smaller and smaller while the numbers of factors grew up. Therefore the line turned into be flat after a particular factor. The number of this factor was the quantity of existence suitable components. The scree plot of the academic adjustment cluster, the social adjustment cluster and the personal-emotional adjustment cluster are shown below in Figure 6, Figure 7 and Figure 8. The essential points are marked on the graphs.

The academic adjustment cluster's scree plot displays 10 factors are suitable for this cluster. The reason which should be stated is that after 10th factor the line would become flatter and flatter which means the total variance became smaller and smaller. Therefore, as it is seen below (Table 6), the scree plot of students' academic adjustment

verified the authenticity of the result achieved by the eigenvalue in the total variance explained table.

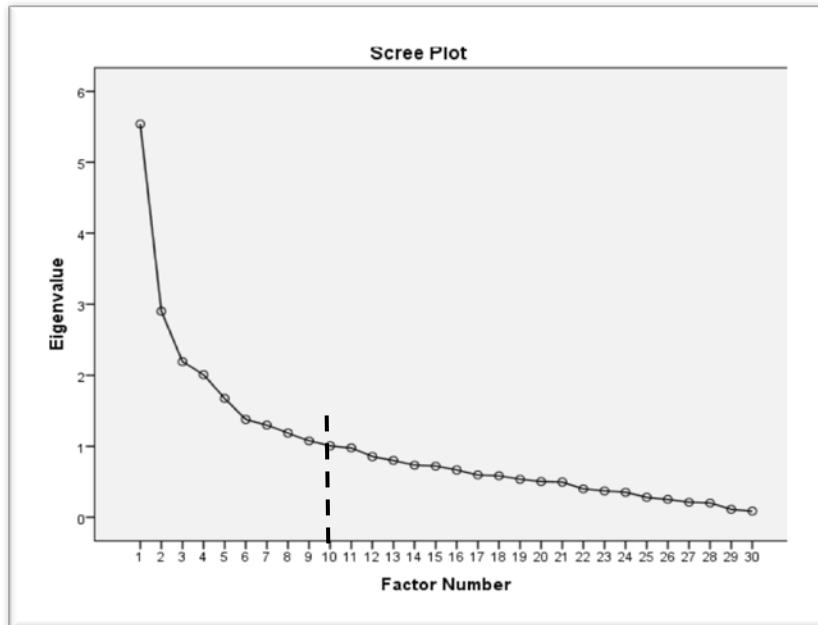


Figure 6. The scree plot of academic adjustment

The scree plot of students' social adjustment shows 7 factors as appropriate subsets of this cluster.

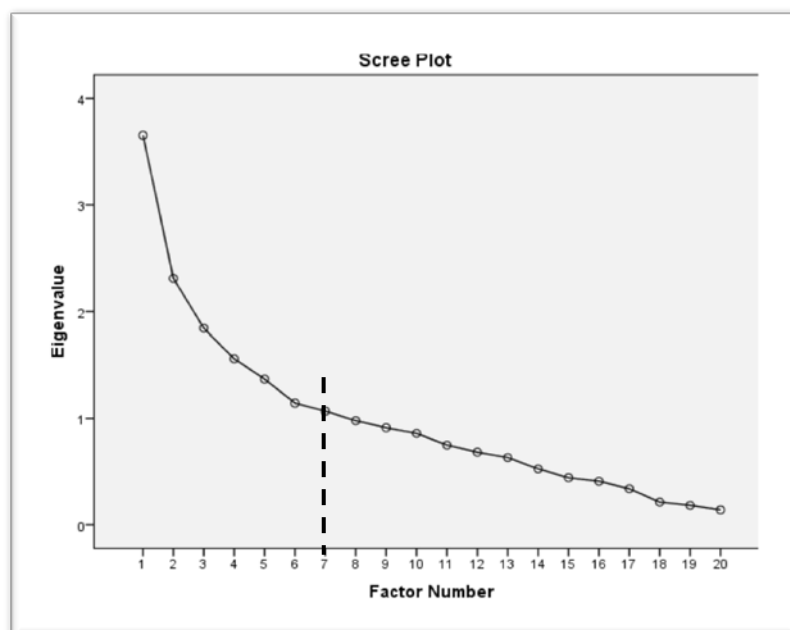


Figure 7. The scree plot of social adjustment

And the scree plot of students' personal-emotional adjustment demonstrates 5 components as fitting variables of this cluster.

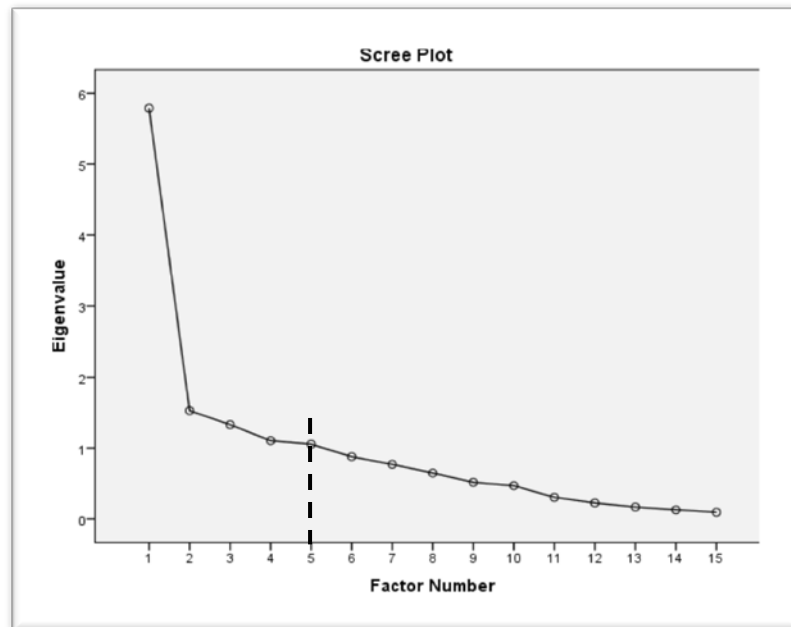


Figure 8. The scree plot of personal-emotional adjustment

### 6.2.8 Factor Matrix

In the factor matrix the correlation between estimated factors and each variables became in a vision. The amounts more than 0.30 in the factor matrix table showed an acceptable correlation between factors and variables. There were factors which have good correlation with several variables, the reason is in this matrix the factors are extracted but un-rotated ones. The acceptable factors were noticed due to their potential to be a main variable in the cluster.

In the factor matrix of the academic adjustment the first factor has acceptable correlation with 15 variables, the second factor has good correlation with 7 variables, the third factor has suitable correlation with 4 variables, the fourth factor has appropriate correlation with 7 variables, the fifth factor has fine correlation with 2 variables, the sixth factor has satisfactory correlation with 3 variables, the seventh factor

has no acceptable correlation with variables, the eighth factor has good correlation with 2 variables, the ninth and the tenth factor has no suitable correlation with variables.

In the factor matrix of the social adjustment the first component has appropriate correlation with 6 variables, the second component has fine correlation with 4 variables, the third component has acceptable correlation with 4 variables, the fourth component has good correlation with 3 variables, the fifth component has suitable correlation with 2 variables, the sixth component has satisfactory correlation with 3 variables and the seventh component has suitable correlation with 2 variables.

In the factor matrix of the personal-emotional adjustment the first factor has fine correlation with 11 variables, the second factor has good correlation with 2 variables, the third factor has satisfactory correlation with 4 variables, the fourth factor has acceptable correlation with 2 variables and the fifth factor has fitting correlation with 1 variable.

In each cluster some factors overlapped with each other in their correlations with variables, it meant those factors had same variables, therefore they needed to become rotated. The matter solved in the rotated factor matrix.

### **6.2.9 Rotated Factor Matrix**

In rotated factor matrix the correlation between extracted rotated factors and variables had been illustrated. Since factors in this matrix are extracted and rotated, there were no overlapped variables between factors and each factor had its own separated variables. At the end each factor counted as a main variable in its cluster and named based on the content of its fundamental formers (sub-variables).

In the rotated factor matrix of academic adjustment the first component has acceptable correlation with 7 variables, the second component has good correlation with 3 variables, the third component has suitable correlation with 3 variables, the fourth component has appropriate correlation with 3 variables, the fifth component has fine correlation with 2 variables, the sixth component has satisfactory correlation with 4 variables, the seventh component has fine correlation with 2 variables, the eighth component has good correlation with 2 variables, the ninth component has acceptable correlation with 1 variable, the tenth component has no satisfactory correlation with variables.

In the rotated factor matrix of social adjustment the first factor has good correlation with 5 variables, the second factor has suitable correlation with 3 variables, the third factor has satisfactory correlation with 2 variables, the fourth factor has appropriate correlation with 2 variables, the fifth factor has acceptable correlation with 4 variables, the sixth factor has fine correlation with 3 variables, the seventh factor has good correlation with 3 variables.

In the rotated factor matrix of personal-emotional adjustment the first component has appropriate correlation with 9 variables, the second component has fine correlation with 5 variables, the third component has satisfactory correlation with 3 variables, the fourth component has good correlation with 4 variables, the fifth component has appropriate correlation with 3 variables.

Therefore, as it has been stated at the first paragraph of this section, each constituent is one of the main components which represents a major independent variable from each cluster.

## **6.3 Hypothesis Testing**

Correlation analysis presents in this section with the purpose of testing the research's Hypotheses. Two parts makes known the result of running correlation analysis. The first part reveals the correlations between academic performance with academic adjustment, social adjustment and personal-emotional adjustment. The second part, demographic variables correlations, discloses the correlations between the variables and controlling factors which are known as demographic indicators. And Table 10 demonstrates the result of the Hypotheses testing.

### **6.3.1 Correlation Analysis: Academic Adjustment, Social Adjustment, Personal-Emotional Adjustment and Academic Performance**

In order to evaluate the quality and quantity of the strength of linear relationships between the study's dependent variable and the independent ones, Pearson procedure of bivariate correlations analysis has been applied. Table 11 and Table 12 display means, standard deviations and correlations between academic performance with academic adjustment by its 4 constitute components, social adjustment by its 3 constitute components and personal-emotional adjustment by its 2 constitute components.

Two out of four components of academic adjustment, motivation and self-confidence, stated strong positive significant correlations with academic performance and the two remain components, academic environment and educational-institutional goals, demonstrated weak negative correlation insignificant with academic performance. Consequently, Hypotheses 1a and 1c are accepted while Hypotheses 1b and 1d are rejected. Totally, academic adjustment with coefficient amounted at .281 exposed a strong positive significant correlation with academic performance, so Hypothesis 1 is supported.



Two out of three factors of social adjustment, social participation and interpersonal relations, had positive but weak insignificant correlations with academic performance. While the other factor, perceived fit, indicated negative, weak and insignificant correlation with academic performance. Thereby, all Hypotheses H2a, H2b and H2c are rejected. Entirely, social adjustment with coefficient amounted at .031 shows a weak positive correlation with academic performance insignificantly, thus Hypothesis 2 should be rejected as well.

Table 10. The study's Hypotheses testing result

<b>Hypothesis</b>	<b>Result</b>
<b>H1</b> Academic adjustment of a student has a strong positive relationship with his/her academic performance.	Supported**
<b>H1a</b> A student's motivation has a strong positive relationship with his/ her academic performance.	Supported**
<b>H1b</b> A student's academic environment has a strong positive relationship with his/ her academic performance.	Not supported
<b>H1c</b> A student's self-confidence has a strong positive relationship with his/ her academic performance.	Supported**
<b>H1d</b> A student's educational-institutional goals has a strong positive relationship with his/ her academic performance.	Not supported
<b>H2</b> Social adjustment of a student has a strong positive relationship with his/her academic performance.	Not supported
<b>H2a</b> A student's social participation has a strong positive relationship with his/ her academic performance.	Not supported
<b>H2b</b> A student's interpersonal relations has a strong positive relationship with his/ her academic performance.	Not supported
<b>H2c</b> A student's has a strong positive relationship with his/ her academic performance.	Not supported
<b>H3</b> Personal-emotional adjustment of a student has a strong positive relationship with his/her academic performance.	Not supported
<b>H3a</b> A student's physical efficacy has a strong positive relationship with his/ her academic performance.	Not supported
<b>H3b</b> A student's psychological has a strong positive relationship with his/ her academic performance.	Not supported

\*\* in significant level.

One of the two components which constituted personal-emotional adjustment, physical efficacy, represented a weak negative insignificant correlation with academic performance while the other component, psychological efficacy, illustrated a positive but still weak and insignificant correlation with academic performance. As a result, there are enough evidence to determine both Hypotheses 3a and 3b are rejected. Wholly, personal- emotional adjustment with coefficient amounted at .019 expressed a weak positive insignificant correlation with academic performance, consequently it is logical enough to state Hypothesis 3 do not be supported and is rejected as well.

According to the level of statistical significance, p-value of the Hypotheses 1, 1a, and 1c are below 5% and counted as significant correlations. Then academic adjustment and two of its constituent factors, motivation and self-confidence, have significant correlations with academic performance. The other variables of the currents study did not correlate significantly with academic performance (Hypotheses 1b, 1d, 2, 2a, 2b, 2c, 3, 3a, 3b).

Table 11. Correlations between the adjustment types and academic performance

	Mean	SD	N	1	2	3	4
1. Academic adjustment	3.60	.370	199	-			
2. Social adjustment	3.22	.490	194	.219**	-		
3. Personal-emotional adjustment	2.99	.537	197	.265**	.034	-	
4. Academic performance	3.29	.487	199	.281**	.031	.019	-

\*  $r < 0.05$  (2-tailed).

\*\*  $r < 0.01$  (2-tailed).

For further information, it seems suitable to announce there were significant correlations between some dependent variables of the current study together. They are listed here

due to their probably usefulness for other researches. All of these correlations had amounts of  $r < 0.05$  or  $r < 0.01$  for their p-value.

Positive and strong correlations have been found between motivation with self-confidence and social participation. Physical efficacy and psychological efficacy both had positive and so strong correlations with academic environment. Social participation had strong positive correlation with educational-institutional goals. Perceived fit correlated strongly and positively with social participation. Psychological efficacy had a so strong positive correlation with physical efficacy.

Academic adjustment correlated positively and strongly with three factors of other adjustments, these factors are a factor of social adjustment which is social participation and two factors of personal-emotional adjustment which are physical efficacy and psychological efficacy. Social adjustment had a positive approximately strong correlation with one of the academic adjustment's factors which is educational-institutional goals. Personal-emotional adjustment correlates positively and strongly with one of the academic adjustment's factors which is academic environment. Finally, correlations between types of adjustments were observed, academic adjustment had positive and strong correlation with both social adjustment and personal-emotional adjustment.

And beside all of these strong notable correlations, there were some not strong but significant correlations in a positive way between variables with each other. These correlations are between motivation with academic environment and educational-institutional goals, between self-confidence with educational-institutional goals and between perceived fit with interpersonal relations.

Table 12. Correlations between the study's variables

	Variables	Mean	SD	N	1	2	3	4	5	6	7	8	9	10
Academic adjustment	1. Motivation	3.88	.485	199	-									
	2. Academic environment	3.09	.847	199	.140*	-								
	3. self-confidence	4.08	.534	199	.351**	-.090	-							
	4. Educational-institutional goals	2.96	.751	199	.152*	.049	.149*	-						
Social adjustment	5. Social participation	3.20	.682	197	.188**	.039	.093	.261**	-					
	6. Interpersonal relations	3.25	.760	196	.003	-.036	.100	.039	.114	-				
	7. Perceived fit	3.21	.818	199	.115	.014	.014	.089	.216**	.143*	-			
Personal-emotional adjustment	8. Physical efficacy	3.03	.751	199	.036	.717**	-.079	.060	.124	-.010	.013	-		
	9. Psychological efficacy	2.91	.740	197	-.063	.512**	.033	.025	-.080	.063	.035	.688**	-	
	10. Academic performance	3.29	.487	199	.271**	-.057	.562**	-.007	.040	.069	-.030	-.037	.078	-

\*  $r < 0.05$  (2-tailed).

\*\*  $r < 0.01$  (2-tailed).

### **6.3.2 Correlation Analysis: Demographic Variables, Academic Adjustment, Social Adjustment, Personal-Emotional Adjustment and Academic Performance**

The impact of demographic variables as controlling factors has been tested in this part. Nationality, age, gender, level of study, major of study and income of the respondents are the indicators which their effect on the research's dependent and independent variables has been watched (see Table 13).

Based upon representation of table 13, academic adjustment correlates with nationality positively while it correlates with age, gender, level and major of study and income of the respondents negatively. Social adjustment had positive correlations with nationality, gender and income of the respondents while it had negative correlations with age, level and major of study of the respondents. Personal-emotional adjustment's coefficients' amounts revealed positive correlations with nationality and level of study of the respondents while it displayed negative correlations with gender, age, major of study and income of the respondents. Academic performance correlated with age, level of study positively while it correlated with nationality, gender and major of study negatively.

In order to strength of the correlations between demographic indicators and the study's variables, all the coefficients amounted at below 0.170 so they counted as weak correlations instead of academic performance which had an approximately strong correlation with age (0.242). And in order to level of significance of the correlations, all correlations have poor p-value instead of academic performance which correlated with age and level of study significantly.

Table 13. Correlations between demographic indicators and the study's variables

No.	Variables	Mean	SD	Alpha	1	2	3	4	5	6	7	8	9	10
1	Nationality	1.52	.500	-	-									
2	Age	25.33	3.10	-	-.072	-								
3	Gender	1.37	.484	-	-.181*	.071	-							
4	Level of study	2.79	1.39	-	.296**	.252**	-.076	-						
5	Major of study	4.95	3.45	-	.397**	.055	-.090	.384**	-					
6	Income	1.80	.899	-	-.211**	.076	.121	.092	.010	-				
7	Academic adjustment	3.60	.370	.776	.100	-.102	-.122	-.079	-.032	-.133	-			
8	Social adjustment	3.22	.497	.757	.018	-.035	.032	-.079	-.007	.026	.219**	-		
9	Personal-emotional adjustment	2.99	.537	.906	.051	-.009	-.002	.020	-.025	-.003	.265**	.034	-	
10	Academic performance	3.29	.487	-	-.067	.242**	-.081	.164*	-.007	.072	.301**	.031	.019	-

For nationality, 1 = Turkish (including Turkish Cypriots) and 2 = other nationalities. For age, minimum of the range = 17 and maximum of the range = 35. For gender, 1 = male and 2 = female. For level of study, 1 = 1st year, 2 = 2nd year, 3 = 3rd year, 4 = 4th year, 5 = Master and 6 = Ph.D.. For major of study, 1 = Architecture, 2 = Business and Economics, 3 = Education, 4 = Law, 5 = Tourism and Hospitality Management, 6 = Medicine, 7 = Pharmacy, 8 = Art and Science, 9 = Communication and Media Studies, 10 = Engineering, 11 = Computer and Technology and 12 = Other. For Income, 1 < \$500, \$500 < 2 < \$999, \$1000 < 3 < \$1500 and 4 > \$1500.

\* r < 0.05 (2-tailed).

\*\* r < 0.01 (2-tailed).

It may be useful for further studies to state there were significant correlations between some demographic indicators with some other ones. Nationality correlated with gender negatively and not so strongly by a p-value amounted at  $r < 0.05$  (2-tailed), nationality had strong positive correlations with level and major of study by significant p-values amounted at  $r < 0.01$  (2-tailed), nationality had an approximately strong correlation with income negatively and significantly by a p-value amounted at  $r < 0.01$  (2-tailed), level of study represented an approximately strong correlation with age positively and significantly by a p-value amounted at  $r < 0.01$  (2-tailed) and major of study correlated with level of study strongly, positively and significantly as well.

#### **6.4 Hierarchical Multiple Regression Analysis**

In order to eventuate the relationships between the study's variables, this section manifests the hierarchical multiple regressions between the independent and dependent variables to achieve last consequences. This section contains two parts, demonstrating regression analysis of variables and displaying regression analysis of demographic indicators.

##### **6.4.1 Hierarchical Multiple Regression Analysis of the Effects of Academic Adjustment, Social Adjustment and Personal-Emotional Adjustment Factors on Academic Performance**

In this stage of the research, the regression analysis has been run in order to assess the impact of academic adjustment, social adjustment and personal-emotional adjustment with academic performance.

###### **6.4.1.1 The Result of the Analysis**

Table 9 illustrates the amount of total variances based on three models made by regression analysis. These models measured the effect of three different types of

adjustment (academic, social and personal-emotional) on the dependent variable of the study which is academic performance.

Table 14. Total variances explained by the models that measure in adjustment\*

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the estimate	R <sup>2</sup> change
1	.559 <sup>a</sup>	.312	.297	.40023	.312
2	.561 <sup>b</sup>	.315	.289	.40271	.003
3	.570 <sup>c</sup>	.325	.292	.40177	.011

<sup>a</sup> Predictors: (Constant), Academic adjustment (educational-institutional goals; self-confidence; academic environment; motivation).

<sup>b</sup> Predictors: (Constant), Academic adjustment (educational-institutional goals; self-confidence; academic environment; motivation) and Social adjustment (perceived fit; interpersonal relations; social participation).

<sup>c</sup> Predictors: (Constant), Academic adjustment (educational-institutional goals; self-confidence; academic environment; motivation), Social adjustment (perceived fit; interpersonal relations; social participation) and Personal-Emotional adjustment (psychological efficacy and physical efficacy).

\* Dependent variable: Academic performance.

Based upon what is observed in Table 14, model 1 comprised of four factors of academic adjustment: Motivation, academic environment self-confidence and educational-institutional goals. The academic adjustment described 31.2% of changes in academic performance. With regard to model 2, 31.5% of changes in academic performance has been caused by academic adjustment and social adjustment. The addition of three factors of social adjustment (social participation, interpersonal relations and perceived fit) created just a change of 0.3% which cannot be accounted as a significant effect at all. And at last, when personal-emotional adjustment factors (physical efficacy and psychological efficacy) had been entered by model 3, R-squared rose up to 32.5%. Therefore, the last predictor caused a change in 1.1% of variance in academic performance.



After controlling the measured total variances amounts explained by models in Table 14, Table 15 discloses the result of coefficients and changes in coefficient amounts of the running regression analysis at each stage of inserting the new variables which are constitutions factors of academic adjustment, social adjustment and personal-emotional adjustment.

According to model 1, motivation displayed a positive beta explaining positive changes in academic performance by 11.2%. By paying attention to the level of significance, motivation was enough close to count as a considerable factor can cause changes in academic performance ( $r = .093$ ). Academic environment demonstrated a negative and insignificant beta amounted at 2.3% which do not play so much important role in changes in academic performance. On the other hand, self-confidence illustrated positive and significant betas describing positive changes in academic performance by 51.6%. And finally college impact as the last factor of academic adjustment, revealed a negative and approximately significant ( $r = .092$ ) beta clarifying negative changes in academic performance by 10.5%. . Consequently, Hypotheses 1a and 1c are accepted while hypotheses 1b and 1d are rejected. Totally, academic adjustment with coefficient amounted at .281 exposed a strong positive correlation with academic performance, therefore there is a providing support for Hypothesis 1.

In accordance with model 2, the additional social adjustment factors caused a little decrease in significance of academic adjustment's factors coefficients instead of educational-institutional goals which had a little increase in its significant level ( $r$  rose up to 0.131 from 0.092). Although, noticeable changes did not happen by

enhancing social adjustment's factors, a detailed perspective of the result of this part is explained below.

In this model, motivation still showed a positive approximately significant beta clearing positive changes in academic performance by 12.1% ( $r = .076$ ), the other factor of academic adjustment, self-confidence, exposed a positive and significant beta stating positive changes in academic performance by 51.3%, and the rest factors of academic adjustment, academic environment and educational-institutional goals, represented negative insignificant betas amounted at 2.3% and 9.7% which did not cause notable changes, the adding social adjustment's factors, social participation and perceived fit had negative insignificant betas expressing negative changes in academic performance by 2.2% and 4.1% respectively, and the third factor of social adjustment, interpersonal relations, showed a positive insignificant beta amounted at 2.2%. . Thereby, all Hypotheses 2a, 2b and 2c are rejected. Entirely, social adjustment with coefficient amounted at .031 shows a weak positive correlation with academic performance, thus Hypothesis 2 should be rejected as well.

And according to model 3, a little decrease happened in significance of academic adjustment's factors and one of social adjustment's factors, perceived fit. The two other factors of social adjustment, social participation and interpersonal relations, had a little increase in their level of significance. Therefore, just like the result of the model 2, there were no important changes with adding personal-emotional adjustment's factors to academic and social adjustment's factors in model 3.

In the last model, motivation and self-confidence displayed positive and significant betas explaining positive changes in academic performance by 14.2% and 49.4%

respectively, academic environment, educational-institutional goals, social participation, perceived fit and physical efficacy presented negative insignificant betas describing negative changes in academic performance by 6.9%, 10%, 0.1%, 5.1% and 4.2% respectively, and finally, interpersonal relations and psychological efficacy disclosed positive and insignificant betas clarifying positive changes in academic performance by 1.2% and 13.9% respectively. As a result, there are enough evidence to determine both Hypotheses 3a and 3b are rejected. Wholly, personal-emotional adjustment with coefficient amounted at .019 expressed a weak positive correlation with academic performance, consequently it is logical enough to state Hypothesis 3 do not be supported as well.

As it has been seen in this section, two factors of academic adjustment, motivation and self-confidence, played the most important role in affection on academic performance of students based on the regression analysis results. These two factors were the only factors which presented significance level of changes in academic performance positively. Two other factors of academic adjustment, academic environment and educational-institutional goals, did not demonstrate significant changes in effecting on academic performance. By adding the two other independent variables' factors, social adjustment and personal-emotional adjustment, there were no observation of any remarkable changes. Social participation, interpersonal relations, perceived fit, physical efficacy and psychological efficacy are these factors which had little positive and negative changes in academic performance of students and all were not significant.

Table 15. Adjustment types regressed on academic performance\*

Model	Predictor	Un-standardized coefficient		Standardized coefficient	t.	Sig.
		B	Std. Error	Beta		
1. Academic adjustment	(Constant)	1.194	.302		3.95	.000
	Motivation	.108	.064	.112	1.68	.093
	Academic environment	-.013	.035	-.023	-.367	.714
	Self-confidence	.469	.060	.516	7.83	.000
	Educational-institutional goals	-.067	.039	-.105	-1.69	.092
2. Social adjustment	(Constant)	1.239	.334		3.710	.000
	Motivation	.117	.066	.121	1.786	.076
	Academic environment	-.013	.035	-.023	-.369	.713
	Self-confidence	.466	.060	.513	7.711	.000
	Educational-institutional goals	-.062	.041	-.097	-1.51	.131
	Social participation	-.016	.046	-.022	-.341	.733
	Interpersonal relations	.014	.039	.022	.356	.722
	Perceived fit	-.024	.037	-.041	-.652	.515
3. Personal-emotional adjustment	(Constant)	1.126	.343		3.28	.001
	Motivation	.138	.067	.142	2.06	.040
	Academic environment	-.039	.050	-.069	-.771	.442
	Self-confidence	.449	.061	.494	7.33	.000
	Personal-emotional goals	-.064	.041	-.100	-1.57	.118
	Social participation	-.001	.048	-.001	-.017	.987
	Interpersonal relations	.008	.039	.012	.198	.843
	Perceived fit	-.030	.037	-.051	-.805	.422
	Physical efficacy	-.027	.066	-.042	-.408	.684
	Psychological efficacy	.089	.056	.139	1.607	.110

\* Dependent variable: Academic performance.

#### 6.4.1.2 The Equations of the Analysis

One of the linear regression analysis goals is finding a mathematical relation between the dependent variable and independent variables of the study. This mathematical relation leads the researcher to have a better comprehension about situation of the dependent variable and its changes which caused by independent variables. In this section three mathematical relations (equations) which conducted based on the models of regression analysis are discussed.

Model 1 presented quantities of the effect of academic adjustment's factors on academic performance. 1.194 which called constant is a figure shows the amount of academic performance (minus standard error) when all of the factors are zero. 0.108, -0.013, 0.460, and -0.067 are respectively the ratio (slope) of motivation (M), academic environment (AE), self-confidence (SC) and Educational-institutional goals (EIG). And 0.500 is the amount of standard error of the equation. This figure calculated by summing up standard errors of each factor.

#### Equation 1:

$$\text{Academic performance} = 1.194^* + 0.108 M - 0.013 AE + 0.460 SC - 0.067 EIG + 0.500^{**}$$

\* Constant

\*\* Standard Error

Model 2 displayed quantities of the effect of social- and academic adjustments' factors on academic performance. 1.239 is the constant amount of the equation. 0.117, -0.013, 0.466, -0.062, 0.016, 0.014 and -0.024 respectively are the ratios of motivation, academic environment, self-confidence, educational-institutional goals, social participation (SP), interpersonal relations (IR) and perceived fit (PF). And 0.658 is the standard error's amount.

### **Equation 2:**

$$\text{Academic performance} = 1.239^* + 0.117 \text{ M} - 0.013 \text{ AE} + 0.466 \text{ SC} - 0.062 \text{ EIG} - 0.016 \text{ SP} + 0.014 \text{ IR} - 0.024 \text{ PF} + 0.658^{**}$$

\* Constant

\*\* Standard Error

Model 3 demonstrated quantities of effects of adding personal-emotional adjustment's factors to social- and academic adjustments' factors on academic performance. 1.126 is the constant amount of equation. 0.138, -0.039, 0.449, -0.064, -0.001, 0.008, -0.030, -0.027 and 0.089 respectively are the slopes of motivation, academic environment, self-confidence, educational-institutional goals, social participation, interpersonal relations, perceived fit, physical efficacy (PHE) and psychological efficacy (PSE). And 0.808 is the amount of standard error of the equation.

### **Equation 3:**

$$\text{Academic performance} = 1.126^* + 0.138 \text{ M} - 0.039 \text{ AE} + 0.449 \text{ SC} - 0.064 \text{ EIG} - 0.001 \text{ SP} + 0.008 \text{ IR} - 0.030 \text{ PF} - 0.027 \text{ PHE} + 0.089 \text{ PSE} + 0.808^{**}$$

\* Constant

\*\* Standard Error

## **6.4.2 Hierarchical Multiple Regression Analysis of the Effects of Demographic Indicators, Academic Adjustment, Social Adjustment, Personal-Emotional Adjustment and Academic Performance**

The goal of this section of regression analysis is to learn which controlling factors known as demographic indicators of the current research have more affection on the dependent variable, academic performance. Nationality, age, gender, level and major of study and income of the respondents are these demographic indicators. Therefore, the result of the hierarchical multiple regression analysis for demographic indicators is explained below.

### 6.4.2.1 The result of the Analysis

Table 16 presents how R, R-square, adjusted R-square and standard error of the estimate change each time when new variables and factors add to previous ones during the linear regression analysis process.

Table 16. Total variances explained by the models that measure academic performance (including academic, social and personal-emotional adjustments and demographic indicators)\*

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the estimate	R <sup>2</sup> change
1	.293 <sup>a</sup>	.086	.056	.46056	.086
2	.446 <sup>b</sup>	.199	.159	.43469	.113

<sup>a</sup> Predictors: (Constant), Nationality, Age, Gender, Level of study, Major of study, Income.

<sup>b</sup> Predictors: (Constant), Nationality, Age, Gender, Level of study, Major of study, Income, Academic adjustment, Social adjustment, Personal-emotional adjustment

\* Dependent variable: Academic performance.

Demographic indicators entered in model 1, which are nationality, age, gender, level of study, major of study and income of the respondents made clear 8.6% of the variance in the dependent variable which is academic performance. After addition of the independent variables, such as academic-, social- and personal-emotional adjustments in model 2, R-square rose to 19.9%, therefore the predictor caused a change in 11.3% of variance in the dependent variable. While the model explained this amount of change of variance in academic performance, the result can be interpreted as a quite a significant influence. Table 17 reveals coefficients of demographic indicators and independent variables in regression analysis of academic performance. The changes after addition of new variables in the second models are cleared as well.

Table 17. Academic, social and personal-emotional adjustments regressed on academic performance (including demographic indicators)\*

Model	Predictor	Un-standardized coefficients		Standardized coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.444	.328		7.460	.000
	Nationality	-.044	.077	-.047	-.569	.570
	Age	.034	.011	.228	3.050	.003
	Gender	-.057	.071	-.058	-.802	.424
	Major of the study	.005	.011	-.035	-.430	.668
	Level of the study	.040	.028	.116	1.404	.162
	Income	.024	.038	.045	.619	.536
2	(Constant)	.857	.485		1.766	.079
	Nationality	-.079	.074	-.084	-1.081	.281
	Age	.037	.011	.242	3.430	.001
	Gender	-.028	.067	-.029	-.419	.676
	Major of the study	-.003	.010	-.024	-.310	.757
	Level of the study	.054	.027	.158	2.013	.046
	Income	.039	.036	.075	1.081	.281
	Academic adjustment	.457	.092	.357	4.941	.000
	Social adjustment	-.008	.065	-.009	-.125	.901
	Personal-Emotional adjustment	-.051	.061	-.058	-.838	.403

\* Dependent variable: Academic performance.



With regard to model 1, nationality showed a negative insignificant beta which described 4.7% of changes in academic performance, age disclosed a positive and significant beta which explained 22.8% of changes in students' academic performance while they becomes older, gender and major of study had negative insignificant betas which demonstrated 5.8% and 3.5% of changes in academic performance respectively, level of study and income of the respondents illustrated positive and insignificant betas which expressed 11.6% and 4.5% of changes in academic performance respectively.

In accordance with model 2, the independents variables added to controlling factors due to the aim of checking the effect on the dependent variable which is students' academic performance. Nationality represented a negative beta insignificantly which showed 8.4% of changes in academic performance, age revealed a positive significant beta which stated 24.2% of changes in students' academic performance while they becomes older, gender and major of study illustrated negative betas which explained 2.9% and 2.4% of change in academic performance insignificantly, level of study and income of the respondents demonstrated positive betas which described 15.8% and 7.5% of changes in academic performance respectively, level of study's beta was approximately significant which stated changes occurred as students becomes more educated, but income's beta was insignificant. The first added independent variable of the study, academic adjustment presented a positive beta significantly which displayed 35.7% of changes in students' academic performance, the second added independent variable by the model which was social adjustment did not show any significant effect on students' academic performance and personal-emotional adjustment confirmed a negative and insignificant beta which indicated of 5.8% changes in students' academic performance as the last added independent

variable in this model. Therefore, in following section the equations of the analysis will be clarified.

#### 6.4.2.2 The Equations of the Analysis

The linear regression analysis applied for demographic indicators too, to investigate the existent mathematical relations between them, independent variables and the dependent variable. Two models below will illustrate these mathematical relations by their equations in detail.

Model 1 cleared quantities of the impact of demographic indicators on academic performance. Equation 1 shows 2.444 as the constant amount, -0.044, 0.034, -0.057, 0.005, 0.040 and 0.024 respectively as nationality (N), age (A), gender (G), major of the study (M'), level of study (L) and income (I) of the respondents, there is also the standard error amounted as 0.564.

#### Equation 1:

$$\text{Academic performance} = 2.444^* - 0.044 N + 0.034 A - 0.057 G + 0.005 M' + 0.040 L + 0.024 I + 0.564^{**}$$

\* Constant

\*\* Standard Error

Model 2 appeared quantities of the impact of inserting dependent variables of the research (academic adjustment, social adjustment and personal-emotional adjustment) to demographic indicators on academic performance. Equation 2 shows 0.857 as the constant amount, -0.079, 0.037, -0.028, -0.003, 0.054, 0.039, 0.457, -0.008 and -0.051 respectively as nationality (N), age (A), gender (G), major of the study (M'), level of study (L) and income of the respondents (I), academic adjustment (AA), social adjustment (SA) and personal-emotional adjustment (PEA),

and as a last factor, there is standard error of the equation amounted at 0.928. The equation form of the relation is displayed below.

**Equation 2:**

$$\text{Academic performance} = 0.857^* - 0.079 N + 0.037 A - 0.028 G - 0.003 M' + 0.054 L + 0.039 I + 0.457 AA - 0.008 SA - 0.051 PEA + 0.928^{**}$$

\* Constant

\*\* Standard Error

## **Chapter 7**

### **DISCUSSIONS AND CONCLUSION**

#### **7.1 The Results of the Study**

According to analyses of the current accomplished research and the main questions of the study that have been discussed at the initial of this dissertation (see Chapter 1), the captured consequences are explicated in below section.

##### **7.1.1 How do three various Types of Adjustment, Academic-, Social- and Personal-Emotional Adjustment, Influence a Student's Academic Performance?**

Students' academic adjustment has been found the positively, strongly and significantly correlated with their academic performance. Then, the obtained result by Rienties et al. (2011) in the matter of positive relationship between academic adjustment and academic performance has been proved. The other two types of adjustment, students' social adjustment and personal-emotional adjustment have been discovered to do not have any relationship with their academic performance.

##### **7.1.2 How the Elements of the three Different Types of Adjustment Can Affect a Student's Academic Performance?**

Each independent variables of the current thesis have their own constituent components. In the purpose of the research, the effects of these components were also examined on the dependent variable of the study.

###### **7.1.2.1 Academic Adjustment's Factors**

It has been found that two components of students' academic adjustment, motivation and self-confidence, have a positive, strong and significant effect on their academic

performance. Therefore, the obtained result by Cokley, Bernard, Cunningham and Motoike (2001) in the matter of positive relationship between student's motivation and their academic performance and the gained result by Gerdes, and Mallinckrodt (1994) in order to relationship between student's self-confidence and their academic performance have been proved. It is essential to state that self-confidence have a stronger relationship with academic performance in comparison to motivation. Although a student's self-confidence of his performance is more important to lead him to achieve a better fulfillment but having motivation play a very important role in a student's educational success as well.

Two other components of students' academic adjustment, academic environment and educational-institutional goals, have displayed no relationships with their academic performance.

#### **7.1.2.2 Social Adjustment's Factors**

All three components of students' social adjustment, social participation, interpersonal relations and perceived fit, have demonstrated no relationships with their academic performance.

#### **7.1.2.3 Personal-Emotional Adjustment's Factors**

No relationships have been found between two components of students' personal-emotional adjustment, physical and psychological efficacy, and their academic performance.

## **7.2 Limitations**

The current study faced some limitation which is mentioned here. The first limitation is related to the dependent variable of the research which is academic performance and was measured by students' GPA. Academic performance was computed as a one-

scale variable and it happened due to the method of assessment in the educational system of the population. The only method which can evaluate the whole students of the population is their GPA. Combining two or more scale for appraising a variable make the measurement process more accurate and previous literatures which research on students' academic performance such as Rienties et al. (2011) chose more than one score for measuring academic performance.

The next limitation goes to using students' self-reported scores for academic performance in this study. It may cause to collect not precise data and if it would be possible for investigators it is suggested to use students' academic profiles to catch the data about their academic performance based on ethical rules and regulations.

The last limitation of this thesis is that the analyzing process was on a sample which includes international and domestic students together. Separating these two categories from each other and analyze them separately may give more precise result.

### **7.3 Implications for Administrators of Higher Educational Institutes**

As it has been noticed in this research, students' academic adjustment is a fundamental provider to their academic performance, then administrators should be aware which components of academic adjustment have important effects on students' academic performance.

So far, universities' administrators should be pay more attention to the mental needs of the students with the aim of improving their motivation to study more, making them feel more enthusiastic to catch their goals, providing dynamic atmosphere to motivate them for more effort and trying to make their path straight in innovation and creativity. All these attempts and other same activities should be implemented to

conduct an environment which leads students to upper levels in motivation that caused a more successful academic performance. Rewards can always be effective positively in any age categories, therefore it is suggested for universities' administrators to regard and honor for progress of students in getting high quality academic performance.

Moreover, it is recommended to administrators of universities encouraging students to believe their abilities, making them to feel that they are valuable and important, learning them to trust and respect themselves, assisting them to be enthusiastic for taking part in academic competitions and learning them feel brave to participate in challenges. Rewarding, regarding and honoring successful students can make them feel more self confident and can give them the chance of believing themselves more confidently. Therefore, rewarding is important for rising students' self confidence as well as making them motivated.

However, administrators of universities should not forget providing a dynamic academic environment and support students' educational goals which are effective by the higher education institute help students adjust well academically, then a successful academic performance can happen in this situation.

#### **7.4 Suggestions for Future Researches**

Firstly, as it has been explained in limitation section, all analyses of the study have been applied on a sample which consisted half international and half domestic students, so future research may be interested to study on these categories separately. Even nationality of the students can be an effective factor on their adjustment such as students from countries which have same or close culture with the host country, so

other investigators may wish to pay more attention on this effect in the category of international students.

Next, it perhaps can help other investigators to know significant correlations between some variable, these relations were not focused in the current research but can be useful to work on in future studies. Students' motivation correlated with their self-confidence positively. Students' social participation has positive relations with their motivation, academic environment and perceived fit. Students' physical and psychological efficacy correlates with their educational-institutional goals positively. Students' physical efficacy has a positive and strong correlation with psychological efficacy. And students' academic adjustment also has strong positive correlations with their social adjustment and with their personal-emotional adjustment as well.

Finally, a demographic variable of this thesis has the potential to influence dependent variable and their relations as mediator. Age correlates with academic performance strongly, positively and significantly.



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