THE ROLE OF BIG FIVE PERSONALITY TRAITS IN PREDICTING PROSPECTIVE EFL TEACHERS' ACADEMIC MOTIVATION AND ACHIEVEMENT

BÜYÜK BEŞ KİŞİLİK ÖZELLİĞİNİN İNGİLİZCE ÖĞRETMEN ADAYLARININ AKADEMİK GÜDÜLENMELERİNİ VE BAŞARILARINI YORDAMADAKİ ROLÜ

Şenay KIRKAĞAÇ

Submitted to the Graduate School of Educational Sciences of Hacettepe University as a Partial Fulfillment to the Requirements for the Degree of Master in English Language Teaching Program

2016

This is to certify that we have read this thesis, entitled “The Role of Big Five Personality Traits in Predicting Prospective EFL Teachers’ Academic Motivation and Academic Achievement”, and that in our opinion it is fully adequate, in scope and quality, as a thesis for the Degree of Master in the Program of English Language Teaching.

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This is to certify that this thesis was approved by the aforementioned examining committee members on July 13, 2016 in accordance with the relevant articles of the Rules and Regulations of Hacettepe University Graduate Education, and accepted as a Master Thesis in the program of English Language Teaching by the Board of Directors of the Graduate School of Educational Sciences on ..... / ..... / 2016.

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THE ROLE OF BIG FIVE PERSONALITY TRAITS IN PREDICTING PROSPECTIVE EFL TEACHERS' ACADEMIC MOTIVATION AND ACHIVEMENT

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ABSTRACT

The aim of this thesis is to investigate possible relationships among personality traits, academic motivation and academic achievement of prospective teachers of English as a Foreign Language studying in the field of English Language Teaching. Additionally, the current study aims at determining the predictive power of personality traits and academic motivation on the academic achievement of prospective teachers. In the light of previous research, the Big Five Personality Traits Model (McCrea & Costa, 1985), which accommodates traits that are Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism, formed the personality part of the study. In the second part of the study dealing with academic motivation, the Self Determination Theory, created by Deci and Ryan (1985) was utilized. Academic achievement of the participants was determined by GPA grades. Sample of the study included 201 students in their second, third or fourth years at the Department of English Language Teaching at Hacettepe University. However, due to validity and reliability issues, data from 181 students were analyzed. Data were analyzed with the help of SPSS Statistical Analysis Software Version 20.0. In the study, Pearson-Product Correlation Test and multiple regression tests were computed. The findings of the study indicated that there are statistically significant and positive correlations between GPA and Openness, Conscientiousness and Agreeableness. The results with regard to academic motivation revealed that types of Extrinsic Motivation, that is; External Regulation, Identified Regulation and Introjected Regulation, correlated significantly and positively with academic achievement of the participants. Likewise, Intrinsic Motivation to Know and Intrinsic Motivation to Accomplish, which are types of Intrinsic Motivation, correlated positively with GPA grades of the participants. The only negative correlation of the study was expectedly between amotivation and academic achievement. Additionally, regression analyses showed that while personality traits within the scope Big Five Personality Traits Model were able to predict 17% of the academic achievement of prospective English language

teachers, academic motivation within the scope of Self Determination Theory could explain 10% of the variance in academic achievement of the participants.

Keywords: Big Five Personality Traits, Self Determination Theory, personality, academic motivation, academic achievement

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BÜYÜK BEŞ KİŞİLİK ÖZELLİĞİNİN İNGİLİZCE ÖĞRETMEN ADAYLARININ AKADEMİK GÜDÜLENMELERİNİ VE BAŞARILARINI YORDAMADAKİ ROLÜ

Şenay KIRKAĞAÇ

ÖZ

Bu çalışmanın amacı, hâlihazırda İngiliz Dili Eğitimi alanında eğitim almakta olan öğretmen adaylarının akademik başarıları ile kişilik özellikleri ve akademik güdülenmeleri arasındaki ilişkileri araştırmaktır. Buna ek olarak, söz konusu çalışma kişilik özelliklerinin ve akademik güdülenmenin öğretmen adaylarının akademik başarısı üzerindeki yordayıcı gücünü tespit etmeyi amaçlamaktadır. Bu alanda yapılmış diğer çalışmaların ışığında, "Büyük Beş" Kişisel Özelliklerinin (McCrea & Costa, 1985) -ki bunlar Açıklık, Sorumluluk, Dışadönüklük, Uyumluluk ve Duygusal Denge Eksikliği olarak adlandırılabilir- çalışmanın kişilik özellikleri ile ilgili olan kısmında kullanılmıştır. Çalışmanın ikinci bölümünü oluşturan akademik güdülenme kısmında ise Deci ve Ryan (1985) tarafından geliştirilen Öz Belirleme Kuramından yararlanılmıştır. Katılımcıların akademik başarısı genel not ortalamaları ile belirlenmiştir. Çalışmanın örneklemini ise Hacettepe Üniversitesi İngilizce Öğretmenliği lisans programında ikinci, üçüncü ve dördüncü yıllarını okumakta olan 201 öğrenciden oluşmaktadır. Fakat veri geçerliliği ve güvenirliği gibi konular nedeniyle 181 öğrenciden alınan veri incelenmiştir. Elde edilen veriler SPSS 20.0 istatistik analiz programı ile incelenmiştir. Araştırmada Pearson-Product korelasyon testleri ve çoklu regresyon analiz yöntemleri kullanılmıştır. Çalışmanın bulguları kişilik özelliklerinden Sorumluluk, Açıklık ve Uyumluluk ve genel not ortalaması arasında istatistiksel anlamda önemli ve pozitif yönde bir ilişki olduğunu göstermektedir. Çalışmanın akademik güdülenme bölümü ile ilgili olan bulgular ise, dışsal güdülenmenin alt başlıkları olan Dışsal Düzenleme, İçe Yansıtılmış Düzenleme ve Belirlenmiş Düzenleme ve akademik başarı arasında istatistiksel olarak anlamlı, pozitif ilişkiler olduğunu göstermektedir. Benzer şekilde, içsel güdülenme türlerinden Öğrenme İçsel Motivasyonu ve Başarma İçsel Motivasyonu ile genel not ortalaması arasında anlamlı ve olumlu yönde ilişkiler tespit edilmiştir. Akademik başarı ve güdülenememe arasında ise beklendik şekilde negatif yönde bir ilişki görülmüştür. Regresyon çalışmalarının sonuçları Büyük Beş Kişilik Kuramı dâhilinde kişilik özelliklerinin öğretmen adaylarının akademik başarısını %17

oranında Öz Belirlerme Kuramı kapsamında akademik güdülenmenin ise akademik başarıyı %10 yordayabildiğini göstermektir.

Anahtar sözcükler: “Büyük Beş” kişilik kuramı, Öz belirleme kuramı, akademik güdülenme, kişilik özellikleri, akademik başarı

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DECLARATION OF ETHICAL CONDUCT

I have prepared this thesis in accordance with the thesis writing rules and conventions of the Graduate School of Educational Sciences of Hacettepe University, and I hereby declare that:

- All the information and documents have been obtained on the basis of academic rules,
- All audio-visual and written information and results have been presented according to the rules of scientific standards,
- In case of using other works, related studies have been cited in accordance with the scientific standards,
- All cited studies have been fully referenced,
- I did not do any distortion in the data set,
- And any part of this thesis has not been presented as any other thesis study at this or any other university.

Şenay KIRKAĞAÇ

To my beloved parents

Osman & Gülten SOYTÜRK

ACKNOWLEDGEMENTS

Last a few months were the most challenging time of my entire life. So, I believe that people around me during those days deserve a sincere thank you.

In the very first place, I would love to express my gratitude to my supervisor, Asst. Prof. Dr. Hüseyin Öz for his continuous guidance and support. He never stopped encouraging and supporting me despite my endless questions.

I would like to thank the committee members, Assoc. Prof. Dr. Paşa Tevfik CEPHE, Assoc. Prof. Dr. Arif SARIÇOBAN, Assoc. Prof. Dr. İsmail Hakkı ERTEN and Asst. Prof. Dr. İsmail Fırat ALTAY for their constructive feedback, time and effort. I would also love to take this opportunity to thank Prof. Dr. İsmail Hakkı MİRİCİ, the head of Hacettepe University Foreign Language Education Department.

I would like to express my gratitude to Dr. Taner YAPAR, the director of TOBB ETU Department of Foreign Languages for his encouragement. It would have been impossible to complete my M.A studies without his support. I also wish to express my thanks to my colleagues at the Department of Foreign Languages at TOBB ETU.

I am also grateful to my fellow colleagues Berrin CEFA SARI, Hakan TARHAN, Melis AKDOĞAN GÜNDOĞDU, Şebnem ÖZTÜRK, and Zeynep Gülay ALICI for their patience and never-ending support. They were always more than eager to listen to me and help me whenever I needed them.

I wholeheartedly thank my family members; Osman and Gülten SOYTÜRK, my parents, and Sevim SOYTÜRK, my sister, for their love, care and tolerance. Without them, I would neither be able to write this thesis nor pursue my ambitions. Thanks to their unconditioned love, I feel competent for future studies. I dedicate my thesis to them as a thank you.

My sincerest thanks go to my beloved husband, Murat KIRKAĞAÇ, who has stood behind me in each and every decision that I make for more than a decade. He was able to put up with me in spite of the tough times I went through while writing this thesis. I thank him for helping me become who I am at the moment and holding my hand on my journey to who I want to be. I feel quite privileged to have him in my life.

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ABBREVIATIONS

GPA: Grade Point Average

ELT: English Language Teaching

AMS: Academic Motivation Scale

IPIP: International Personality Item Pool

IM: Intrinsic Motivation

EFL: English as A Foreign Language

1. INTRODUCTION

1.1. Introduction

This thesis seeks to find out whether there is a relationship among personality traits, academic motivation, and achievement. In the present study, in order to find out the personality tendencies of the participants, Big Five Personality Traits Model (Costa & McCrea, 1985) is utilized. For academic motivation, participants are analyzed based on the principles of the Self-Determination Theory (Deci & Ryan, 1985). In this chapter, background of the study is presented. Following the presentation of the background, the problem and the purpose of the study are stated. Later, significance of the study is discussed. Then, the research questions are clarified. Following the assumptions and limitations, the terms used in the current thesis are defined in the light of earlier studies.

1.2. Background of the Study

Learners are incredibly unique individuals, and they differ from each other in many ways. Although these differences were ignored until 1950, the spread of Humanism in the field of education paved the way for brand-new methods and techniques (Brown, 2007; Larsen-Freeman, 2013). Some of these methods include Suggestopedia, Total Physical Response (TPR), Community Language Learning and Communicative Language Learning (Richards & Rogers, 2000). Such developments in the field pointed out the importance and effect of individual differences while learning, specifically while learning a new language.

When individual differences are regarded, personality is often the first construct associated with these differences. Personality is a very broad construct that stands out where people are involved. Essentially, it covers all the features and deeds that make people as they are. Funder (2001) defined personality as “individuals' characteristic patterns of thought, emotion, and behavior, together with the psychological mechanisms -- hidden or not -- behind those patterns.” (p. 2). Similarly, Hogan et al. (1996) described personality as individuals’ disposition towards certain actions or patterns of attitudes. Although the definitions of personality seem to be clear and cause no ambiguities, personality varies greatly among individuals.

Certain definitions of personality indicate that there has been a lack of consensus on the definition of personality. In time, however, scholars have recognized the unique

personalities of the individuals and made, even discovered, certain measurements, evaluations, and categorizations. Their attempts have thus led to the development of personality traits.

One of the most plausible models that was developed in order to find out certain broad categories to refer to specific personality traits is the Big Five Personality Traits Theory. Early version of the Big Five Personality Traits Model is called the Five-Factor Model (FFM). This model owns a hierarchical organization of personality traits including five basic dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to Experience. In their study, McCrae and John (1992) attributed the formal beginning of Big Five Personality Traits Model to FFM by Norman (1963) who stated the need for a suitable taxonomy of personality traits. Norman (1963) used the following factor numbers and the names: I. Extraversion or Surgency, II. Agreeableness, III. Conscientiousness, IV. Emotional Stability, and V. Culture.

One of the benefits of using numbers with the names is that numbers are neutral in nature. In other words, they do not connote specific meanings related to the names they are used with. These names and numbers can be considered to be the first version of what is known as Big Five Personality Traits Model today. However, it is worth mentioning that Big Five Personality Traits as a model is a product of a long process in which many scholars have somehow contributed. Next big development in the model, for instance, was by Eysenck (1985) who asserted that Extraversion (E) and Neuroticism (N) were the major elements claiming that the others were subcategories. It was also Eysenck who proposed the use of initials rather than the numbers depending on the idea that it might be difficult to remember which number referred to which trait. Later in the development of Big Five Personality Traits, Eysenck's notion of two-element model may have encouraged Wiggins (1968) to use the term "Big Two" for these components. Although lots of changes - such as supplementation of the Openness to Experience by Costa and McCrea (1980) - took place in the model itself and the names given to the major traits, Goldberg coined the term "Big Five" for the model in 1981 giving the model its modern name. The current version of the model which is also cited in this study has five major equally important components including Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness. The terms will be discussed in the following parts of the chapter.

Since the fifth component was added to the model, there have been some suggestions from scholars (e.g. Digman & Takemoto-Chock, 1981) to add the sixth component as a result of the studies conducted based on Big Five Personality Traits Model. However, no agreement on the sixth component has been reached, so far. Some suggestions with regard to the sixth trait were Masculinity/Femininity, Values Factor or Culture Factor. However, proponents of Big Five Personality Traits Model claimed that these traits can be accommodated under the original five traits, as well. In addition, as all people show unique characteristics, it would never be possible to come up with a general and an agreed model if every specific feature in the model would be included.

Clearly seen from the historical development of the model, plenty of researchers and scholars have assisted in the formation of the current model throughout the history. In line with the view, it can be inferred that there was an urgent need for a consistent and comprehensive model for categorizing the personality traits. There are several crucial reasons for the need of a unifying model.

The most significant reason for the need of one consistent model is basically practicality. As personality is a very broad construct which is studied in various fields, it has always gained the interests of the researchers from different fields. Thus, in order for the results to be cumulative and ready to be benefitted by other researchers rather than scattered under different categories of models, it was high time that scholars utilize one agreed model. At that point, the Big Five Personality Traits Model stood out for many reasons.

To begin with, the five traits that the model accommodates overlap perfectly with the studies that include more or less than these traits. In other words, the categories or titles that the other studies propose can easily find a place in the Big Five Personality Trait Model, as well.

Another reason why the Big Five Personality Trait Model has gained popularity among researchers and scholars is that the model makes use of the terms that make sense to people working in different fields as well as common people. McCrea and John (1992) asserted that Five Factor Makers (FFM) - Big Five in its current name – endowed psychologists from different traditions with a common language and a natural framework for arranging the studies. Although some scholars (e.g. Block, 1995) criticized the model due to the belief that using labels might lead people to misinterpret the terms, scholars strengthened the model with the help of certain adjectives attained

to each category. The accompaniment of the adjectives to the terms has also eliminated the risk of mistranslation from the original study to other languages. Even if the terms themselves have evoked different concepts into people's minds due to varied cultural backgrounds, the adjectives help people to reach more standardized version of the concept in different cultures.

In addition to these plausible reasons, it is worth mentioning that the Big Five Personality Traits Model aims at developing universal categories or labels for the sake of more fruitful research findings. It takes its universality both from the basic and comprehensible words used for each term and from the fact that it has been analysed and contributed by different scholars for a long time.

Even though Big Five Personality Traits Model has gained appreciation from the scholars from various fields due to the reasons provided above, as previously stated, it was also criticized several by researchers and scholars (e.g. Mershon & Gorsuch,1988). To begin with, many scholars argued that the model was far from covering the richness of even one individual. Thus, it was claimed that the model was inadequate and needed to be elaborated. However, as stated earlier, the Big Five Personality Traits Model did not promise to cover every detail of an individual. It aimed at providing a reliable starting point for the development of other research. Eventually, it was highly unlikely that a single theory or model would be sufficient to explore personality owing to the fact that nature of personality itself appeared to be a problem at that point.

Although several similar criticisms have taken their places in literature, when the criticisms and the benefits are taken into account, benefits such as its being a useful starting point in the personality studies, having internal consistency, serving as a common jargon for almost all researchers overweigh the criticisms towards the model.

In addition to personality, another individual difference that has been attracting the attention of researchers and scholars from the field of education is the concept of motivation. Motivation can be defined as "the reasons underlying behavior" (Guay et al., 2010, p. 712). Another definition by Broussard and Garrison (2004) states that motivation is the attribute that moves people to do or not to do something. In other words, it would not be incorrect to state that motivation is the positive attitude or willingness that enables us to perform a specific task or duty. Academic motivation,

which is slightly more specific than motivation, can be defined as the reasons that affect a person to attend the school studies to get a degree (Clark & Schroth, 2010).

Although the term itself is not new, studies on motivation still continue. After the concept of motivation settled down in scholars' minds thanks to innumerable definitions, researchers realized that the source of the motivation created differences in the motivation, itself. Thus, a need for new terms for different sources of motivation emerged. Even though the history of this search could be dated back to the 1960s, even to Skinner's reinforcements in the 1950s (Stipek, 1996), it was mainly Edward L. Deci who contributed to motivation theories to great extent.

Scholars working on motivation, motivational factors and sources of motivation came up with two terms: intrinsic motivation and extrinsic motivation. In Deci's own words:

> *"It is possible to distinguish between two broad classes of motivation to perform an activity: intrinsic motivation and extrinsic motivation. A person is intrinsically motivated if he performs an activity for no apparent reward except the activity itself. Extrinsic motivation, on the other hand, refers to the performance of an activity because it leads to external rewards (e.g., status, approval, or passing grades)" (Deci, 1972; p. 113).*

Scholars and researchers have benefitted from this meaningful distinction in their own studies. In the light of this distinction, a number of scales have been developed in order to accurately diagnose the motivation type of the individuals. Still some of the educational theories are based on this distinction. Since the emergence of this distinction, educators have believed that intrinsically motivated learners have better learning outcomes compared to extrinsically motivated learners. (Deci et al., 1999). This belief still prevails in the field of education for some good reasons.

The differences between intrinsic motivation and extrinsic motivation were ground-breaking for the future studies as learner profiles and the process of teaching and learning showed clear differences in these motivation types. Therefore, new subcategories and some alternations were required. In need for such changes, Deci and Ryan (1985) developed a more detailed version of the motivation theory called the Self-determination theory. Unlike the previous version, there are three major categories in the theory named as intrinsic motivation, extrinsic motivation and amotivation. Adding amotivation element was essential because there are some instances when the learner does not make use of any motivational sources ending up not performing the task or duty, at all. Therefore, existence of the label helps researchers to categorize them under a different title.

In addition to the existence of amotivation component, some new subcategories took their places under intrinsic and extrinsic motivation. Intrinsic motivation has three types named as Intrinsic Motivation to Know, Intrinsic Motivation to accomplish and finally Intrinsic Motivation to Experience. Clark and Schroth (2010) defines Intrinsic Motivation to Know as a drive that a person has due to the pleasure s/he feels from learning a new thing. Intrinsic Motivation to accomplish refers to the willingness that the person has because s/he enjoys completing a task and feeling competent to create something new (Öz, 2015). Intrinsic Motivation to Experience is about the sense of excitement that a person feels when in a new learning or performing environment (Öz, 2015). Similarly, Extrinsic Motivation has three types. These are Identified Type of Regulation, Introjected Type of Regulation and External Type of Regulation. In identified regulation the person performs the task because s/he values the activity despite not enjoying it. Introjected regulation refers to the person's engagement in the activity in order to maintain personal expectations not for the pleasure of the activity. Finally, external regulation means the people is involved in that specific activity due to external reward(s) or avoid punishment (Clark & Schroth, 2010).

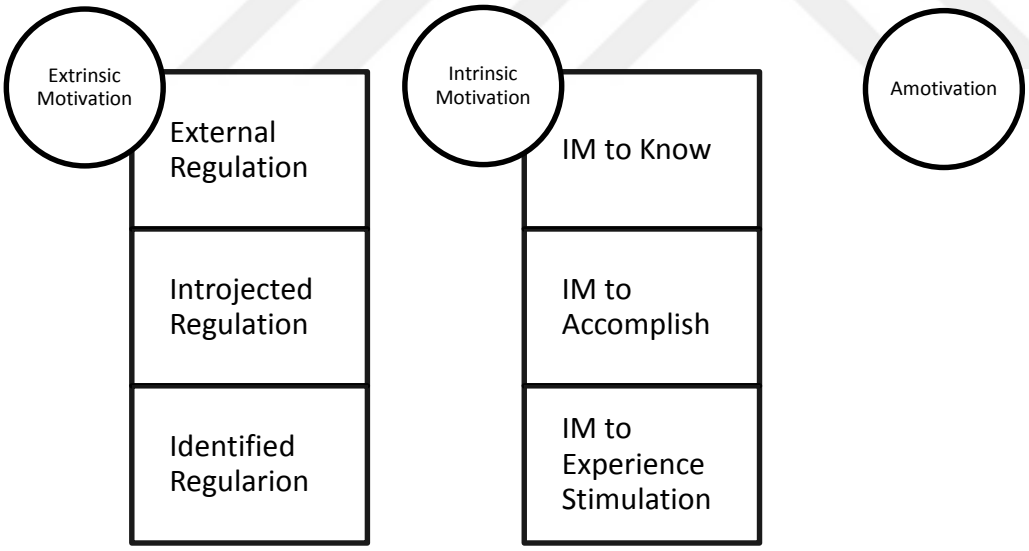


Figure 1: Hierarchical structure of academic motivation based on Self-Determination Theory (Clark & Schroth, 2010)

The existence of these specific categories helps researchers organize the participant profile in a clearer way. In addition, these categories enable research findings to be more accurate since two-dimensional motivation theory did not completely distinguish one group of learners from the other group in an accurate way.

As the categories were clear in terms of motivational factors, researchers tried to find ways to put the learners into correct categories. In need of diagnosing the motivation type of the individuals, several scales have been developed and used extensively. In search for creating a reliable scale, Vallerand, Blais, Briere and Pelletier developed the most well-known motivational scales called Echelle de Motivation en Education in French in 1989, which was translated as Academic Motivational Scale into English.

The scale takes the Self Determination Theory as its base and aims at finding the source of motivation that learners are mostly moved by. 28-item scale tries to put the learner into the correct category among seven categories. Reliability and validity issues of the scales will be discussed in the following chapters.

1.3. Statement of the Problem

Existence of myriad studies on Big Five Personality Traits and academic motivation and achievement proves that there is a promising link among these three individual differences. According to Green, Neslon, Martin and Marsh (2006), for instance, academic motivation bears a key role in determining academic performance and achievement. Komarraju & Karau (2005) also point out that personality factors also affect motivation and they have great implications for student learning.

These results have obviously encouraged researchers to conduct more studies. Therefore, a lot of researchers have intended to predict academic achievement with the help of personality traits and academic motivation. However, much of the research has focused on elementary, middle and high school students for a long time. (Komarraju & Karau, 2005) Therefore, very few studies have been done on pre-service or prospective English language teachers. Although prospective teachers need to be aware of concepts such as academic motivation and Big Five Personality Traits more than other groups of participants due to their future profession, only a limited number of studies have been conducted with prospective teachers as participants of the study. Lack of such studies in the field of education creates a huge gap in literature. Therefore, this study aims to fill this gap.

In addition to the uniqueness of the participant profile, the scope of the study also contributes to the field due to the fact that Big Five Personality Traits and academic motivation of the learners are two topics that have taken the attention of the researchers separately. Although few studies have recently covered the relationship

among Big Five Personality Traits, academic motivation and academic achievement, more research is required for more accurate and consistent results. Thus, the current study aims at contributing the literature by addressing the direct links among Big Five Personality Traits, academic motivation, and academic achievement.

1.4. Purpose of the Study

The main aim of this study is to find out whether there is a relationship among personality traits, academic motivation and academic achievement of prospective English language teachers.

The current study is based on the idea that the learners would be motivated most in a learning environment which would be able to accommodate their personality traits. In the light of the previous research claiming Big Five Personality Traits have strong influences on learners' behaviors (Costa & McCrae, 1992), the current study tries to uncover how much personality and academic motivation affect academic achievement of Turkish prospective teachers of English in a state university context. Specifically, the study intends to discover which personality trait(s) are significantly correlated with academic achievement. In addition, the study aims at finding out how much of the academic achievement is predicted by personality. Another purpose of the study is to detect the relationship between academic motivation and academic achievement. Possible links between academic motivation drives and academic achievement are also studied. It also tries to reveal to what extend academic motivation can predict academic achievement. Finally, the study aims at finding out the correlations between personality traits and academic motivation drives. It is believed that the findings will shed light on motivation issues and concerns of the learners and raise awareness in both learners and educators.

To sum up, finding out the possible links between these three concepts and discovering the predictive power of personality and academic motivation on achievement are main goals of the study. It is believed that the results will enlighten the issues with regard to effects of personality traits and academic motivation on learning a foreign language.

1.5. Significance of the Study

Although previous research sheds light on the issue to a great extent, the current study is significant for several reasons. One of the distinctive features of the study is the unique participant profile. As stated earlier, most of the research (e.g. Conard, 2006;

Hakimi, Hejazi & Lavasani, 2011; Komarraju, Karau & Schmeck, 2009) deals with freshman university students. Even though these studies focus on university students as their participants, no departmental information is provided to our knowledge. The study is also significant in that the data is collected from prospective English language teachers. Getting data from the prospective English language teachers will not only induce interesting results but also raise great awareness in prospective English language teachers. Having an insight on the topic, prospective English teachers may reflect the knowledge on their own teaching, which will result in better teaching and learning processes for the future generations.

In addition, although many studies have dwelled on issues of motivation and personality, the study is important because it forms a link among personality traits, academic motivation and academic achievement, which may help future educators to develop more effective teaching strategies (Komarraju & Karau, 2005). By uncovering the mysteries behind personality traits and academic motivation, future educators and / or curriculum developers may create learning environments and opportunities for the learners whom teachers perceive as low-achievers. In the long run, this would help build up better-educated communities.

Finally, conducting such a study will raise awareness in lower-achievers, as well. Realizing that motivation, personality traits and achievement are somehow related, lower-achievers may try to manipulate their behavior to achieve more, or these learners may look for different motivation sources, which means that they will also be integrated into the effective teaching learning process.

As a result, this study not only includes practical benefits stated above but also aims at filling a gap in literature with the help of its unique participant profile. Thus, it is believed that the study will contribute to the literature on the topic.

1.6. Research Questions

As the aim of the study is to find out possible relationships between personality traits and academic achievement, academic motivation and academic achievement, and personality traits and academic motivation, the following questions are formulated to guide the present study.

RQ1: What are the participants' perceived levels of personality traits and academic motivation?

Mean scores of the participants' depending on the data obtained via scales will be presented to get a general idea about the participant profile of the study.

RQ2: Is there a significant relationship between personality traits and academic achievement?

In the light of aforementioned previous research, it is assumed that while some personality traits help academic achievement, some traits may affect academic achievement in an undesired way. Therefore, the link(s) between personality traits and the achievement is one of the main concerns of the study.

RQ3: Is there a significant relationship between academic motivation and academic achievement?

As cited earlier, intrinsic motivation facilitates learning, causing higher academic achievement. The links between different motivation sources and academic motivation and the link between lack of motivation and academic motivation are one of the other major constructs of the study.

RQ4: Is there a significant relationship between academic motivation and personality traits?

As the literature proposed certain promising links between academic motivation and personality traits, it is believed that finding out these links may contribute the existing literature.

RQ5: What personality traits can predict academic achievement of the participants?

The effect(s) of certain personality traits on academic achievement will be uncovered with the help of certain statistical tests.

RQ6: What motivational drives can predict academic achievement of the participants?

The effect(s) of certain motivational drives on academic achievement will be uncovered with the help of certain statistical tests.

1.7. Assumptions and Limitations

Although possible limitations were predicted and tried to be manipulated before the study was conducted, some limitations are beyond the researcher's ability to intervene.

First of all, personality has long been a rather hot topic not only in the field of education but also in other fields such as psychology, sociology or even business administration

(Ozer & Benet-Martinez, 2005). As it is a locus for many fields of study, the debate among researchers intensifies. In this study, one of the most appreciated models in the field of education (Clark & Schroth, 2010) - Big Five Personality Traits Model- was utilized. However, it is worth mentioning that although being one of the well-known personality models in literature, it got criticism from researchers, as well. The same limitation applied to the second part of the study, which was academic motivation. Even though academic motivation has been discussed by lots of researchers, there is no agreed model on the topic. Two dimensional model including two types of motivation – intrinsic and extrinsic motivation- has gained attention and appreciation from many researchers. However, in this study Self Determination Theory, both adding subcategories to intrinsic and extrinsic motivation and taking amotivation component into consideration, was regarded as the most appropriate theory for the study.

Another limitation could be related to the surveys that prospective English language teachers are expected to fill in. The participants were expected to fill in two surveys. As in all research, the risk of getting missing or erroneous data was valid for this piece of research, too. Thus participants were informed that there would be no judgments on the data they provided. The missing data as well as outliers were eliminated to keep the reliability and validity high.

In addition, as a part of research, participants were asked to provide information on their GPA grades. In one of the surveys, participants were expected to write their GPA grades in order to enable the researcher to see the relationship among personality traits, academic motivation and academic achievement. At that point, participants were assumed to deliver correct information about their own GPA due to the fact that they were informed that no judgments would made against them, and all of the information that participants provide would be reached only by researchers for academic purposes.

The limitations stated above were the limitations that the researchers had anticipated before the research was conducted. All of the anticipated limitations were dealt with care to increase the validity and reliability of the results.

1.8. Definition of Terms

A glossary of the key terms that appear in the thesis are given below. These terms mainly belong to Big Five Personality Traits Model and Self-Determination Theory.

Agreeableness: It is one of the five traits of Big Five Personality Traits Model which connotes being trusting and cooperative as well as complying with the rules and requirements.

Amotivation: It refers to the lack of any motivational sources.

Big Five Personality Traits: It refers to the five basic underlying dispositions of personality which are Neuroticism, Extraversion, Openness, Conscientiousness and Agreeableness (John & Srivastava, 1999).

Conscientiousness: It describes controllable impulse that helps the individual complete the task properly. It also leads to goal directed behaviors such as being disciplined and achievement oriented, thinking before acting, organizing, and obeying rules.

Extraversion: It refers to an energetic approach to the social and material world that includes traits such as sociability, activity, assertiveness and positive emotionality (Ulu & Tezer, 2010).

External Regulation: It is a condition when the individual does the activity for the sake of reward or avoiding punishment.

Extrinsic Motivation: It refers to the existence of an external or possibly materialistic reason to perform a task. Like intrinsic motivation, extrinsic motivation has three subcategories which are Identified Regulation, Introjected Regulation and External Regulation.

Identified Regulation: In this type of motivation the person does the activity because s/he believes the value of the activity even though that person doesn't fully enjoy doing it.

Intrinsic Motivation: It is the existence of internal source of motivation regardless of the materialistic sources or sources that are forced by others. According to the Self Determination Theory, intrinsic motivation has three subscores, that is, intrinsic motivation to know, intrinsic motivation to accomplish and intrinsic motivation to experience.

Intrinsic Motivation to Accomplish: It is a source of motivation that refers to the satisfaction that the individual feels when completing a task.

Intrinsic Motivation to Experience: It is a source of motivation that refers to a state a person deals with a particular activity because the individual finds the activity stimulating.

Intrinsic Motivation to Know: It is the source of motivation that refers to the pleasure that the individual has as a result of learning a new thing.

Introjected Regulation: It is a condition when the individual engages in the activity to fulfill a particular expectation or to avoid guilt.

Neuroticism: It is associated with the lack of emotional stability resulting in negative emotionality such as feeling anxious, nervous, sad and tense.

Openness to Experience: It is a state that triggers originality and creativity. The trait leads to strong intellectual curiosity and desire to experience new things.

Self Determination Theory: It is a theory by Deci and Ryan (1985) that regards motivation as a continuum from the amotivation component to intrinsic motivation, extrinsic motivation being in the middle of the continuum.

2. REVIEW OF LITERATURE

2.1. Introduction

The review of literature presents earlier studies from the literature with regard to personality and motivation. Specifically, the first section is allocated for the Big Five Personality Traits Model, detailed presentation of these five traits, features associated with these traits and also previous studies dealing with the Big Five Personality Traits and academic achievement. The second section of this chapter is devoted to motivation. In this part of the chapter, the Self Determination Theory is discussed along with motivational factors that predict achievement.

2.2. Big Five Personality Traits Model

The growing interest of the researchers in the individual differences during the 20th century has paved the way for the rise of many theories covering individual differences. Some of these theories have dealt with issues such as anxiety, gender, age and attribution. However, the areas which have been studied extensively and thoroughly have been personality traits and motivation (Busato et al., 2000; Komarraju & Karau, 2005).

Although a lot of definitions exist regarding the term of “personality”, it can be defined as “the most individual characteristic of a human being” (Dörnyei, 2005, p. 10). Similarly, Hogan, Hogan and Roberts (1996) proposed that personality was a stable individual difference that included a person’s attitude towards certain behaviors, cognitions and feelings. As it is one of the most influential individual differences affecting human behavior, huge number of studies have been conducted on the effect of personality on education. Two main theories – Eysenck & Eysenck’s three-component personality model (1985) and Costa and McCrea’s Big Five Personality Traits Model (1992) - attracted the attention of scholars working on personality (Öz, 2015).

The main rationale for the rise of personality models and theories lays on the fact that many researchers (e.g. Barratt, 1995; Barrick & Mount, 1996; Blickle, 1996) believed that personality had an effect on the way learners accumulated and processed information. Chamorro-Premuzic and Furnham (2003a, 2003b, 2004, 2005) claimed that personality traits could determine academic outcomes together with the

intelligence factor. Farsides and Woodfield's study (2003) on personality also supported the idea that personality had a predictive power on academic achievement. Similarly, Chamorro-Premuzic and Furnham (2003a) found out that personality was significantly correlated with academic performance. In addition, according to Rindermann and Neubauer's study (2001), personality and intelligence affected information processing speed which changed exam grades directly. Likewise, Oz's study (2015) showed that personality partly explained overall academic motivation. Many other researchers (e.g. Chamorro-Premuzic & Furnham, 2008; Furnham and Monsen, 2009; Nguyen, Allen & Fraccastoro, 2005; O'Connor & Paunonen, 2007) agreed on the fact that personality traits had considerable amount of impact on the academic achievement and performance.

Big Five Personality Traits Model - also called Five-Factor Model of Personality- was proposed by McCrea and Costa in 1987. However, it is necessary to recall that many other scholars such as Eysenck (1992), Wiggins (1968) and Norman (1963) and Goldberg (1981) contributed to the development of the modern Big Five Personality Traits Model.

The Big Five Personality Traits model rose and spread around the world among scholars and researchers due to its strengths. Considering the modern form of the model, Costa and McCrea (1992) argued that Big Five Personality Model covered the major parts of individual differences in behavioral patterns. Although there were some criticisms stating that five traits were not enough to cover the variety in the personality of an individual (Mershon & Gorsuch, 1988), McCrea and Costa (1992) refuted that criticism by explaining that Big Five Personality Traits Model did not aim at covering all features of an individual. Rather, these traits intended to come up with a universal framework that could be referred while dealing with personality issues. The popularity of the model showed that they reached their goal.

In addition, providing researchers with a common language have assisted them to have more productive results (McCrea & John, 1992). Before the Big Five Personality Traits Model, scholars and / or researchers working on personality traits used to end up with new terms for the same traits. This has caused the repetition of the similar studies over and over with different terms. However, having an agreed jargon in terms of personality enabled researchers and scholars to build on it, and thus, to have cumulative and more productive outcomes.

Moreover, the existence of Big Five personality traits model opened up new horizons for researchers. Having a base for the research, scholars have been trying to discover the relationship between personality and other important issues such as motivation, achievement, anxiety etc. Today, there are innumerable studies that try to discover a link between personality and issues such as achievement, motivation, anxiety etc (Öz, 2015). With regard to motivation, for instance, many scholars (e.g. Payne, Youngcourt & Beaubien, 2007; Ross, Rausch & Canada; 2003) claimed that personality traits determined learners' motivational attitudes to a great extent.

At present, Big Five Personality Traits Model dominates the literature regarding personality, showing that McCrea and Costa's claim was not pointless (O'Connor & Paunonen, 2007). To illustrate from the literature, Busato et al. (2000) claimed that there was a strong agreement between scholars working on personality on the description of personality based on five factors. Other scholars (e.g. Digman, 1990; Goldberg, 1990; de Raad & Schouwenburg, 1996) agreed and stated that there was a consensus about describing personality with the help of five universal traits. Thus, it is safe to put that it is appropriate to consider the model as the primary model for the research trying to find out the effects of personality traits (Feyter et al., 2012).

As the name of the model suggests, the modern Big Five Personality Traits Model tries to cover the personality via five major traits. The traits can be listed as Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. These traits will be discussed in the following parts of the chapter in detail.

2.2.1. Conscientiousness

2.2.1.1. Characteristics of Conscientious Learners

McCrea and John (1992) attempted to standardize the concepts that people from other countries utilized when they thought about these traits. Therefore, they decided to use some adjectives for each trait. According to McCrea and John (1992), conscientious learners were efficient, organized, reliable, responsible and thorough. Many other upcoming studies had similar concepts with regard to conscientiousness. For example, conscientiousness referred to "socially prescribed impulse control" (Hogan & Ones, 1997, p.851). Similarly, Busato et al. (2000) described conscientiousness as desire to succeed, having self-control and being persistent. According to Roberts, Chernyshenko, Stark and Goldberg (2005) conscientiousness included six aspects in

its conceptual structure and these were industriousness, order, self-control, traditionalism, responsibility and virtue. In addition, these learners were likely to work harder than their peers, and they strived to succeed and attended classes more. (Chamorro – Premuzic & Furnham, 2003a; De Raad, 1996). Feyter et al. (2012) similarly stated that conscientious learners could be characterized by their orderly, deep and accurate pattern of working. Some other studies mentioned self-discipline and persistence as an inseparable part of conscientiousness. (MacCann, Duckworth & Roberts, 2009; Paunonen & Ashton, 2001). As a result; it could be inferred that the conscientious learners were well-organized, achievement-oriented, and responsible. Due to these reasons, conscientiousness was perceived as the strongest and the most reliable trait in the Big Five Personality Traits Model (Hazrati-Viari et al., 2012; Komarraju et al, 2009).

As clearly stated in the definitions, conscientiousness is a trait that is always assumed to help learners while they learn. Thus, more studies have been conducted in order to find some links between conscientious and issues such as intelligence, learning styles and strategies. This part of the chapter covers the interaction between conscientiousness and academic achievement and performance and motivation.

2.2.1.2. Conscientiousness and Academic Achievement and Performance

The consensus on the concept of conscientiousness has led researchers to conduct research on the effects of this personality trait on learning. Therefore, they have tried to uncover the relationships between conscientiousness and achievement. At that point, it is necessary to clarify what is meant by academic achievement. Academic achievement refers to the measurable and observable performances that the learners display in the learning setting. Thus, in most of the studies cited at this part of the chapter, academic achievement is determined by grade point average (GPA) of students.

Considering the definitions of conscientiousness provided by different scholars, it is quite natural to suppose that conscientious learners are higher achievers compared to non-conscientious learners. Parallel to this assumption, due to its positive nature, conscientiousness has always been assumed to be a good predictor of achievement (Cheng & Ickes, 2009; Diseth, 2003; Noftle & Robins, 2007; Poropat, 2009). To illustrate, in their study, Chamorro- Premuzic and Furnham (2003) found out that

conscientiousness was a strong and determinant predictor of learners' performance in exams. Similarly, in their study that uncovered the relationship between goal orientaions and personality, Bipp et al. (2008) discovered an inverse relationship between conscientiousness and work avoidance orientation. In his study about the relationship between personality traits and SAT scores of the learners, Conard (2006) found out that learners who were high in conscientiousness tended to have higher SAT scores. Feyter et al (2012) observed a strong link between conscientiousness and academic motivation and also academic performance. Busato et al. (2000) also stated that among five traits, conscientiousness was the only trait that consistently and positively correlated with academic success.

As found out and stated in many studies, conscientiousness has a positive impact on academic achievement and performance. However, although not many, there are some studies (e.g. Cheng & Ickes, 2009; Furnham & Monsen, 2009) claiming contrasting results. One of these claims was based on the idea that learners who had high levels of conscientiousness might suffer from too much pressure and perfectionism, which might result in lower achievement in the exams. This might explain the condition of the learners who study a lot, participate in the lessons regularly, and improve their proficiency level at maximum level but end up having poor grades in the exams. From a different point of view, Cheng and Ickes (2009) also mentioned that conscientiousness itself without the effect of motivational factors cannot predict GPA. When two opposing sides are taken into consideration, it is safe to put that studies proving the positive effects of conscientiousness outnumber the studies with contrasting views.

2.2.1.3. Conscientiousness and Academic Motivation

It is a well-known fact that motivation is central to learning (Dörnyei, 2005; Öz, 2015). Therefore, researchers try to uncover the valuable interactions between personality traits and motivation. Although motivation will be discussed in a greater detail in the second part of the chapter, it is better to state at this point that Deci and Ryan's Self Determination Theory is the base of motivation part of the study. Ongoing studies (e.g. Bipp, Steinmayr & Spinath, 2008; Cheng & Ickes, 2009; Feyter, 2012; Öz, 2015) have consistently found strong links between different personality traits and different motivation types. Conscientiousness and academic motivation are discussed in this part of the chapter.

As clearly stated in the definition part, conscientiousness is associated with some positive adjectives such as disciplined, responsible, orderly, achievement-oriented etc. Thus, most of the researchers hypothesized that it positively correlated with motivation.

The results of the study by Komarraju et al. (2009) which aimed at spotting the relations between academic motivation and Big Five Traits demonstrated that conscientiousness was the strongest determiner of the academic motivation. It correlated positively with intrinsic and extrinsic motivation and negatively with amotivaton, showing that conscientious learners tended to be more motivated. This made conscientiousness a more desirable personality trait for teaching and learning purposes. It was also found out that together with academic motivation, conscientiousness affected academic performance in a positive way. (Feyter et al., 2012). This result showed that conscientiousness might have a bigger influence combined with academic motivation. In an attempt to examine the possible links between personality traits and academic motivation, Clark and Schroth (2010) conducted a piece of research, the results of which claimed that conscientiousness formed a positive link not only with intrinsic motivation but also with extrinsic motivation. In their study, Busato et al. (2000) also came up with a positive link between conscientiousness and academic motivation.

Although many scholars agreed on the fact that conscientiousness was the best predictor of academic achievement, performance and academic motivation, there are also several studies with opposing results (e.g. Paunonen, 1998; Farsides and Woodfield, 2003). In their study, for instance, Cheng and Ickes (2009) ended up with an interesting result showing that neither conscientiousness nor self-motivation could not predict academic achievement alone. Thus, according to the results of the study, conscientiousness was not a main determiner of GPA, neither was self-motivation. However, the second phase of the data analysis showed that conscientiousness together with self-motivation explained the significant portion of the variance in GPA. This result answered the question of why some conscientious learners were sometimes low achievers. Although Öz's study (2015) on Big Five Personality Traits and academic achievement and motivation demonstrated that personality traits affected overall academic motivation, surprisingly conscientiousness did not stand out as the strongest variable.

As previously stated, despite several studies having different results, the literature agreed on the fact that learners who had high levels of conscientiousness tended to be more motivated both intrinsically and extrinsically. Thus, helping learners gain conscientiousness features might also result in more motivated learners, which would make the whole learning process a more productive and meaningful one.

2.2.2. Openness to Experience

2.2.2.1. Characteristics of Open Learners

As stated earlier, Big Five Personality Traits Model took its modern form as a result of the contribution made by many different scholars throughout many years. Openness to Experience is one of the traits that is added to the model a little later than the other traits such as Extraversion or Neuroticism. Openness to Experience took its place in the model in the 1970s and 1980s thanks to Costa and McCrea (1980). At first, in literature, Openness to Experience was called Intellect. However, in modern literature, the term Openness to Experience is used extensively.

According to McCrea and John (1992), the most appropriate adjectives to describe Openness to Experience to evoke the same concept in the minds of people from different cultures were “imaginative, perceptive, and sensitive to art and beauty and need for variety” (p.172). Komarraju and Karau (2005) defined openness to experience as being intellectually inquisitive and having a strong desire to have variety. Busato et al. (2000) also stated that openness to experience was “associated with a receptivity to new ideas, a preference for varied sensations, and intellectuality” (p. 1059). Moreover, McCrea and Costa (1997) claimed that open individuals experienced deeper emotions, and their awareness level tended to be higher when compared to non-open learners. Open learners seemed to be more open-minded, and they were adjusted to change easier that others (Komarraju & Karau, 2005). Furthermore, open learners looked for new experiences due to the fact that they were curious. So, this might lead them to seek new educational opportunities (Lounsbury et al., 2003). Likewise, Bipp et al. (2008) asserted that openness to experience covers some facets like “fantasy, aesthetics, new ideas and actions” (p. 1458). In line with previous studies, Diseth (2003) associated openness to experience with novel performances and working hard. It was also expressed that open learners appreciated deep and complex processes and owned a positive approach towards challenging tasks (Barrick & Mount, 1991). Finally, for Hakimi et al. (2011), openness to experience “reflects an individual’s

broad-mindedness, depth of attitude, and penetrable awareness. It is also a need for generalizing and testing out experiences" (p.837).

As the name of the trait and definitions provided for openness to experience revealed, learners who have higher levels of openness to experience seek new experiences, tend to be more curious. As this may seem to facilitate learning and motivation, numerous studies have been conducted to see the effects of openness to experience on academic achievement and motivation, which will be deeply covered in the following parts of the chapter.

2.2.2.2. Openness to Experience and Academic Achievement and Performance

Openness to experience is a trait that seems to help the learning process due to its nature. However, the results of the studies dealing with openness to experience and academic achievement demonstrated some confusing results.

Many studies stated that open learners tended to benefit from deep approach to learning, and elaborative learning (Geisler-Brenstein, et al., 1996; Slaat, Van der Sanden & Lodewijk, 1997; Zhang, 2002; 2003). Other studies (Busato, Prins, Elshout & Hamaker, 1999) also supported this idea by showing that openness to experience could positively be linked to meaning-directed learning and constructive learning approach. Bidjerano and Dai's study (2007), for instance, found out that learners having high levels of openness to experience made better use of time management, and effort regulation, which was considered to be one of the best predictors of achievement by many scholars (Busato, Prins, Elshout, & Hamaker, 2000; Chamorro-Premuzic & Furnham, 2003a). These learners also benefitted from more advanced cognitive skills such as "elaboration, critical thinking, and metacognition" (p.77). Lounsburry et al. (2003) asserted that openness to experience assisted learners to have higher final grades thanks to the use of learning strategies such as critical thinking in a better way. Likewise, Ackerman and Heggestad's study (1997) on the effects of personality traits and intelligence indicated a positive relationship between openness to experience and intellectual ability measures. More clearly, in their study on the effect of personality and intelligence on academic school grades, Farsides and Woodfield (2003) stated that openness to experience was one of the traits that predicted final grades. Together with verbal intelligence and absentee, openness to experience was able to explain 40% of variance in academic school achievement.

The relationship between academic achievement and openness to experience is more multifaceted than the one between conscientiousness and academic achievement. Although openness to experience appeared to help learning –thus, achievement-, studies (e.g. Duff, Boyle, Dunleavy & Ferguson, 2004) displayed less solid and mostly not significant links. Some other scholars (e.g. Busato, Prins, Elshout, & Hamaker, 2000; Chamorro-Premuzic & Furnham, 2003; Gray & Watson, 2002) also stated that results regarding openness to experience varried in different settings. For instance, Furnham and Monsen (2009) assumed that openness to experience would be a strong determinant of academic achievement due to its nature. However, results of the study inferred that openness was not an influential predictor. In addition, in contrast to their hypothesis, no relationships between openness to experience and intelligence were detected. Similarly, the study by Feyter et al. (2012) dealing with the effects of big five personality trait on academic performance asserted that openness to experience was the only trait that failed to explain variance in academic performance. More interestingly, Busato et al. (2000) found out that in spite of the positive correlation between meaning directed learning and openness to experience, no significant relationships were discovered between openness to experience and academic success.

These studies taken into account, it is possible to say that there is no compromise in the literature on the impact of openness to experience. However, the fact that open learners make use of learning strategies in a better way makes the trait still a favored one in terms of learning.

2.2.2.3. Openness to Experience and Academic Motivation

The link between academic motivation and openness to experience is another topic that has attracted the attention of scholars. Komarraju and Karau (2005) claimed that openness to experience promoted thinking, persistence and achievement. The results of the same study presented a positive link between openness to experience and learners' ambition for self-development, as well. It was also found out that open learner were less likely to dislike school, feel discouraged and withdraw from school. The same study discovered a negative connection between avoidance of work and openness to experience. In other words, it can be inferred that learners who were curious and eager to learn new things inclined to be more motivated, which resulted in academic achievement. Öz (2015) also declared that openness to experience was one of the

traits that was assumed to be associated with powerful goal orientations that directly fostered academic motivation. The same study demonstrated that personality traits explained significant portion of academic motivation, openness to experience being one of the two strongest variables in both extrinsic and intrinsic motivation types. In their study aiming at finding out the relationships between personality traits and achievement motivation, Bipp et al. (2008) hypothesized that openness to experience would maintain a positive relationship with learning goal orientation, which referred to learners' desire to gain knowledge. In the end, the hypothesis was proved to be true, clearly showing the positive link between openness to experience and academic/achievement motivation. In line with earlier studies, Busato (1999) also claimed that "because of the need for variety, open learners are usually more motivated" (p. 839).

As stated in the academic success and performance part, openness to experience may have contrasting results in different settings. With regard to academic motivation, it is still the case. In their study, to illustrate, Feyter et al. (2012) ended up with result showing that there was a negative correlation between openness to experience and academic motivation. This partly indicated that openness to experience, which tended to be a positive trait, might result in some drawbacks in educational settings. Thus, it is better to encourage and guide open learners to benefit from good sides of openness to experience. Otherwise, the trait may put the learners in a more disadvantageous situation.

2.2.3. Extraversion

2.2.3.1. Characteristics of Extraverted Learners

Extraversion is one of the oldest traits in the Big Five Personality Model. Some of the adjectives used by McCrea and John (1992) to standardize "extraversion" as a concept were active, assertive, energetic, enthusiastic, outgoing and talkative. According to Klinkozs et al. (2006), extraversion referred to the individuals' deep relationships with the environment. Thus, learners high in extraversion could be associated with warm, energetic and sociable behaviours. Clark and Schroth (2010) also noted that extraversion was "characterized by sociability, spontaneity, and adventurousness" (p.20). According to Furnham (1992) extraverted learners preferred having active roles in a social environment rather being the reflective one in the group unlike introverts. So, it can be inferred that they are people who are keen on leading others and being

the spokespeople of the group. In line with the ideas on extraversion, Komarraju and Karau (2005) added that extraverted learners were “warm, socially-oriented, and assertive” (p.560), which was a feature that was believed to be the crucial part of extraversion by Costa and McCrea (1992). Extraverted learners were also sociable, and they looked for excitement in life (Feyter et al, 2012).

As it is clear in the definitions, extraversion is a trait that leads individuals to be socially engaged and active. As being social and engaged with the environment may lead to both positive and negative results while learning a language, the outcomes of extraversion on learning are still dubious. A number of studies will be referred in the following parts of the chapter in order to demonstrate the conditions when extraversion may help learning or when it may distract learners from learning.

2.2.3.2. Extraversion and Academic Achievement and Performance

Extraversion, like openness to experience, also holds interesting and sometimes unfortunately inconclusive results with academic achievement and performance (Duff et al., 2004). In their study, Feyter et al. (2012) clearly stated that extraversion might have both facilitative (e.g. Poropat, 2009) and inhibitive effects (e.g. De Raad and Schouwenburg, 1996) on academic achievement and performance.

As extraverted learners are socially engaged individuals with higher communication skills, it is not incorrect to assume that this trait would help them learn a second language. There are numerous studies discovering the facilitative effects of extraversion on academic achievement and performance. Chomorro and Furnham (2003a), for instance, found out a positive relationship between extraversion and academic achievement. This claim was also confirmed by the results of Dunsmore’s study (2005) stating that the elementary level learners who had higher levels of extraversion ended up with higher academic achievement. However, interestingly, the same study claimed that extraversion posed a drawback at higher education levels.

Scholars such as Melissa, Sampo and Paunonen (2007), on the other hand, revealed some inverse relationships between extraversion and academic achievement. Furnham, Zhang and Chamorro (2006) also claimed that extraversion affected academic achievement in a negative way, adding that highly extraverted learners might not focus on learning properly. Rather, they preferred spending their time and energy for social activities, which might be the main reason why extraverted learners were

sometimes lower achievers. In their study on the relationship between personality and academic achievement, Hakimi et al (2011) found out that there was a negative relationship between extraversion and academic achievement. Hakimi et al. (2011) explained that this might be due to the fact that extraverted learners were easily distracted while introverted ones were inclined to make use of effective study habits and higher concentration levels. In a study evaluating academic achievement with SAT and GPA, Oswald et al. (2004) discovered that extraversion negatively predicted academic achievement. Feyter et al. (2012) verified these results with their own study results. Bidjerano and Dai (2007) stressed how extraversion might lead learners to end up with both positive and negative outcomes. On the one hand, extraversion fostered some actions such as “help seeking and peer learning” (p. 71), which were concepts that might help learners while learning a language. On the other hand, in a problem solving situation, these learners failed to dwell on the topic with care and avoided and ignored the problem (Matthews, 1997). In the light of the results of a study conducted by Rolfhus and Ackerman (1996) showing the negative correlation between certain knowledge tests and extraversion, Furnham and Monsen (2009) also set up a hypothesis claiming the existence of the negative relationship between extraversion and academic performance. The hypothesis was proved to be correct by the results of the study.

When both positive and negative effects are taken into account, some scholars (e.g. Feyter et al., 2012) believed that negative direct effects of extraversion outnumbered the positive indirect effects that took place thanks to motivational factors. However, extraversion is a trait that educators should be hopeful about. Thus, extraverted learners should be approached with care due to the fact that a proper guidance may lead them to the path that goes to success. Otherwise, believing that they are not hardworking enough, or they do not have enough capabilities will definitely cause them to get lost in that path.

2.2.3.3. Extraversion and Academic Motivation

The relationship between extraversion and academic motivation is another area that needs closer examination. As in the link between extraversion and academic achievement and performance, the results of the studies on the extraversion and academic motivation also vary in different settings with different participants.

In general, it seems that there is a consensus on the idea that extraversion fosters academic motivation. Busato et al. (1999), to illustrate, claimed that extraverted learners valued for meaning-directed learning and they were more achievement-oriented. This notion, in a way, showed that these learners held a desire to be successful, which was actually one of the biggest motivational factors for learners. In their study searching for the link between academic motivational factors and personality traits, Komarraju and Karau (2005) asserted that extraversion had a positive predictive role in approval and affiliating motives. In line with the claim, the results revealed that extraversion facilitated "persistence, positive anxiety, grades orientation, economic orientation, desire to improve, and influencing others" (p.563). It was also negatively linked to withdrawal. Öz's study (2015) also demonstrated that together with openness to experience, extraversion was able to explain 19 % of extrinsic motivation. In addition, as extraverted learners were active, Bipp, Steinmayr and Spinath (2008) hypothesized that extraversion would be positively correlated with not only learning goal orientation- that is; learning to gain knowledge- but also performance approach orientation which refered to learners' desire to show their abilities and capabilities. Although the hypothesis was not met properly, the study found out a negative relationship between extraversion and performance avoidance orientation, which was a term referring to strategies that learners utilized in order not to perform the competence (if any). Some other studies (e.g. Feyter et al, 2012; Busato et al., 2000) also ended up with results showing that extraversion and academic motivation were positively correlated.

Although there are enough studies to accept that extraverted learners are academically motivated, there are different ideas and results with regard to the source of motivation. A lot of studies (e.g. Komarraju et al.; 2009; Hakimi et al., 2011; Philips, Abraham and Bond, 2003) claimed that extraverted learners were more likely to be extrinsically motivated rather than intrinsically motivated. As extraverted learners sought opportunities to be active and social, it was safe to allege that external factors were more attractive for extraverted learners. However, interestingly, another study by Kaufman, Agars, & Lopez-Wagner (2008) professed that extraverted learners might be motivated both intrinsically and extrinsically. Clark and Schroth's study (2010) on personality and academic motivation confirmed the previous study by showing that extraverted learners made use of intrinsic motivation, as well because these learners

asserted that they learnt for the sake of knowledge and they believed that college attendance was significant. According to these studies, in addition to extrinsic motivation, intrinsic motivation was also an important source of motivation because they were motivated both by external factors such as obligations and principles to attend classes and internal factors such as desire to learn new things and self-improvement. Oswald et al. (2004) noted that extraversion is positively related to the self-reported number of absent hours from school. Another interesting result from Komarraju and Karau's study (2005) showed that extraversion seemed to be one of the traits that was positively linked to academic achievement and motivation. However, surprisingly, it also positively correlated with avoidance. Furthermore, extraversion played a role in explaining 23% of the variance in engagement together with openness to experience, as well. As avoidance and engagement were two terms which refer to opposing concepts, it was quite clear to understand how extraversion might have both positive and negative effects on academic motivation and academic achievement.

As clearly seen in the results regarding the effect of extraversion in both academic achievement and academic motivation, extraversion is a trait that has confusing results. Therefore, it is of utmost importance that extraversion is guided carefully towards the facilitative side rather than the debilitative side.

2.2.4. Agreeableness

2.2.4.1. Characteristics of Agreeable Learners

Agreeableness is one of the five traits in Big Five Personality Traits model. In general, agreeableness associated with adjectives and phrases such as caring and emotional support. It was also thought that people high in agreeableness were less likely to be hostile, indifferent or self-centered (Costa & John, 1992). De Raad and Shouwenburg (1996) believed that agreeable learners were reliable and they were interested in working in groups. So, they valued collaborative learning. For Kommarraju and Karau (2005), agreeable individuals were more likely to be "sympathetic, helpful, trusting and cooperative" (p. 561). Similarly Clark and Schroth (2010) stated that agreeableness was associated with "honesty, courtesy, and kindness" (p. 20). It was also "associated with a disposition toward nurturance, altruism, trust and friendly compliance" (Busato et al, 2000, p. 1059).

The definitions of agreeableness showed that in general, it was a facilitative trait that might help learning due to its aspects such as collaborative learning, friendly compliance etc. Thus, it is safe to allege that agreeable learners possess certain advantages that come from their trait. However, it is crucial to keep in mind that guiding these learners is of great significance.

2.2.4.2. Agreeableness and Academic Achievement and Performance

There are a remarkable number of studies covering the personality traits and their effects on academic achievement and performance. Although agreeableness is not one of the five traits that always have consistent and statistically significant results in different settings, it can be claimed that there is almost an agreement on the positive links between agreeableness and academic achievement. Farsides and Woodfield (2003), to illustrate, discovered a positive link between agreeableness and school grades. According to Zhang (2002, 2003), agreeableness and studying styles that focused on high grades had a parallel relationship. Agreeable learners tended to use effort and surface (reproductive) styles (Slaats et al., 1997). These learning styles, especially effort management, were known to foster learning. Moreover, due to the features such as compliance and cooperativeness that agreeable learners held, agreeable learners monitored their study habits and tried to organize them according to their needs and external demands (Vermetten et al, 2001). Having awareness on their study styles and being able to arrange them with regard to different conditions led agreeable learners to have higher grades. The same study also argued that agreeable learners were able to manage time and effort while learning. These were very critical learning strategies that increased the effectiveness of study habits to a great extent. Effort regulation referred to the ability to overcome barriers and failures while learning. Time management, on the other hand, meant knowing the correct or ideal time to study when no distractions were foreseen. As agreeable learners made better use of these learning strategies, they were more likely to achieve. In line with these ideas, Bidjerano and Dai's study (2007) discovered a significant positive correlation between learners' GPA and agreeableness. The study also concluded that these learners were good at using critical thinking skills. With regard to academic achievement and performance, many other studies (e.g. Furnham et al, 2006; Duckworth & Seligman; Lounsbury et al., 2003b) claimed a positive link between this personality trait and academic success. All of these studies agreed on the fact that agreeable learners' willingness to be

cooperative and work efficiently with their peers helped them be higher achievers. In their comprehensive study on the impact of personality traits on academic performance by taking moderating and mediating effects of self-efficacy, Feyter et al. (2012) traced a positive link between agreeableness and academic performance.

Although the majority of the research held the belief that agreeableness facilitated academic achievement and academic performance, Hakimi et al (2011) found out that agreeableness did not have a predictive role in academic achievement. As seen from the results of the studies, agreeableness seemed to assist learning to a great extent. Therefore, it is critical that the educators monitor these learners and guide them towards more collaborative activities and create opportunities for them to benefit from their advantageous characteristics.

2.2.4.3. Agreeableness and Academic Motivation

Agreeableness and academic motivation is another part of this section that needs further examination and a closer look. Due to its positive aspects, agreeableness is believed to affect the academic motivation level of learners in a positive way. This belief is supported by many scholars and their studies.

In their study, Komarraju and Karau (2005) hypothesized that like extraversion, agreeableness was also associated with “approval and affiliating motives” (p. 561). The results of the study demonstrated that although agreeable learners did not prefer competing, they possessed several other motivational factors such as persistence, desire for high grades and self-improvement. Due to these factors, it could be inferred that agreeable learners employed intrinsic motivation more than extrinsic motivation. Another study by Komarraju et al (2009) also concluded that disagreeable learners lacked motivational factors and these learners were also low in conscientiousness which is, as discussed in the previous parts of the study, known to assist learning. In line with these studies, Kaufman et al (2008) stated that agreeable learners had a tendency towards intrinsic motivation like conscientious and open learners. In the light of such studies, Clark and Schroth (2010) also claimed that agreeable learners would be intrinsically motivated due to the nature of agreeableness. They also assumed that agreeableness was negatively correlated with amotivation. Proving that the hypotheses and assumptions were true, the results also stressed that agreeable learners learnt to know and develop themselves. In addition, external factors such as college attendance rules also mattered to them, showing that these learners were not

only intrinsically but also extrinsically motivated. Farsides and Woodfield (2003) also found out a significant negative correlation with absence at college and agreeableness. Furthermore, Busato et al. (2000) discovered a positive correlation between agreeableness and achievement motivation which referred to the fact that agreeable learners held a desire to achieve, as well. Interestingly, the same study indicated that learners who were high in conscientiousness were also high in agreeableness. This result revealed that like conscientiousness, agreeableness might also be a positive and anticipated trait when learning was concerned.

The links between agreeableness and academic achievement and academic motivation are promising for educators and learners as clearly observed in numerous studies in the literature. The educators need to be monitoring their learners to strengthen their facilitating behaviours.

2.2.5. Neuroticism

2.2.5.1. Characteristics of Neurotic Learners

Neuroticism, in addition to extraversion, is the oldest trait that was agreed to exist even in the earliest forms of the model by the scholars. McCrea and John (1992) stated that neuroticism was the trait on whose definition scholars had the least disagreement. According to McCrea and John (1992), neuroticism referred to the tendency to experience stress. These learners were more likely to suffer from chronic negative feelings, and psychological abnormalities. In the earlier versions of the model, McCrea and Costa (1987) expressed that neurotic individuals did not have effective control on impulses, and these learners were not good at coping with problems in their lives. It was more likely for these individuals to experience tension and depression. Hakimi et al. (2011) stated that neuroticism "reflects individual differences in one's disposition towards constructing, perceiving and feeling realities in threatening, disturbing or problematic ways" (p.837). The trait also referred to "insecurity, emotional instability, and immaturity" (Clark & Schroth, 2010, p. 20). Busato et al. (2000) defined neuroticism as "the degree that people experience negative emotions" (p.1059). In addition, Komarraju and Karau (2005) asserted that due to emotional instability and poor control on their own impulse, neurotic learners had troubles in handling academic responsibilities and difficulties. Thus, these learners were apt to dislike college and they might have desire to withdraw. The definitions of neuroticism revealed that it was not a contributing trait in terms of learning. However, some studies with surprising

results which will be discussed in the following parts may still build new hopes for educators.

2.2.5.2. Neuroticism and Academic Achievement and Performance

Neuroticism is one of the rare traits on which almost a consensus is built among scholars. As it can be inferred from the definitions of the neuroticism presented above, it is expected to hinder academic achievement and performance.

Many scholars (i.e. Laidra et al, 2007; Lounsbury et al., 2003a; Mathews & Zeidner, 2004) discovered negative associations between neuroticism and academic achievement. It was also a widely-known fact that neurotic learners experienced certain abnormalities which led them to suffer from stress. Stress was known to affect academic achievement, as well, especially in exam settings. Thus, neurotic students ended up being low achievers and these learners avoided from attending the classes regularly (Chamoro & Furnham, 2003b). Duff et al. (2004) stated that fears and problems that neurotic learners went through impeded their learning and kept them away from the goals of their education. In line with these studies, Hakimi et al. (2011) claim that the negative relationship between academic achievement and neuroticism was statistically significant. In the light of such studies, Furnham and Monsen (2009) hypothesized that neuroticism and academic performance were negatively correlated due to the fact that the stress level that neurotic learners experienced was much higher than the facilitating level. Thus, these learners were badly affected by stress and anxiety during the exams.

Another reason why neuroticism hindered academic achievement might be due to the fact that neurotic learners failed to use critical thinking and analytic ability. Instead, they mostly employed superficial learning strategies such as memorizing and surface learning, which were strategies that did not focus on meaning or deep understanding. Thus, learners were bad at learning the study material, which in return caused bad exam results. It was also found out that emotionally stable learners inclined to spend more time and effort on learning unlike neurotic learners (Bidjerano & Dai, 2007). Ackerman and Heggestad's study (1997) on the relationships between intelligence and personality also posited that there was a negative link between neuroticism and intellectual ability. The result of the study was in line with the studies which claimed that neurotic learners were not good at using critical thinking and analytic thinking strategies. Komarraju and Karau (2005) strengthened this hypothesis by claiming that

neurotic learners attached importance to structured thinking styles rather than critical thinking. The results of the study proved that neuroticism was really a negative predictor of academic performance.

However, some other scholars such as Komarraju et al (2009) believed that the effects of neuroticism were more complex than this. In their study, Komarraju et al. (2009) found out positive links between academic achievement and neuroticism. They concluded that certain level of anxiety which neurotic learners were disposed to suffer from might actually increase their academic achievement. Bratko et al. (2006) supported the claim by stating that this "certain" level of anxiety triggered perfectionism and these learners seemed to have higher levels of preparedness before an exam compared to non-neurotic learners. Stating that further research was needed in order to prove their opinion, Komarraju and Karau (2005) stated that neuroticism and achievement might have slightly positive links. These scholars believed that neurotic learners' thought that they had to be prepared for the certain tasks might make them achieve to some extent. Some other scholars (e.g. Nguyen et al, 2005; Rosander, Backstrom & Stenberg, 2011) also agreed that neuroticism had no or somehow positive effects on academic performance. In the light of such studies, it could be inferred that neurotic learners might also achieve due to the fact that they were scared failing or being judged by others. In such cases, neuroticism can be said to increase academic achievement in an undesired way.

2.2.5.3. Neuroticism and Academic Motivation

The links between neuroticism and academic motivation are more complicated than expected. The definitions of the trait may lead people to assume that all neurotic learners are amotivated. However, this is not the case with all participants in all settings.

Komarraju and Karau's study (2005) on the personality traits and academic motivation showed that neurotic learners were high in avoidance rather than in engagement and achievement measures. The same study found out that neuroticism was positively correlated with subcategories of motivation such as "debilitating anxiety, economic orientation, approval, and drawing from school" (p.563). However, unfortunately the link between neuroticism and facilitating anxiety was negative. In the study, neuroticism was the strongest variable that explained 21% of variance in avoidance. This proved that neurotic learners displayed lack of motivation. However, in another

study by Komarraju et al (2009), Vallerand's Academic Motivation Scale (1992) was used and this time the results exhibited that neurotic learners took extrinsic factors as their motivation sources, unlike the previous study. Kaufman et al. (2008) came up with exactly the same result stating that these learners tended to be motivated extrinsically rather than intrinsically. Another study (Philips et al., 2003) that made use of Deci and Ryan's Self Determination Theory (1985) tried to found links between personality and academic motivation. In this study, it was discovered that neuroticism and introjected regulation were positively associated. In the light of these studies, Clark and Schroth (2010) hypothesized that neuroticism would be positively correlated with extrinsic motivation. The results of the study proved that these learners found external factors more motivating, and they expressed that they attended college due to a sense of obligation. Feyter et al. (2012) claimed that neuroticism was positively linked to extrinsic motivation because of the fact that neurotic learners did not want to experience sense of guilt. Therefore, they might prefer increasing the effort they put on studying.

From a different point of view, Bipp et al. (2008) stated that neurotic learners were positively associated with performance avoidance orientation. That is, these learners utilized certain strategies which retained them from demonstrating lack of competence. The use of these defense strategies could also be tied to the fear of failure and judgement. Learning goal orientation, on the other hand, was negatively linked to neuroticism.

Although neuroticism is not one of the traits that is associated with intrinsic motivation, there is also little evidence showing that it is strongly linked with amotivation. In contrast, Öz (2015) asserted that personality traits were not statistically significant predictors of amotivation. Therefore, it can be stated that even though neuroticism is not one of the most facilitative traits in terms of learning, and it hinders academic performance most of the time, amotivation cannot be attributed to neuroticism solely. It is worth believing that it is possible to reshape these external motivation factors for these learners and make them internal factors in time.

2.3. Self-Determination Theory

Academic motivation forms the second part of this chapter. To have a clear understanding of the motivation theories, it is crucial to define first what motivation is. Ryan and Deci (2000) stated that "to be motivated means to be moved to do

something" (p. 54). Öz (2015) explained that academic motivation aided learners by providing them with an inner desire to do learning tasks. He also added that academic motivation gave them the sense of personal autonomy. While defining the motivated learners, Ryan and Deci (2000) put that motivated learners had enough energy to finish a certain task rather than leaving it uncompleted. Singht (2011) also added that motivation referred to the determination that caused individuals to pursue their goals in spite of the difficulties that they faced. In addition to willingness to act, it also included characteristics such as curiosity, being learning-oriented, having high performance and achievement, which made it a multidirectional entity (Ayub, 2010; Deci & Ryan, 1985). In other words, it is safe to claim that motivation is the collection of positive attitudes and emotions towards performing certain tasks.

More specifically, Clark and Schroth (2010) stated that academic motivation could be defined as the elements that affected a learner to join the classes and to get a degree. Similarly, Pintrich and Schunk (2002) claimed that motivation was a fundamental aspect of second language learning. In line with these ideas, it was also alleged that shortage or lack of motivation was one of the major reasons of the worsening education system (Noureen, & Naz, 2011). Likewise, Dörnyei (2005) expressed that it was motivation which drove learners to act in the long route of learning a second or foreign language. Clark and Schroth (2010) also highlighted that being aware of learners' motivation level gave educators an idea while helping them get rid of stressing factors in their academic life. In another study (Deci et al., 1991), scholars claimed that in the ideal school environment, learners possessed high levels of interest and volition which resulted in higher levels of flexibility in solving problems, more effective ways of acquiring knowledge and greater value for the sense of self. As it can be concluded from the definitions and impacts of academic motivation, motivation is one of the most important constructs in terms of teaching and learning (Elliot & Dweck, 2005).

There are a myriad of studies claiming that motivation is the key factor in performance and achievement (e.g. Green, Nelson, Martin, & Marsh, 2006; Linnenbrink & Pintrinch, 2002; Clark & Schroth, 2010). Cheng and Ickles (2009), for instance, believed that although conscientiousness as a personality trait was the strongest predictor of the achievement, without self-motivation, effects of conscientiousness would be very limited. The results of their study proved that it was the combination of the desired trait – conscientiousness in this case- and self-motivation that created a big difference in

terms of academic achievement. Thus, it is true to suppose that motivated learners show willingness to execute learning activities. However, it is worth mentioning that learners' being motivated does not necessarily mean that these learners always enjoy the activity or the task. In other words, learners may be moved by different drives.

There are different models and theories aiming at covering all aspects of motivation. Although earlier motivation theories accentuated "how much" aspect of the motivation and valued for the level of motivation, it was realized that individuals not only possessed different amounts of motivation but also had various reasons to be motivated (Ryan & Deci, 2000). Hence, more contemporary theories on motivation today highlight the issues that motivate learners. In other words, instead of the level of the motivation, scholars shifted their attention towards the orientation of the motivation (Ryan & Deci, 2000). Therefore, the question of "what" became more relevant than the question of "how much". Today, the literature on academic motivation tries to uncover the primary attitudes and objectives that lead individuals to act more willingly.

One of the most-documented models or theories is the early classic motivation model that deals with two types of motivation called intrinsic and extrinsic motivation. These types will be dealt in detail in the following parts of the chapter. However, it is worth expressing that intrinsic motivation refers to the internal desire or drive that moves the individual to do that particular activity. Extrinsic motivation, on the other hand, emphasizes the existence of external factors such as rewards or separable outcomes (Ryan & Deci, 2000).

As an alternative to the classic model of motivation which consists of two basic forms of motivation, Deci and Ryan (1985) elaborated on a more detailed theory of motivation. This motivation theory was called Self-Determination Theory. In his book, Dörnyei (2003) expressed that Self Determination Theory was among the most prominent models in motivation studies. Self Determination Theory forms its base by the idea that individuals have an innate desire to involve in the surroundings around them and acquire new knowledge and skills and assimilate them in their ordinary lives (Reeve et al, 2007). As a part of the theory, Self-Determination Theory also dwells on issues that promote or undermine self-determination of the individuals with the help of mini theories under the Self-Determination Theory. Noels et al. (2000) asserted that Self-Determination Theory possessed more advantages than other approaches for several reasons. They explained their ideas with the following words.

> *"…SDT [Self-Determination Theory] offers a parsimonious, internally consistent framework for systematically describing many different orientations in a comprehensive manner. It also offers considerable explanatory power for understanding why certain orientations are better predictors of relevant language learning variables (e.g. effort, persistence, attitudes) than others. Also, by invoking the psychological mechanisms of perceived autonomy, competence, and relatedness, it can account for why certain orientations are evident in some learners and not in others. Moreover, the framework is empirically testable and indeed has stood up well under empirical scrutiny in our studies. Its clear predictions may also be particularly valuable in applying the theory in language teaching and program development." (Noels, Pelletier, Clement & Vallerand, 2003, p. 35).*

According to the theory if an individual chose to perform that specific task freely without any external control, it would mean that that specific action was a self-determined one. At such cases, locus of causality was internal (Deci et al., 1991) as opposed to the cases with the controlled actions. It was also reported that such actions were associated with a number of positive consequences, such as higher academic performance, greater personal development and persisting in academic studies. If the action was executed due to pressure or in an attempt to comply with an external factor, the action would be considered to be a controlled action (Deci et al. 1991). Thus, self-determined actions referred to the actions that were performed more willingly; while controlled actions were done due to external force or power pressure. Many studies (e.g. Daoust, Vallerand & Blais, 1988; Deci et al., 1991) alleged that students who had higher levels of staying at schools were more likely to be moved by self-determined forms of motivation unlike students with less self-determined forms of motivation. It was found out that the latter group had higher levels of dropout.

The Self-Determination Theory is based on the idea that motivation is not a unitary concept. It has different forms in different contexts because it deals with both the direction of the behavior and energization although earlier theories focused on only the direction aspect of the behavior. Deci et al. (1991) asserted that self-determination level of an action varied according to some factors such as the volition or endorsement. Therefore, Deci and Ryan (1985) came up with different forms of intrinsic and extrinsic motivation sources. Another major difference between classic motivation approach and Self-Determination Theory is the existence of amotivation. According to the classic motivation theory, individuals were either intrinsically or extrinsically motivated. However, Deci and Ryan (1985) realized that it was not the case all the time. Sometimes, individuals had no reasons or drives to initiate the desired or expected task/activity. At such cases, the term "amotivation" was required in the literature. Similarly, Komarraju et al. (2009) claimed that motivation was not an entire entity which

either exists or lacks. Rather, it is a continuum in which learners were evaluated according to their level and source of motivation. Due to these major two modifications, the Self-Determination Theory gained the attention of numerous scholars all over the world. Today, Self-Determination Theory dominates the literature on motivation. The following figure presents the main concepts in the Self-Determination Theory.

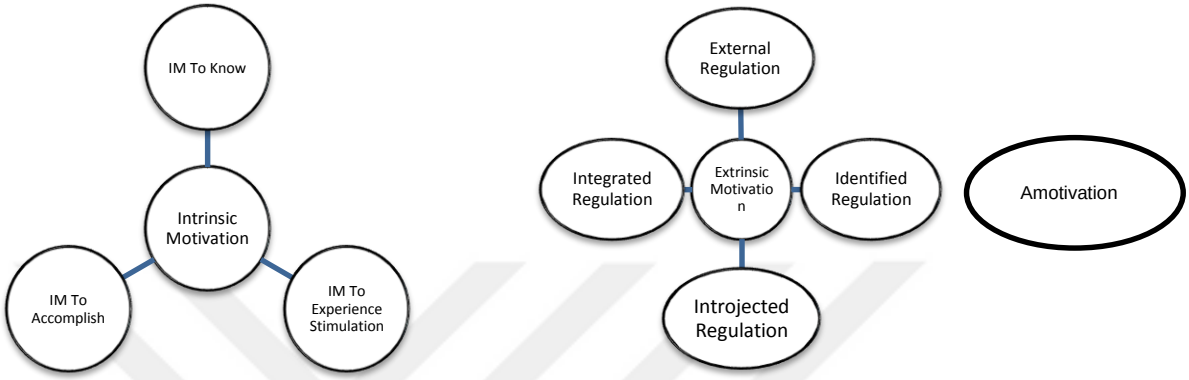


Figure 2. Concepts in the Self-Determination Theory

2.3.1. Intrinsic Motivation

Intrinsic motivation is a natural and innate process that occurs due to individuals' basic needs such as autonomy or desire to learn new things (Deci & Ryan, 1985). More specifically, Deci and Ryan (2000) defined intrinsic motivation as "the doing of the activity for its inherent satisfactions rather than for some separable consequence" (p. 56). Intrinsically motivated learners are aware of "what it means to seek out, master, and derive pleasure from optimal challenges" (Reeve et al., 2007, p. 234). In line with these ideas, Deci et al. (1991) stated that simply trying to fit in or to comply with the expectations could harm learning, which highlighted the value of intrinsic motivation. According to some scholars (Deci et al., 1991) individuals possessed an inherent intrinsic motivation due to their desire to survive in the community because learning new things enabled them to function in their social contexts in a better way.

As the definitions of the term suggested, learners who were driven by intrinsic motivation sources performed that specific task due to the positive feelings and experiences that they got at the end of the activity. It was also claimed that these positive feelings led learners to hold higher levels of self-esteem while controlling regulations increased anxiety in learners (Deci et al., 1981). Since intrinsic motivation engaged individuals in the activity to a greater extent, it was the most favored form of

motivation in education. It was a well-known fact that the outcomes of intrinsically motivated performance were of better quality without doubt (Ryan & Deci, 2000). The reason for this difference laid on the fact that intrinsic motivation involved creativity and interests of the individuals. As individuals enjoyed the task/activity, they gave full focus on the task, which resulted in better products. Relevant to these ideas, Noels et al. (2003) expressed that provided that individuals had freedom to determine whether they would do the certain task or not, they would look for some attractive ways to do it, and this situation got more challenging for them. In need of meeting these difficulties, individuals thought that they were competent enough to do that task. As a result, existence of intrinsic motivation automatically motivated them for the following tasks. When language learning is considered, it is not hard to predict how intrinsic motivation would foster language learning, which is a long, demanding and challenging process in which creativity, productivity and willingness are crucial for better outcomes. Therefore, a large amount of research (e.g. Pintrich & De Groot, 1990) highlighted the positive links between intrinsic motivation and academic achievement. To illustrate, a study by Ehrman (1996) revealed that there was a positive correlation between intrinsic motivation and learners' end-of-semester reading and speaking proficiencies.

According to Ryan and Deci (2000), individuals possessed certain amount of intrinsic motivation from birth. They are innately curious about and interested in certain tasks/acts more than others. This shows that they have innate desire to know or find out new things. It was also believed that these individuals held an internal locus of control (Komarraju et al, 2009). However, settings where individuals- learners, in this case- feel that they are controlled diminish this intrinsic motivation level in these individuals. Thus, within the scope of Self Determination Theory, Ryan and Deci (2000) summarized some factors that fostered and thwarted intrinsic motivation with the help of a new sub-theory called Cognitive Evaluation Theory. According to the Cognitive Evaluation Theory, positive occasions among individuals such as communications or constructive feedback that gives the individual the sense of competence facilitate intrinsic motivation. However, Cognitive Evaluation Theory highlights that sense of competence alone is not enough for the uprising of the intrinsic motivation. Sense of freedom or self-determination is the key factor in intrinsic motivation. If individuals believe that they are both competent and autonomous at the same time, intrinsic motivation is maintained. In line with these factors, some studies (e.g. Deci & Ryan,

2000) from the literature suggested that freedom to choose and self-direction assisted in intrinsic motivation.

Cognitive Evaluation Theory not only covered factors that enhance intrinsic motivation but also dealt with elements that subdue it. As it can be inferred from the factors that promote intrinsic motivation, external control diminishes the level of intrinsic motivation significantly. As individuals lose the sense of autonomy and believe that they do not have the freedom for that certain task/activity, they lose the interest and satisfaction that they get from that task/activity. A study by Grolnick and Ryan (1987) revealed that reminding learners that specific material would be in the test caused lower attention of the learners and poorer use of effective learning strategies. It was also found out that when the test had not been mentioned, learners were more interested and used conceptual learning strategies more than other group (Deci et al., 1991). Thus, it is critical that the learners feel the sense of self-determination or autonomy.

In addition to external control, Cognitive Evaluation Theory suggested that external rewards also detracted individuals from intrinsic motivation (Deci & Ryan, 2000). When an external reward, which was separate from the activity itself, was provided, individuals' attention moved from the internal satisfaction to the external reward, which made extrinsic motivation more dominant.

Furthermore, commands and deadlines (Amabile, DeJong, & Lepper, 1976), goals that were set by external forces (Deci et al., 1991) and competition spirit (Ryan & Deci, 2000) were thought to reduce intrinsic motivation level due to the fact that all of these factors impaired the sense of autonomy. As individuals felt that an exterior factor had the control on the issue, intrinsic motivation level fell.

Another issue with regard to fostering autonomy and intrinsic motivation is about the beliefs that educations hold. Deci et al. (1991) claimed that what educators thought about classroom management determined the level of autonomy support in the classroom. In line with the idea, Vallerand et al. (1992) also asserted that teachers might also utilize self-fulfilling prophecy depending on learners' profile. In other words, when the teacher believes that certain students are already intrinsically motivated, s/he might let them make their own decisions. This would unconsciously support autonomy to greater extent.

It is also critical to remember that not all external factors hinder intrinsic motivation and the fact that external rewards shift individuals' attention from the pleasure that they get from the activity to external rewards does not necessarily mean that educators should avoid external factors all the time. There are considerable number of studies proving the positive effects of external factors in intrinsic motivation level. Providing learners with optimal level of challenge was found out to be beneficial for the maintenance of intrinsic motivation (Reeve et al., 2007). Similarly, external feedback that confirmed the competence of the individual contributed to intrinsic motivation (Vallerand et al., 1992). Hence, supporting intrinsic motivation meant manipulating external factors in such a way that they promoted autonomy, competence and internalization, and that they deepened the learning settings with more attractive and relevant tasks (Reeve et al., 2007). Therefore, the important point is to assure that the learners are aware of the fact that the external factor is presented in an attempt to enhance intrinsic motivation not to control or limit the learners.

As expressed earlier, Self-Determination Theory differs from many other motivation theories in that it greatly focuses on the different orientations or reasons that move the individuals. With regard to this notion, the theory presents sub-motivation types under intrinsic motivation. These are called "intrinsic motivation to know", "intrinsic motivation to accomplish" and "intrinsic motivation to experience stimulation". These types will be discussed in the following part of this chapter.

2.3.1.1. Intrinsic Motivation to Know

Intrinsic Motivation to Know (IM to Know) is utilized if individuals are involved in the task/performance due to the pleasure or enjoyment that they get as a result of learning or trying to learn something (Clark & Schroth, 2010). Noels et al. (2003) also defined IM to Know as a type of motivation that was linked to positive feelings that aroused as a result of finding out new ideas or gaining knowledge. Similarly, in their study on the various effects of intrinsic motivation types, Hein, Müür and Koka (2004) expressed that intrinsic motivation to know led individuals to execute the task because of their desire to learn something that was not familiar for them or to know more about something familiar.

This form of intrinsic motivation promotes learning at higher levels due to the fact that these learners put more effort and time on the learning tasks or performances. Therefore, consequences of such motivational drives are expected to lead a more

effective learning and teaching process. Learners who are driven by IM to Know enjoy the activity or task even if there are not any material or external outcomes separate from the task itself. To illustrate, a learner who reads history books due to his/her interest in learning more about history is moved by intrinsic motivation to know.

2.3.1.2. Intrinsic Motivation to Accomplish

In intrinsic motivation to accomplish (IM to Accomplish), it is the satisfaction of fulfilling a task that primarily motivates individuals. It also referred to pleasure that individuals felt as a result of the attempts to master a task or achieve a goal (Noels et al, 2003). Thus, it is safe to claim that individuals enjoy the sense of competency and being able to do something. Individuals driven by IM to Accomplish set up goals for themselves, and trying to reach these goals becomes the major motivation source for them. Such individuals are motivated to outdo themselves in each task (Hein, Müür & Koko, 2004).

When language learning is considered, such learners go through a fertile learning process, as well. A learner who puts more effort and time for certain tasks because s/he wants to complete these tasks and to achieve his/her goal would be an example for this type of intrinsic motivations. In terms of implications, for a more fruitful learning and teaching process, it is a better idea for teachers to encourage learners to set their personal goals.

2.3.1.3. Intrinsic Motivation to Experience Stimulation

The main reason for individuals who are driven by intrinsic motivation to experience stimulation (IM to Experience Stimulation) is the excitement and pleasure that are associated with the task or performance. Noels et al. (2003) stated that

> *".. IM-Stimulation [Intrinsic Motivation to Experience Stimulation] is related to motivation based simply on the sensations stimulated by performing the task, such as aesthetic appreciation or fun and excitement" (p.38).*

Likewise, Hein et al. (2004) claimed that these individuals were engaged in the expected behavior due to the positive sensations attached to the task itself, not the completing of it or learning more about it.

With regard to language learning, learners driven by this type of intrinsic motivation associate tasks with stimulation and perceive the performance of the task as new opportunities to enjoy themselves. A language learner who reads English novels both because it is one of his/her leisure time activities and because s/he wants to improve the proficiency level is an example of a case in which IM to Experience Stimulation is

utilized. As it can be inferred from the descriptions, outcomes of this type of motivation are also expected to be beneficial for learning due to the fact that the learners enjoy the task by its nature.

2.3.2. Extrinsic Motivation

It is quite clear that intrinsic motivation is a great assistant while learning- especially learning a language. However, frankly, in educational settings, it is not always the case. After childhood, individuals start taking up different responsibilities in different social contexts. In time, formal education appears to be the biggest responsibility for the learners after childhood. Both parents and teachers expect certain outcomes from the learner. That external pressure, control and expectations lead learners to lose intrinsic motivation they used to keep (Ryan & Deci, 2000). After a while, tasks at school begin to be intrinsically not-interesting for the learners. At that point, educators and learners have to accept that intrinsic motivation is not present in the classrooms all the time. Thus, it is not rational to depend on intrinsic motivation for teaching and learning (Ryan & Deci, 2000). At that point, extrinsic motivation stands out as a concept that cherishes hope for both educators and learners.

As a definition, extrinsic motivation is “a construct that pertains whenever an activity is done in order to attain some separable outcome” (Ryan & Deci, 2000, p.60). Unlike intrinsically motivated learners, extrinsically motivated learners do not experience any positive feelings attached to the activity itself. Rather, these learners value the consequences that are not connected to the activity in its nature.

As no pleasure or enjoyment is associated with the task itself, many scholars believed that extrinsic motivation as a whole contrasted with intrinsic motivation. However, according to the Self-Determination Theory, this is not the case. Deci and Ryan (1985) thought that different forms of extrinsic motivation existed. To illustrate, a learner who performed a task because she or he believed the value of the task although she or he did not enjoy it had a different extrinsic motivation source from the learner who did it because he wanted to avoid from the punishment he would get in the classroom unless he completed the task.

In an attempt to differentiate extrinsic motivation sources, Deci and Ryan (1985) created a new sub-theory called Organismic Integration Theory. According to the Organismic Integration Theory, different categories for extrinsic motivation existed

according to the degree of internalization and integration of the activity into the self (Reeve et al. 2007). These categories are named as “external regulation”, “introjected regulation”, “identified regulation” and “integrated regulation”. Deci and Ryan (1985) believed that it was a continuum from unwillingness to total personal commitment. The process of development towards individualization of the task is called internalization and integration of values and behavioral regulations by Deci and Ryan’s Self Determination Theory (1985).

In their study, Deci and Ryan (2000) stated that internalization referred to the procedure in which individuals realized and understood the value attached to the behavior they were expected or forced to perform. Integration, on the other hand, meant that individuals fully perceived the task/activity as their own. In other words, in internalization processes, the value that the task/activity held was recognized by the individual. In integration, the individual task/activity was regarded as something personal or self-endorsed.

Internalization and integration help learners greatly because when internalization and integration take place, negative attitudes towards that certain task/activity shift into more positive ones. Thus, outcome of the learning process changes for the better. The resistance and unwillingness that learners hold in amotivation diminish with the help of internalization processes. However, Ryan and Deci (2000) highlighted that it was not possible for everyone to go through these stages. One may start from amotivation and stay at that level due to bad learning experiences. In addition, it is possible to begin the continuum from identification level and go backwards due to undesirable experiences that expose learners to too much pressure and external control.

In order to find out factors that accelerated and hindered internalization and integration processes, Deci and Ryan (1985) formed a sub-theory called Organismic Integration Theory under the Self-Determination Theory. According to Organismic Integration Theory, under ideal conditions, learners are longed to move from external regulation to integration stage. This shift, which symbolizes a continuum, means that the individual internalizes the value of the task/activity and perceives it as his/her own deed. Therefore, for educators, it is critical to help learners get through the internalization process, at the end of which extrinsic motivation will result in more productive learning processes similar to the ones in intrinsic motivation.

So as to come up with some ways to enhance the internalization process to make learners benefit from extrinsic motivation at maximum level, Deci and Ryan (1985) founded another sub-theory called Basic Psychological Needs Theory. This theory tells that individuals possess innate and universal psychological needs such as feeling free and able, and this theory suggests that these needs are strong motivation sources (Reeve et al., 2007). According to the principles of the theory, three psychological needs in particular develop self-determined extrinsic motivation in learners, and these needs both help and accelerate the internalization and integration process of individuals. According to Basic Psychological Needs Theory, these needs, fulfilment of which promotes internalization and integration, are relatedness, competence and autonomy.

Relatedness as one of the human needs refers to the idea that if the learner feels belongingness or connectedness with the task itself or the person / group that assigns the task, the learner tends to reach greater internalization. It also refers to promoting safe and satisfying connections both with the required tasks and people that are related to the task in social platforms (Deci et al., 1991). Ryan and Deci (2000) stated that it was an important issue in a classroom setting. They claimed that a student who valued classroom rules and norms and respected the teacher would have the sense of relatedness, which caused a better internalization process. Lack of relatedness, on the other hand, caused great impairment in and eventually loss of intrinsic motivation (Deci et al., 1991). In line with the notion, Ryan, Stiller and Lynch (1994) discovered that students with higher relatedness to teachers and parents went through internalization in a better way which helped them to benefit from their extrinsic motivation in a more productive way. Deci et al (1991) also stated that parental involvement and peer acceptance increased the relatedness level of learners, which, as a result, would help internalization and integration process.

Another need that is crucial to foster internalization is the sense of competence. Deci et al. (1991) defined competence in the context of motivation with regard to human needs as “being efficacious in performing the required actions” (p. 327). Ryan and Deci (2000) asserted that in order for internalization to occur, individuals needed to feel that they could achieve that task/activity. In other words, in order to internalize the task/activity, they should know that they are competent enough to perform it. This is also an important concern while teaching. Keeping the competence factor in mind,

educators need to assign learners with the task that are not beyond their capabilities. Otherwise, internalization does not take place. However, it is worth mentioning that Deci et al. (1991) expressed that optimal challenge was the best condition for competence awareness. In an attempt to come up with new ways to foster competence awareness, these scholars also claimed that constructive feedback developed competence awareness, while negative feedback led learners to perceive their own performances lower than the real situation, as a result of which learners would develop non-autonomous forms of motivation. Therefore, lowered perceived competence makes learners to feel helpless, which triggers amotivation (Boggiano & Barrett, 1985).

Last but not the least, autonomy is the key need that develops internalization. Autonomy can be described as “the inner endorsement of one’s actions – the sense that one’s actions emanate from oneself and are one’s own” (Reeve et al., 2007, p. 230). Autonomy was also defined as “being self-initiating of one’s own actions” by Deci et al. (1991, p. 327). It also referred to the ability to have a say over their actions (Reeve et al., 2003). If individuals are given opportunities to choose and act according to their preferences, they are more likely to internalize the task/activity.

Developing other two factors without autonomy factor would increase general motivation level (Deci et al., 1991). However, unless autonomy need was fulfilled, it would not possible to reach fully self-determined extrinsic motivation (Ryan & Deci, 2000). According to Reeve et al. (2007), when feeling autonomous, learners were involved in the activity willingly. In addition, they felt that they were responsible for the way they performed that particular activity because they had made the decisions. Hence, in a classroom environment, educators need to give freedom to the learners from time to time to imbue them the idea of autonomy.

Although it is not always possible to let the learners make the decisions, some autonomy support techniques can be benefitted (Reeve et al., 2007). Autonomy support refers to instruction that endorses inner motivation by giving meaningful rationale for the activities with the help of a positive and constructive language. It also includes understanding learners’ point of view, which eventually increases student engagement (Reeve, Deci, & Ryan, 2004). Some examples of autonomy-supportive instructional behaviors were provided by Reeve and Jang (2006). Listening to the learners, asking what they want, creating independent work time, encouraging them to speak up, arranging the physical environment in a way learners can benefit from

learning materials, explaining the reasons of the tasks learners were expected to complete, making use of constructive feedback especially praise when necessary, encouraging the participation of the learners and responding to the comments, suggestions and questions posed by the learners were some examples of instruction that promoted autonomy in the classroom.

There are also behaviors that subdue autonomy of the learners. Some of such undesirable behaviors can be listed as using commands or directives while teaching, endorsing “the correct way” to do a certain thing verbally or behaviorally, monopolizing materials that learners want to utilize and manipulating the questions of the learners (Reeve et al., 2007). It is crucial for educators to make use of autonomy-supportive instruction and avoid controlling one (Reeve & Jang, 2006) due to the fact that handling classroom issues in autonomy-supportive or controlling style governs the type and level of motivation for learners (Deci et al., 1991).

A great number of studies stressed the importance of autonomy and effects of autonomy-supportive behaviors. In his study, Reeve et al. (2007) stated that learners whose levels of autonomy were high were more inclined to think critically, make their own decisions, follow their goals, have more positive attitudes towards learning in general and be more persistent in challenging tasks. It was also found out that autonomous learners possessed higher conceptual thinking abilities and these learners were reported to enjoy the learning process more than non-autonomous learners (Grolnick & Ryan, 1987). With regard to the effects of autonomy, it was also reported that autonomy fostered the internalization of extrinsic motivation and affected school performance for the better (Williams & Deci, 1996). With their study on the promotion of internalization, Deci et al. (1994) supported the existence and the importance of these autonomy-supportive strategies by claiming that even though they did not find the tasks attractive, learners were more inclined to reach internalization provided that they were given some meaningful reasons for certain tasks. The same study also revealed that controlling settings without autonomy harmed the internalization process. In line with the idea, a study on medical students by Williams and Deci (1996) proved that learners with more autonomous and supportive teachers in terms of competence had higher levels of internalization.

In the light of theory and previous studies, it is obvious that learning environments need to promote autonomy to increase the internalization level of the students. In addition,

it is important for educators to remind their learners what they get out of teaching process belongs to them to create sense of relatedness. Also, it is of utmost importance to assign them not too easy and not too complicated tasks to promote the sense of competence.

Numerous studies (e.g. Chirkov & Ryan, 2001; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000) found out that meeting all of these psychological needs – not only autonomy need but also competence and relatedness need - increased classroom performance of the learners and enhanced abstract thinking. In a study by Jang et al. (2007), it was discovered that satisfying these needs caused more active participation and achievement in learners while not meeting these needs led serious levels of frustration in learners, which clearly revealed the influential effects of sense of autonomy, relatedness and competence.

As discussed earlier, the internalization and integration lead learners to put more time, energy and effort on the task/activity. Therefore, providing them with enough opportunities to fulfil these human needs directs them to be more motivated. If the environment that surrounds the individuals does not promote these needs, the process of internalization and integration is damaged, and alienation becomes inevitable (Deci et al., 1991). However, it is also worth restating that although learners do the task/activity with better care when these needs are met, the motivation source is still extrinsic. Despite learners' more positive attitudes toward the task, learners do not get satisfaction or pleasure due to performing the task in any types of extrinsic motivation. However, providing learners with relatedness, competence awareness and autonomy creates great benefits for the learner in terms of attitudes and outcomes.

Although extrinsic motivation is always perceived as something undesirable or not predictive of academic achievement (Komarraju et al., 2009), there are studies such as Oz's study (2015) showing a positive link between academic achievement and extrinsic motivation. At that point, it is obvious that the amount of internalization creates a difference.

As stated above, Deci and Ryan (1985) claimed that extrinsic motivation and effects of it on the outcome might vary greatly depending on the autonomy –self-determination, in other words- level. In the following part of the chapter, these various forms of extrinsic motivation will be discussed in detail.

2.3.2.1. External Regulation

External regulation is a label that Deci and Ryan (1985) used to refer to the form of extrinsic motivation in which individuals focused on tangible outcomes that were totally different from the task/activity itself. Therefore, Deci et al. (1991) claimed that this type of extrinsic motivation was the least self-determined one among both extrinsic and intrinsic motivation types. Öz (2015) also asserted that external regulation was concerned with rewards, punishments or constraints. In support of these studies, Ryan and Deci (2000) stated that this type of regulation was usually utilized to gain an external reward or to please an exterior demand. A classic example for external regulation would be a student who finishes a task/activity in order to get a bonus point from the teacher or to satisfy his/her parents. In this case, it is obvious that the things that motivate the student have nothing to do with the task itself. A controlling and external power exists in such cases.

One of the concerns with regard to external regulation is the fact that individuals generally feel pressure and alienated (Ryan & Deci, 2000). Therefore, they are more likely to blame others for failures and do not take the responsibility of the task/activity they are expected to fulfill. Too much pressure and control at that point would direct individuals to suffer from amotivation.

2.3.2.2. Introjected Regulation

Introjected regulation is another form of extrinsic motivation. In introjected form of extrinsic motivation, individuals understand that the task is important and they internalize the idea. In other words, they still feel that the action they are expected to do is due to a rule but they internalize the existence of these rules and demands (Deci et al., 1991). Therefore, individuals who make use of introjected regulation as their motivation source still find the environment and people/groups controlling and feel the pressure.

The main drive for these learners is to avoid the sense of guilt or to accomplish a sense of self-confidence or maintain ego (Ryan & Deci, 2000). Thus, it is quite clear that it does not satisfy learning objectives properly. However, when compared to amotivation, it is still a drive that results in an outcome somehow.

2.3.2.3. Identified Regulation

Identified regulation is more self-determined type of extrinsic motivation (Ryan & Deci, 2000). As the name suggests, in this type of extrinsic motivation, individuals realize the reasons for the task/activity they are expected to do it. Not only do they understand the rationale of the task, but also they care about the value the task possesses. In other words, individuals driven by identified regulation sources admit the importance of the task and perceive that task as a part of the self, which makes the task and the process more autonomous compared to abovementioned forms of extrinsic motivation. As an example, Reeve et al. (2007) stated that if a learner expressed that s/he wanted to read a particular book because s/he believed that the book had meaningful and valuable ideas, this learner could be reported to benefit from identified regulation as his/her motivation source. This shows that individuals attach personal importance to the value of the task/performance, which automatically increases the quality of the outcome.

Due to the attitudes the individuals have towards the task/activity in identified regulation, it is safe to claim that it has positive effects on learning. However, it is crucial to recall that although the learners hold a more promising approach towards the task, it is still not intrinsic because of the lack of pleasure related to performing of the task. Another example for identified regulation would be a student who practices the pronunciation of a problematic sound because she or he believes that it is important while speaking although she or he does not enjoy the practice. In this case, student may hate the practice but still finds it worth performing.

2.3.2.4. Integrated Regulation

Ryan and Deci (2000) expressed that integrated regulation is the most autonomous type of extrinsic motivation. Individuals with integrated regulation drives internalize the task completely and perceive it as something related to his/her self, which makes this form of intrinsic motivation the most self-determined extrinsic motivation type (Deci et al., 1991). As the task is viewed connected to the concept of self, the effort, energy and time that individuals spend on the performance of the task increase significantly. Therefore, it was claimed that this form of extrinsic motivation was more likely to be observed in adult individuals (Deci et al., 1991) due to several reasons such as age and awareness level.

Ryan and Deci (2000) asserted that integrated regulation and intrinsic motivation shared some points such as autonomy or self-determination factor. Deci et al. (1991) also claimed that individuals making use of integrated regulation or identified regulation would perform the assigned task willingly and they would be engaged like individuals with intrinsic motivation drives. Yet, it is worth highlighting that there are several main differences between these two motivation factors. For instance, in integrated regulation although the value attached to the task matters to individuals, and individuals find the task worth executing, no pleasure of doing the task is observed. Even though the task and performance are internalized, it is still an external factor which causes the internalization. Nevertheless, the existence integrated and identified regulation brings hopes for both learners and educators due to the fact that even though intrinsic motivation is not present, it is still possible to have a fruitful and qualified learning process. Thus, it is significant to help the learners internalize the reasons and values for performing these expected tasks.

The ways to promote internalization and integration were discussed in great detail in previous parts of the chapter. In addition to these methods, it is also possible to make use of "interest-enhancing strategies" (Jang et al, 2007). Putting task-specific, manageable and short-termed goals for the learners, trying out new techniques for the similar tasks to find out the one that attracted the attention of the learners or encouraging learners to work in pairs or groups may help learners to enjoy the task that they are expected to execute.

2.3.3. Amotivation

Last component of three-dimensional Self-Determination Theory is amotivation. In their study on amotivation and its effects, Legault, Green-Demers and Pelletier (2006) stated that today's teenagers desperately suffered from amotivation, which was recently one of the most major and common academic problems. These scholars also expressed that despite the existence of such a prominent problem, little focus was put on the term of amotivation and the reasons behind it.

Ryan and Deci (2000) defined amotivation as "the state of lacking an intention to act" (p.61). Similarly, Noels et al (2003) stated that

> *".. amotivation refers to the situation in which people see no relation between their actions and the consequences of those actions; the consequences are seen as arising as a result of factors beyond their control. In such a situation, people have no reason,*

intrinsic or extrinsic, for performing the activity, and they would be expected to quit the activity as soon as possible" (p. 40).

In amotivation, no reasons or drives to act or to perform a task are observed in individuals. As it can be inferred from the definitions above, amotivation is the lack of both extrinsic and intrinsic motivation sources. Amotivated individuals are not moved by any external or internal reasons to do the task/activity. Such individuals cannot see the reasons for the desired actions and the relationships between the desired actions and their own behaviours. They also believe that they do not have any control over their actions. On the contrary, they think that external forces control them. (Janosz, 2000). As a result, they are mostly indifferent to the desired actions and experience the sense of alienation. This situation is mostly associated with the learned helplessness. In addition to these symptoms, amotivation caused learners to experience the sense of frustration and discontentment, which, as a result, hindered creativity and productivity (Leagult, Green-Demers & Pelletier, 2006).

As in other motivation types, amotivation is also a multidimensional concept, which has various aspects and dimensions (Legault et al, 2006). Scholars speculated on the reasons that led individuals to be amotivated. In search of finding out some reasons, Deci (1972) stated that individuals tended to be amotivated because they believed that they were not capable of performing the task/activity. At that point, competence awareness, which was cited in earlier parts of the chapter, stands out as an important factor to lead learners to benefit from motivation sources in a more productive and effective way. Ryan (1995) concluded that individuals got to be amotivated due to the fact that they found the task/activity meaningless and unworthy. In order to increase the chance of motivating learners, giving students significant reasons to complete the task/activity may be a useful technique for educators to apply.

Some reasons or factors that led learners to be amotivated were discussed in the previous studies, as aforementioned. However, unfortunately, lack of an organized category with regard to types of amotivation or reasons of amotivation resulted in the repetition of the same conclusions with different words and inconclusive results. In search for a more structured form of amotivation concept, as in intrinsic and extrinsic motivation types, Pelletier et al. (1999) came up with a model that classified the reasons of environmental amotivation under four major reasons which were strategy beliefs, ability beliefs, effort beliefs and helplessness beliefs. Taking this study into consideration, Legault et al. (2006) proposed four-dimensional academic amotivation

taxonomy. According to this taxonomy, the reasons that lead individuals to be amotivation could be discussed under four subtypes. These subtypes are ability beliefs, effort beliefs, characteristics of the task and the value placed on the task.

As the names of the subtypes suggest, the term of ability beliefs as one of the four reasons of amotivation refers to one's self-efficacy. Previous research (e.g. Patrick, Skinner, & Connell, 1993) claimed that learners who had little belief in themselves and their abilities tended to be disintegrated from their academic studies and responsibilities. In the light of such studies, Legault et al. (2006) claimed that ability beliefs are one of the main drives behind amotivation.

Effort beliefs, on the other hand, is another component of amotivation, depending on the idea that when individuals lack the belief that they can put enough effort and energy for the desired behavior, they are more inclined to be amotivated. As a result, academic detachment is observed.

The third component of the taxonomy is related to the value attached to the task. This component of the taxonomy refers to the fact that if individuals do not value the task, they cannot find a motivating factor. As stated by Deci and Ryan (1985, 2000), when the task is irrelevant for the individual, amotivation arises. Another issue with regard to the value placed on the task component is related to the environment. Murdock (1999) stated that when individuals associated their environment or school with negative feelings, they tended to end up with higher amotivation levels.

Finally, according to this taxonomy, characteristics of the task are also vital for individuals. As earlier studies (e.g. Deci & Ryan, 1985; Ainley, Hidi & Berndoff, 2002) covered, in order for individuals to put maximum effort and time for that specific task and to benefit from that task at maximum level, they needed to experience some form of amusement and pleasure. Therefore, Legault et al. (2006) hypothesized that unappealing tasks that did not entertain or please the individual could result in higher amotivation.

Upon proposing the forementioned subtypes, Legault et al (2006) came up with some ideas to overcome or dilute the effects of amotivation. They suggested that issues such as autonomy support and competence support are vital in order to handle the consequences of amotivation. Additionally, according to these scholars, fostering

interpersonal affiliation, also called relatedness, would help both learners and the teachers.

Literature on motivation included a lot of studies showing the effects of amotivation in education. Numerous studies (e.g. Beaudoin, 2006; Vallerand & Bissonnette, 1992) proved that amotived learners were inclined to be disengaged in the classes and they were more likely to drop out. Another study by Noels et al. (2003) found out that when individuals thought they did not have freedom and they were not competent enough, these individuals developed higher levels of amotivation. Noels et al. (2003) expressed that these results were parallel to a previous study by Noels and his colleagues (1999) which revealed that the higher the amotivation level was, the more controlling individuals perceived their teachers. In line with these studies, Baker (2004) emphasized that amotivation led stress while attending the courses or studying. It was also claimed that amotivated learners were incapable of being adjusted to college properly. Similarly, Vallerand et al. (1997) found out a positive correlation between school dropout and amotivation level.

Like other types of motivation, amotivation is a complex and multifaceted construct that needs closer attention. Although the effects of amotivation are severe and directly hinders the teaching and learning process, it is clear that it does not get the attention and research that it deserves. Perceiving amotivation as a single-dimensional reality that nothing can help would encumber learning and teaching to a great extent. Therefore, it is worth stating that for future generations, it is vital to examine amotivation in greater details and uncover the possible reasons behind it.

3. METHODOLOGY

3.1. Introduction

This chapter is devoted to the presentation of the overall design of the study. This chapter consists of five parts. The first part of the chapter gives general information about the research design utilized for the study. The second part elaborates on the detailed description of the setting and participants in which research was conducted. Then, data collection instruments of the study are introduced. Later, data collection procedures are presented. Finally, data analysis procedures are discussed.

3.2. Research Design

The research design was based on a quantitative research design. Therefore, no manipulation of the environment or the participants was required. As in many quantitative research designs, participants of the study were expected to provide data with the help of the instruments in their natural educational settings where no intervention was planned or utilized.

The participants were expected to fill in two different surveys. The data were collected from the participants and coded numerically in order to be able to come to quantitative conclusions with the help computational data analysis programs/applications.

The design of the study was also a correlational one due to the fact that it aimed at finding out probable relationships among independent variables such as demographic information of the participants, their personality traits, and academic motivation sources. Furthermore, the links between these independent variables and the one and only dependent variable of the study, namely academic achievement, were intended to be uncovered. In addition to the correlation design, regression analyses were practiced in an attempt to find out the predictive effects of independent variables on the dependent variable.

3.3. Participants and Setting

Data for this study were collected from 202 students enrolled in the Department of Foreign Language Education at Hacettepe University. While selecting the participants, convenience sampling technique, which is a well-known non-probability sampling technique in language studies (Dörnyei, 2007), was utilized as convenience of the researcher was an influential factor.

In data analysis part, two of the participants appeared to be extreme outliers on the boxplots. Therefore, the data obtained from these two participants were ignored. All the required procedures with regard to permissions and ethical issues were completed prior to data collection. Additionally, personal consent forms had been signed by the participants before they were given the questionnaires. In addition, the participants were informed that they could leave the study any time they wanted. However, no such cases were observed while collecting data. The distribution of the students by gender and the number of years at university is presented in Table 3.1 and 3.2.

Table 3.1. Distribution of Participants by Gender

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	***Female***	159	79,5	79,5	79,5
	Male	41	20,5	20,5	100,0
	Total	200	100,0	100,0	

As seen from the table below, 159 female participants and 41 male participants took part in the study.

Table 3.2. Distribution of Participants by Grade at University

		Frequency	*Percent*	*Valid Percent*	*Cumulative Percent*
Valid	***Second Year***	119	59,5	59,5	59,5
	Third Year	19	9,5	9,5	69,0
	Fourth Year	62	31,0	31,0	100,0
	Total	200	100,0	100,0	

More than half of the participants were in their sophomore year while 31 % of them was in their senior year. Only about 10% of the participants was attending university for three years.

All of the participants in the study majored in English Language Teaching Department at Hacettepe University. Freshman students were not included into the study due to the fact that their GPA grades would not reflect academic achievement as it only included one academic term. Therefore, data were collected from second-year, third-year and fourth-year students of Foreign Language Education Department at Hacettepe University

At Hacettepe University, like at many other major universities in Turkey, students have to either study English extensively at School of Foreign Languages, namely the prepatory school, or pass the proficiency exam that takes place before students start enrolling for their own departments. As these participants were on their second, third or fourth year in bachelor degree, and the medium of instruction was English due to their future profession, they had good command of English. The proficiency level of the participants were expected to range from upper-intermediate to advanced level. It referred to C1 and C2 according to CEFR.

With regard to setting of the study, the Department of Foreign Languages of Hacettepe University is a major department for the students who want to take teaching as their profession. Students who have relatively high scores from University Entrance Exams prefer studying at this department due to its reputation and high-quality education and content. Students who have a chance to study at this department already need to get good scores from YDS, which is a part of University Entrance Exam for the students who study foreign languages at high school in order to study language-related departments such as Foreign Language teaching, Foreign Language Literature or translation and interpreting departments. This part of the exam aims at testing such students' foreign language proficiency levels. Therefore, it can be inferred that students studying at Department of Foreign Languages of Hacettepe University get relatively higher grades compared to many foreign language students in Turkey. Some of the courses that these students are expected to take can be listed as Advanced Writing & Reading, English Literature, Linguistics, Approaches in English Language Teaching, Developing Teaching Materials, Testing and Evaluation etc.

3.4. Instrumentation

In this study participants were expected to provide data with the help of two questionnaires. There are several reasons why getting data through questionnaires was chosen over other ways of instrumentation. First of all, the design of the study required the use of such tools since quantitative research design was utilized. Additionally, questionnaires were used due to practicality issues. It was both convenient to use and easy to score. Furthermore, administering questionnaires was time-efficient for both the researcher and the participants. Unlike some of the qualitative data collection instruments, making use of questionnaires helped participants to feel secure while providing data in their natural environment. In the

following part of this chapter, detailed information on the two questionnaires utilized in the study is provided.

3.4.1. The International Personality Item Pool (IPIP)

Data for the present study were collected using the International Personality Item Pool (IPIP). IPIP is the general concept used for most of the personality measures. Therefore, it does not necessarily refer to one specific measure. On the contrary, established in 1999 by Goldberg in an attempt to create a pool of personality inventories, today IPIP holds more than 3000 items and over 200 measures which were developed by scholars from different countries, which proved that it had already achieved to keep its initial goal (Goldberg et al., 2006). The measures in IPIP are mostly free of charge, and hold high reliability and validity values. Therefore, these measures were used extensively by quite a large number of researchers (i.e. Ashton & Lee, 2001; Baker et al., 2004; DeYoung, 2010).

Some of the most popular personality measures can be named as Costa and McCrea's NEO-PI-R (1992), Hogan and Hogan's Hogan Personality Inventory (1992) or Cattell's 16 Personality Factor Questionnaire (Conn & Rieke, 1994). However, in this study Goldberg's personality scale called Big-Five Factor Markers (1992) was administered.

Goldberg (1981) strongly asserted that although their being finite, vocabulary covering personality traits existed in languages. Therefore, he followed a lexical approach while trying to come up with a personality measure. As a result, Goldberg (1992) created the Big-Five Factor Markers Inventory aiming at finding out the personality trait(s) that the person was mostly dominated by. Two different versions of the inventory existed. The only major difference between these inventories was the number of the items. One of them made use of 100 items while determining the dominant personality traits. However, in this study, due to practicality and time constraints, 50-item version of the inventory was conducted. 50-item Big-Five Factor Marker is presented at Appendix B.

50-item Big Five Factor Markers Inventory consists of two sections called Personality Traits and Global Personality Traits. It has a Likert-Scale form with responses from 1 to 5, 1 referring to "very inaccurate of me" and 5 meaning "very accurate of me". Depending on the answers of the participants, the measure was intended to reveal the dominant personality trait(s) from Big Five Personality Traits Model. As aforementioned, these traits are neuroticism, extraversion, conscientiousness,

agreeableness and openness to experience. In order to make sure that participants responded to items with care, some of the items were negatively keyed and while analyzing the data, these items were approached with special care.

There are many benefits of using Goldberg's 50-item Big Five Factor Markers Inventory. First of all, the language of the measure is suitable for individuals who do not have very high command of English. This, in a way, improves the quality of the data as it diminishes misunderstandings with regard to the items. Moreover, the inventory is easy to score. The original website created by Goldberg in 2001 (ipip.ori.org) provides researchers with the materials that show how to score the data. Furthermore, unlike some inventories, the Big Five Factor Markers Inventory is free of charge and easy to use as Goldberg shared the inventory on his website. Additionally, the inventory directly asks about the traits with clear items. Gosling et al (2003) believed that directing asking participants with such items resulted in better results. Furthermore, as it can be inferred from the number of items, it is a short inventory. So, the participants did not necessarily have to spend more than 15 minutes to complete the inventory. This might be considered to be an advantage, as well due to the fact that participants find long inventories irritating and dull (Donnelan, Osward, & Lucas, 2006)

More importantly, many studies proved that Goldberg's Big Five Inventory was a reliable and effective tool while measuring the dominant personality trait(s) of individuals. To illustrate, John and Sritvastava (1999) claimed that the factors of the scale could be duplicated with ease for different settings. Additionally, these scholars asserted that the scale's internal consistency was impressively high. In order to test the internal consistency of the measure, it was applied to a large group of adults and results proved that it had a very high mean internal consistency, which was .84 (Gow, Whiteman, Pattie, Deary, 2005).

The reliability analysis based on the current data was also computed and provided below. However, it is important to note that some items of the questionnaire were negatively keyed. Therefore, in order to calculate the reliability of the questionnaire properly and to have accurate results, these negatively keyed items were reverse-coded. The table below shows the Cronbach Alpha value of the items some of which coded reversely for 200 participants.

Table 3.3. Reliability Analysis of Big Five Inventory

	Cronbach Alpha	*N of Items*
Conscientiousness	.69	10
Openness	.79	10
Extraversion	.74	10
Agreeableness	.63	10
Neuroticism	.83	10
Total	.78	50

As the table reveals above, Cronbach's Alpha value for the questionnaire consisting of 50 items is .78 which makes the questionnaire a reliable one. Internal consistency of the questionnaire is acceptable.

3.4.2. The Academic Motivation Scale (AMS)

Academic Motivation Scale (Vallerand, 1992) is one of the well-known scales used while measuring the academic motivation levels of the individuals. Originally developed in French and called Echelle de Motivation en Education (EME), the scale was developed in the light of the Self Determination Theory. Three-step cross cultural scale translation techniques were used in order to preserve the reliability and validity of the scale.

The scale has seven major categories that depend on the Self-Determination Theory. These categories are three types of intrinsic motivation (intrinsic motivation to know, intrinsic motivation to accomplish, and intrinsic motivation to experience stimulation), three types of extrinsic motivation (external, introjected and identified regulation) and finally amotivation. In total, 28 items, each four of which were created for one motivation type, try to assess the motivation types. The scale makes use of Likert-scale form of survey, and participants can freely choose from 1 which represents "doesn't correspond at all" to 7 referring to "correspond exactly" options. The major question that individuals were expected to think while responding to the statements was why they were attending the university.

Although there are numerous scales developed in an attempt to measure motivation Academic Motivation Scale (AMS) possesses certain advantages over other scales. First of all, the language level of the test does not require individuals to have high levels of English. B1 level of English according to CEFR would be enough to understand and respond to the items properly. Although the participants of the study were students of

English Language Teaching department, English was still their foreign language. So, participants' understanding and responding appropriately was guaranteed with the help of such scale. Furthermore, different from many other scales on motivation, Academic Motivation Scale takes amotivation into consideration, as well, and it perceives it as an equally important type of academic motivation. Therefore, equal number of items were allocated for all types of motivation. Hence, it was a bigger chance to diagnose the dominant academic motivation drive(s) of the individuals. Finally, lots of studies revealed the reliability and consistency of the scale. For instance, in their study analyzing Academic Motivation Scale from statistical perspectives, Robert J. Vallerand et al. (1992) found out that after several modifications, normed fit index (NFI) was .93, the Adjusted Goodness of Fit Index (AGFI) was .91, and the Goodness of Fit Index (GFI) was .94, which replicated the results obtained with the help of French version. Therefore, it is safe to claim that translation from original did not diminish the determinative power of the scale. With regard to reliability level, which also echoed the values of original scale, Cronbach alpha values ranged from .83 to .86. The only exception for this range was the value of the Identification subscale that had an alpha value of .62. However, overall values of the scale proved that it was an appropriate measure to use while determining the academic motivation drive(s).

The results of the study (Vallerand et al., 1992) showed that Academic Motivation Scale held satisfactory levels of reliability and factorial validity. It was also found out that these values were very much parallel to those of the original version of the scale. Apart from studies conducted by Vallerand and his colleagues, other studies such as Fairchild et al. (2005), Öz (2015) also asserted that it was an appropriate tool to measure academic motivation level of the individuals. Using more than 1400 participants, the study by Fairchield et al. (2005) proved that the Academic Motivation Scale met adequate and satisfactory levels of construct validity showing a good fit with seven-factor model and internal consistency of the items responses. Due to its reliability, validity and practicality, the Academic Motivation Scale by Vallerand et al. (1992) were utilized for this study. The reliability analysis results of AMS for the current study is given below.

Table 3.4. Reliability Analysis of Academic Motivation Scale

	Cronbach Alpha	*N of Items*
IM To Know	.81	4
IM To Experience Stimulation	.77	4
IM To Accomplish	.73	4
External Regulation	.70	4
Identified Regulation	.81	4
Introjected Regulation	.83	4
Amotivation	.90	4
Total	.87	28

In line with the previous studies, Cronbach's Alpha value of the questionnaire proved that AMS held a quite satisfactory internal consistency level. AMS is available in Appendix C.

3.5. Data Collection Procedures

The present study was conducted with prospective English language teachers at Hacettepe University, which is a major state university in Ankara. Before data collection, all necessary permissions were taken from the Hacettepe University Ethics Commision. In addition, all participants were given a consent form, through which they were informed that it was a voluntary survey and that they were free to stop participating at any time they wanted.

After all the necessary requirements about the permissions and informing the participants about the data collection were met, the participants were given two paper-based surveys. As previously stated, The International Personality Item Pool (IPIP) by Goldberg had 50 items, while the Academic Motivation Scale (AMS) had 28 items. Both scales were Likert type of scales, and the language of the surveys were English. In addition, both surveys were anonymous to make sure that the participants could respond to the items freely.

Although no time limit was set to help participants provide proper data, it took about 25 minutes to complete two surveys. In addition, researchers' contact information was provided for the participants in case they had any questions regarding the research or they wanted to learn more about the details of the study. After completing the surveys, the participants returned them to the researcher.

3.6. Data Analysis Procedures

In order to find proper answers to the research questions stated in the previous chapter, some statistical analyses were conducted with the help of IBM SPSS Statistics 20.0, which is a comprehensive computer program used in a great deal of research from different fields.

In the current research, socio-demographic factors such as gender or age, academic motivation drive(s) (if applicable) and personality traits were independent variables. Academic achievement of the individuals, represented by GPA grades, on the other hand, was the only dependent variable in the research.

First of all, as normality is a concern while determining the proper statistical tests, all preliminary analyses were completed and it was found out that the data were normally distributed. Although it was normally distributed, data from two participants seemed to distort the quality of the data. So, these outliers and missing data were dealt with care. The results of such assumption tests are provided in the following chapter. Furthermore, certain descriptive statistics analyses were conducted. To illustrate, mean scores of both Big Five personality traits and Academic Motivation Drives were presented by gender along with standard deviations. In addition, as correlation and multiple regression were utilized while analyzing the data, linearity and variance homogeneity assumptions were also considered and necessary tests were run.

Given that data were normally distributed and necessary assumptions were met, three Pearson-Product Moment Correlation tests, which deal with whether two or more variables are statistically associated or correlated (Field, 2013), were conducted to find out whether there were any relationships among Big Five personality traits, academic achievement and academic motivation.

In addition, the multiple regression analysis was carried out to explore the predictive power of independent variables and to find out the extent to which personality traits and academic motivation would predict academic achievement. The multiple regression analysis, conducted to reveal any possible relationship between dependent and / or independent variables, is a powerful statistical test (Field, 2013). Among several other methods of multiple regression, enter method was used for the current study.

4. RESULTS

4.1. Introduction

This chapter is devoted to the presentation of the results obtained as a result of various statistical tests. The following research questions were designed to guide the study.

1. What are the participants' perceived levels of personality traits and academic motivation?
2. Is there a significant relationship between personality traits and academic achievement?
3. Is there a significant relationship between academic motivation and academic achievement?
4. Is there a significant relationship between academic motivation and personality traits?
5. What personality traits can predict academic achievement of the participants?
6. What motivational drives can predict academic achievement of the participants?

First of all, in order to be able to decide on which statistical tests to use, it was of high importance that some statistical assumptions were met. The first analysis to be conducted in an attempt to determine whether it was possible to use parametric tests or not was the normality test. The Kolmogorov-Smirnov and Shapiro-Wilk tests were run. Besides, visual inspection of P-P and Q-Q plots, histograms and skewness and kurtosis values were analyzed in detailed. All the skewness and kurtosis values were between +2 and -2, which was considered acceptable in literature (George & Mallery, 2010). Furthermore, P-P and Q-Q plots demonstrated good matches in all variables. As a result, it was found out that deviation from normality was far from being significant, proving that the data were normally distributed. The following plots were provided to show the normality of the data.

Figure 3: Normal Q-Q Plot of Conscientiousness

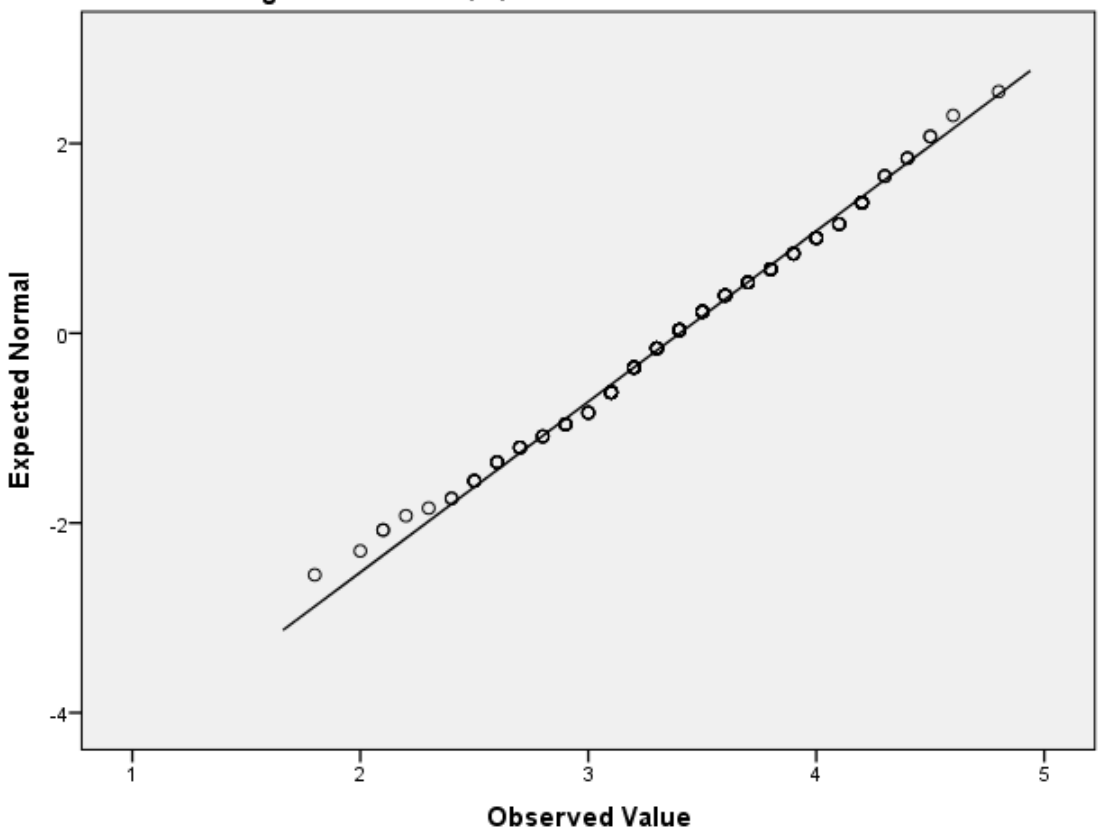


Figure 4: Normal Q-Q Plot of Openness

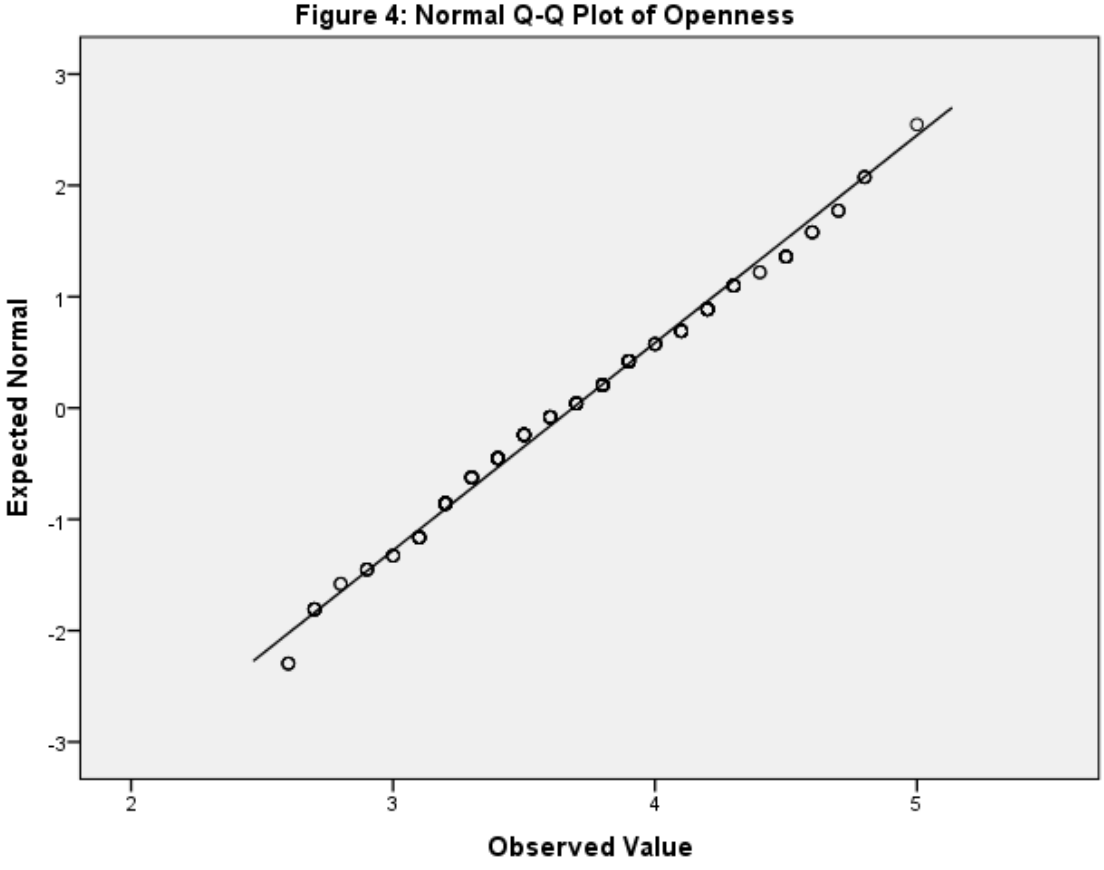


Figure 5: Normal Q-Q Plot of Agreeableness

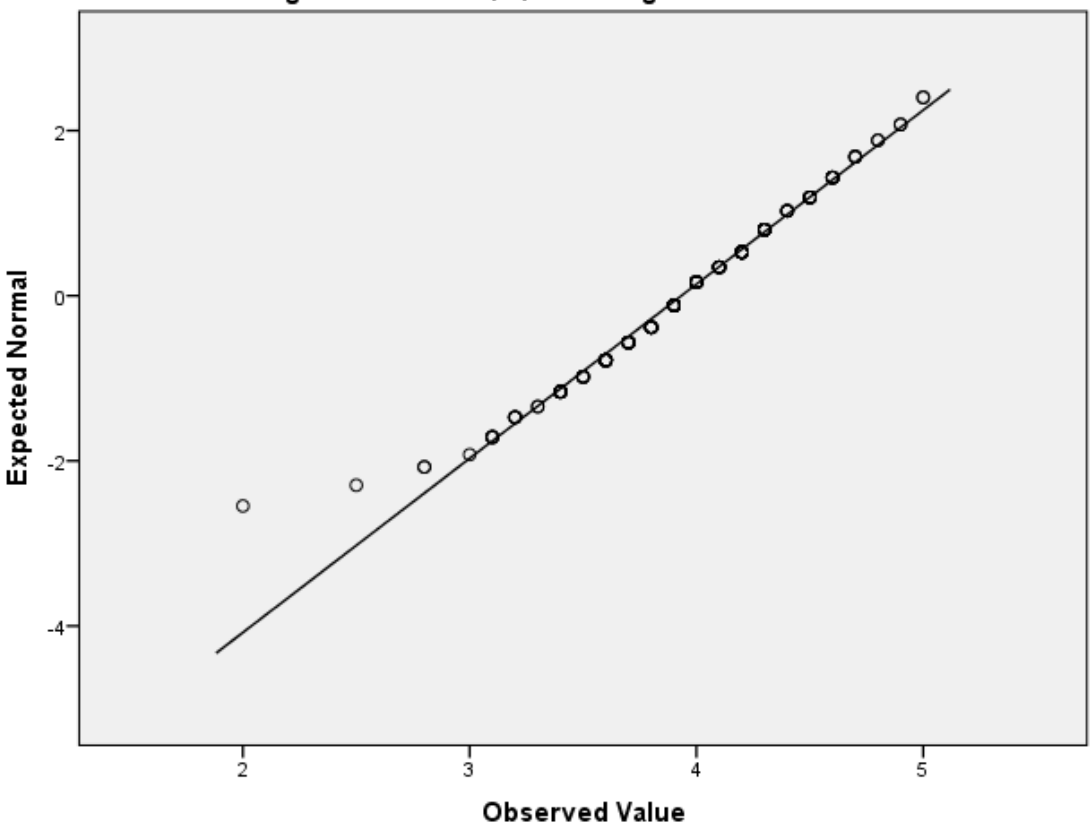


Figure 6: Normal Q-Q Plot of Extraversion

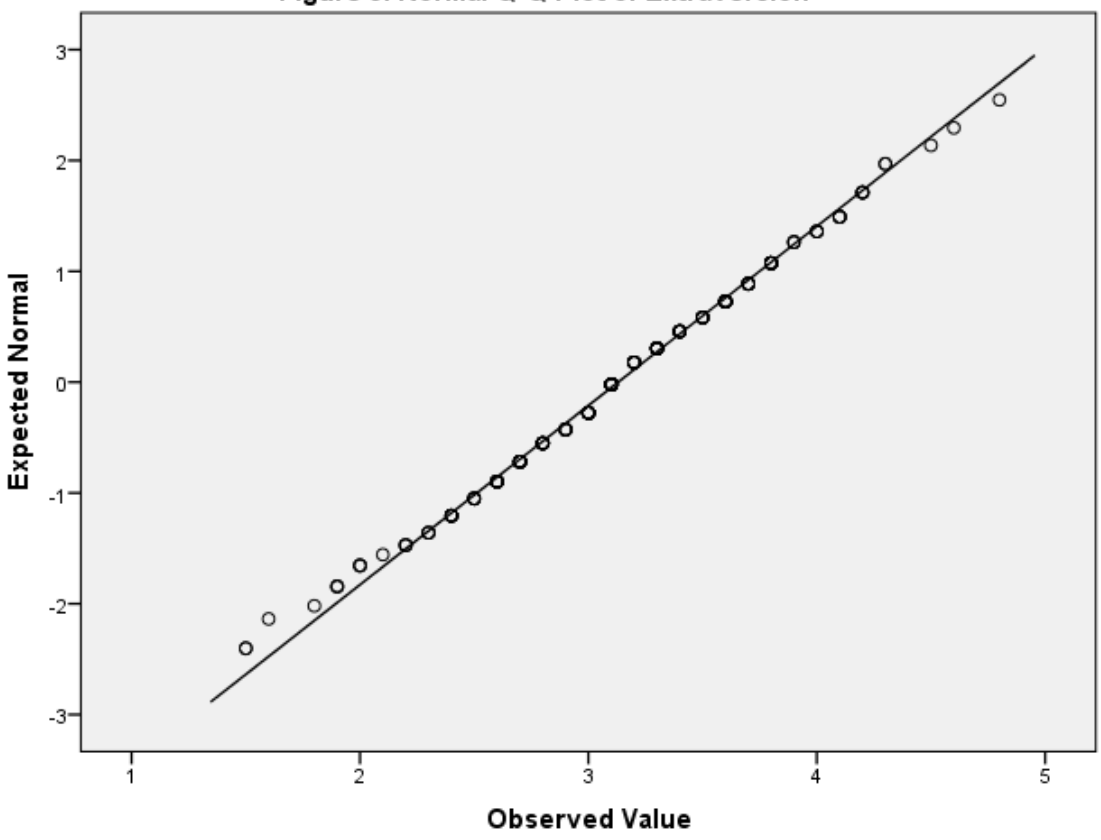


Figure 7: Normal Q-Q Plot of Neuroticism

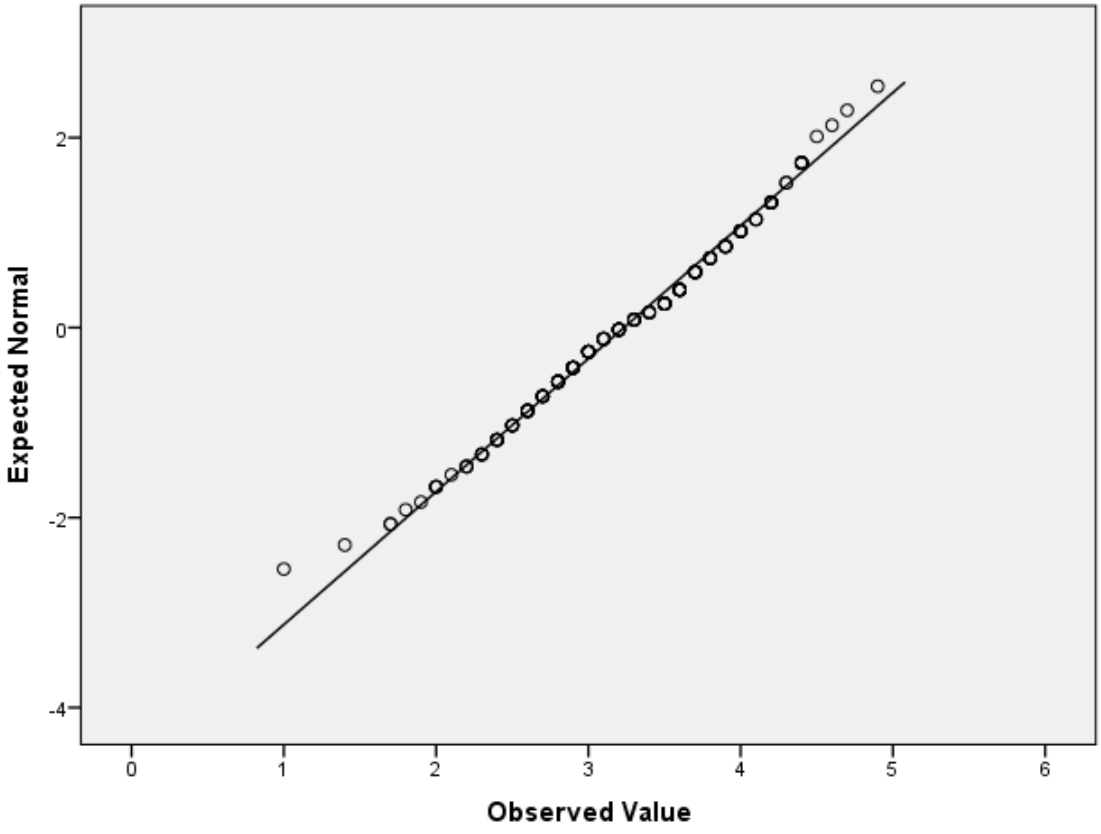


Figure 8: Normal Q-Q Plot of ExternalRegulation

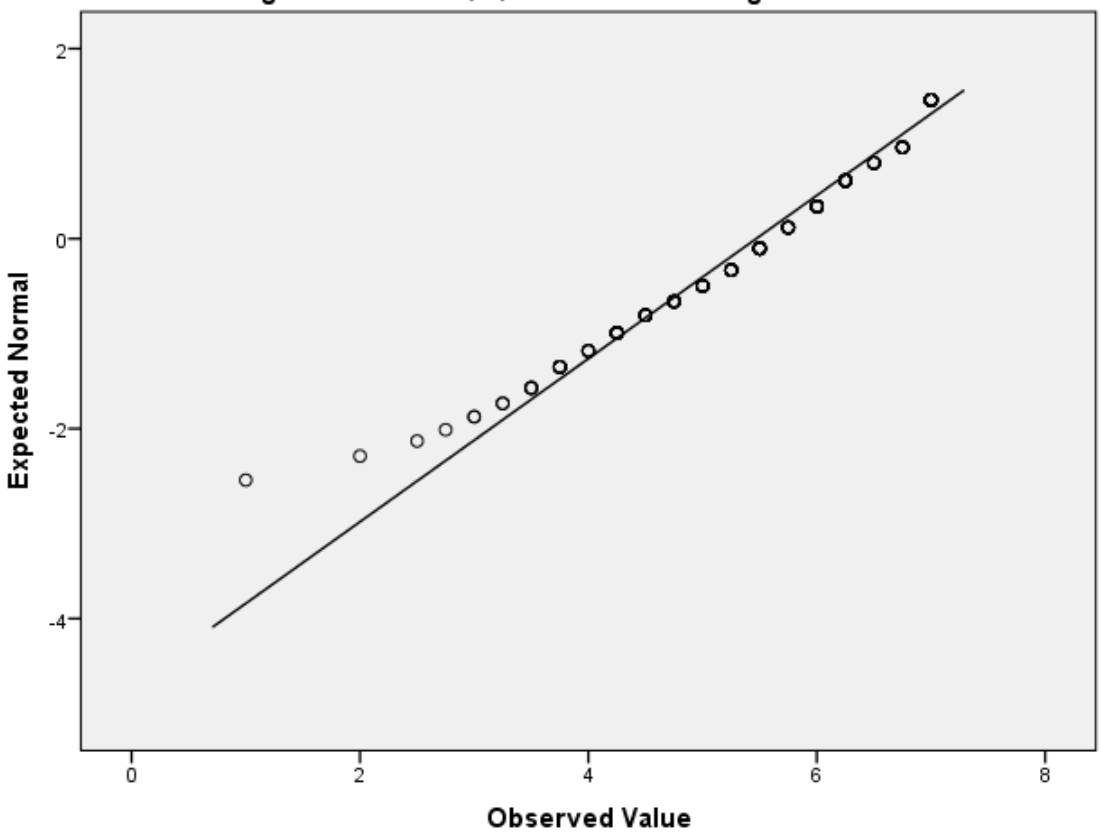


Figure 9: Normal Q-Q Plot of IdentifiedRegulation

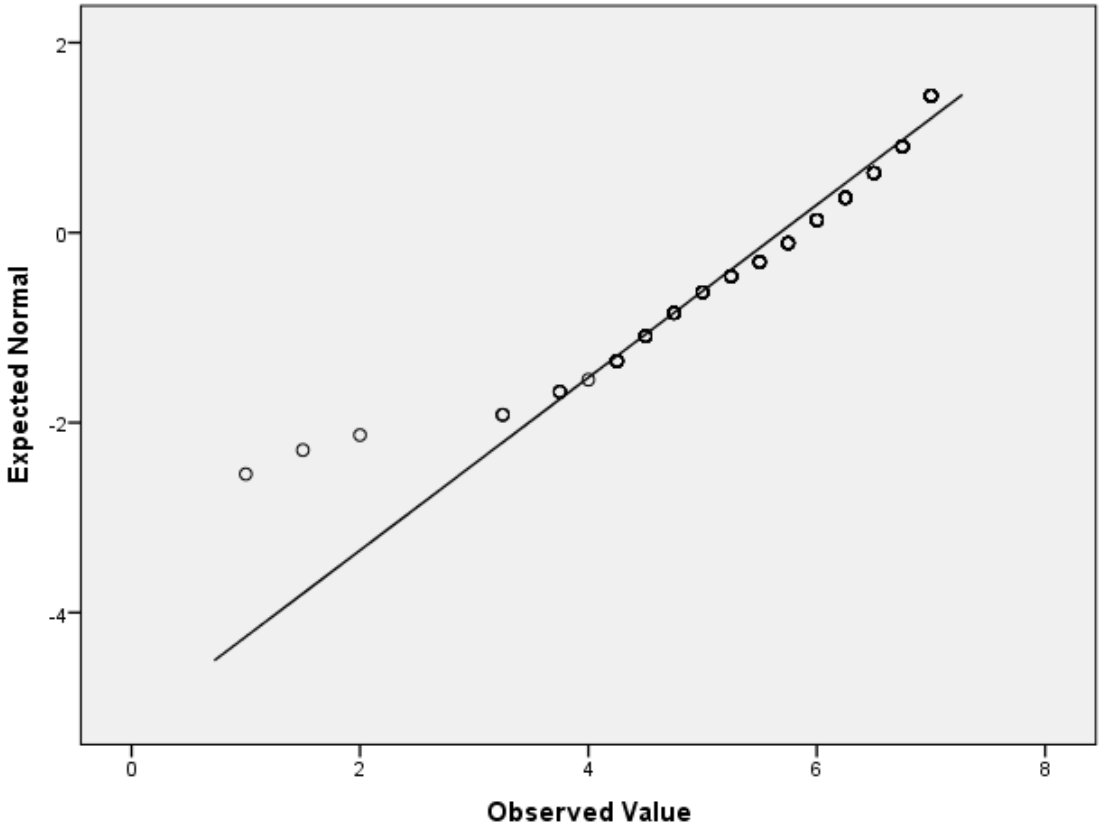


Figure 10: Normal Q-Q Plot of IntrojectedRegulation

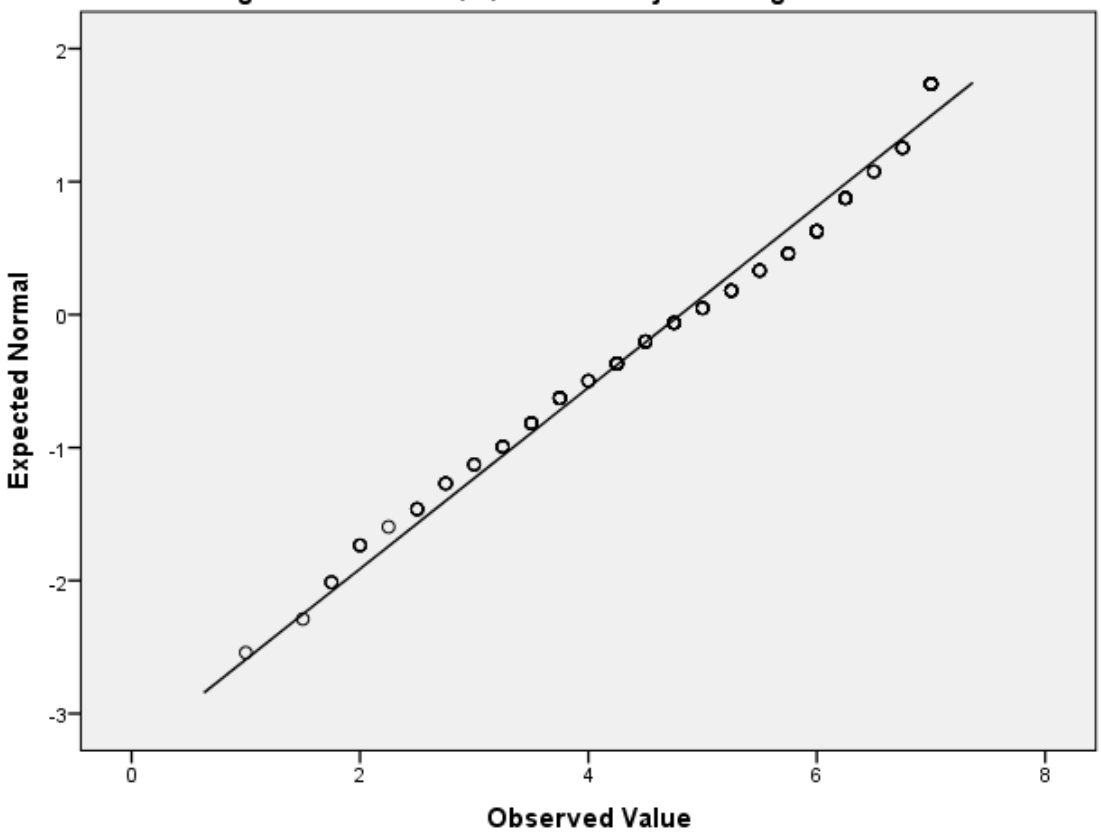


Figure 11: Normal Q-Q Plot of IMToKnow

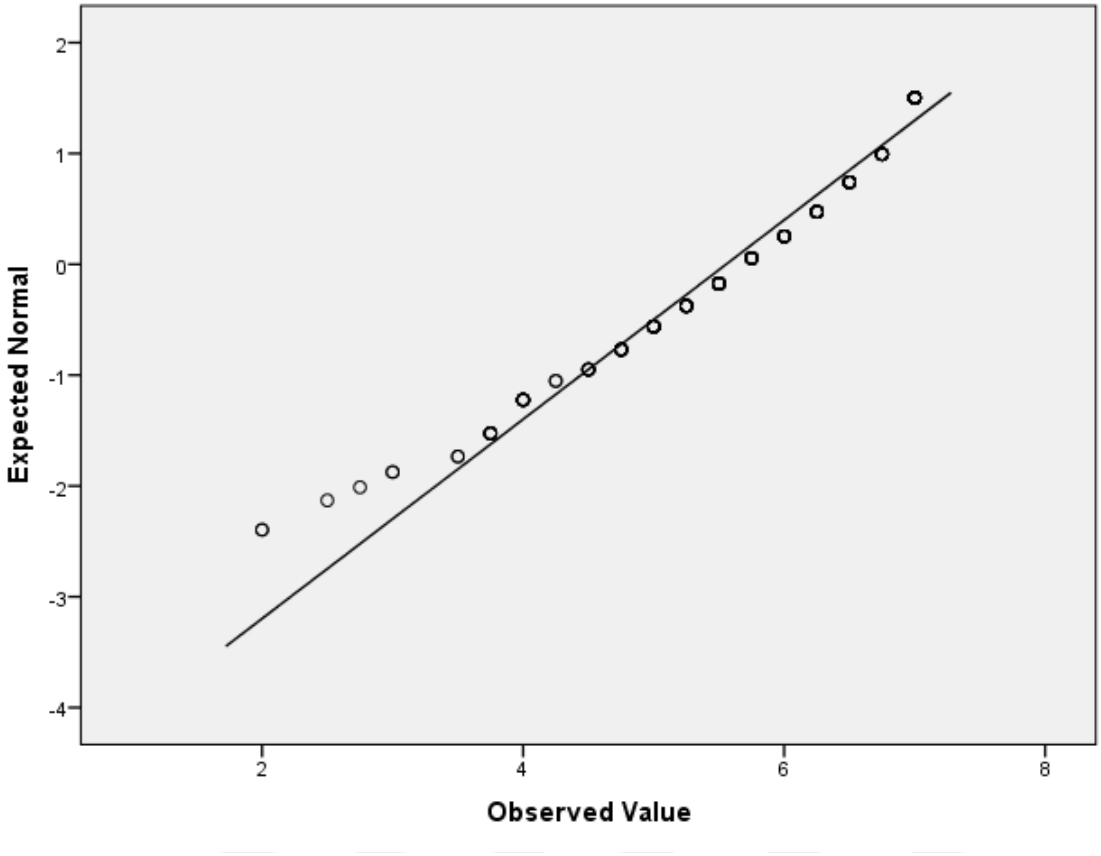


Figure 12: Normal Q-Q Plot of IMToExperienceStimulation

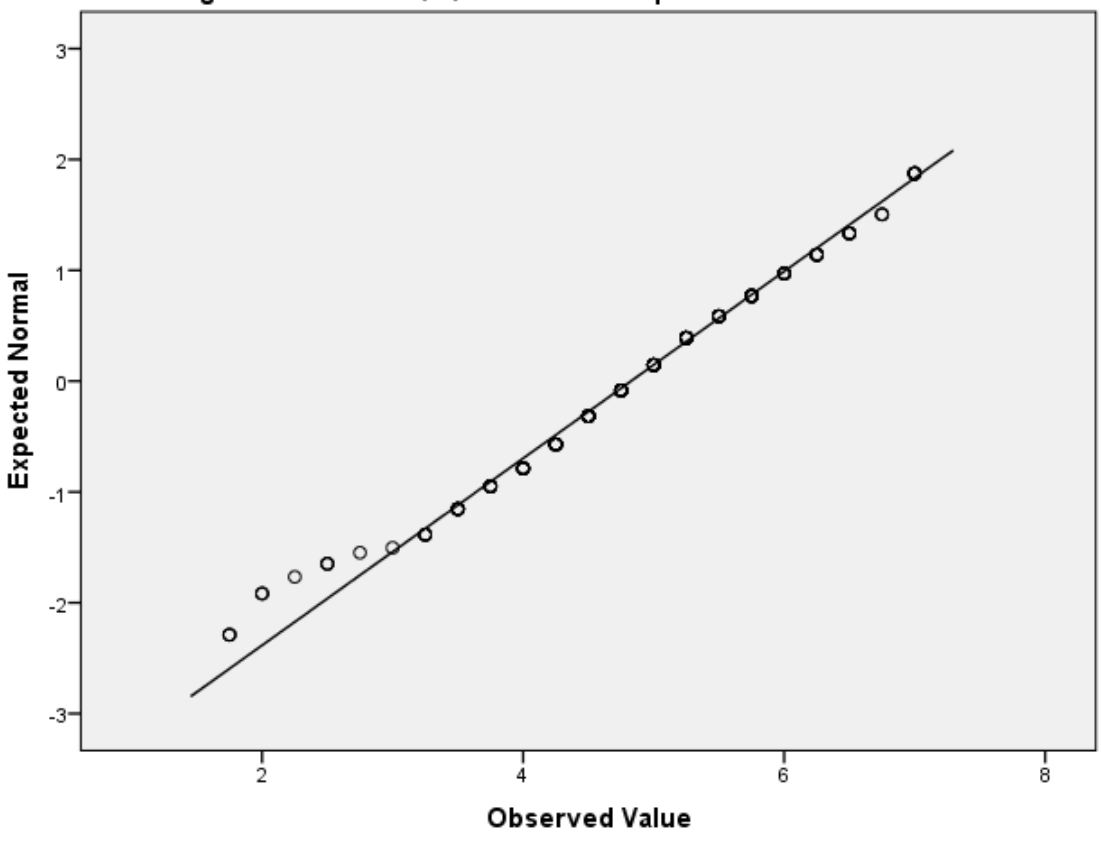


Figure 13: Normal Q-Q Plot of IMToAccomplish

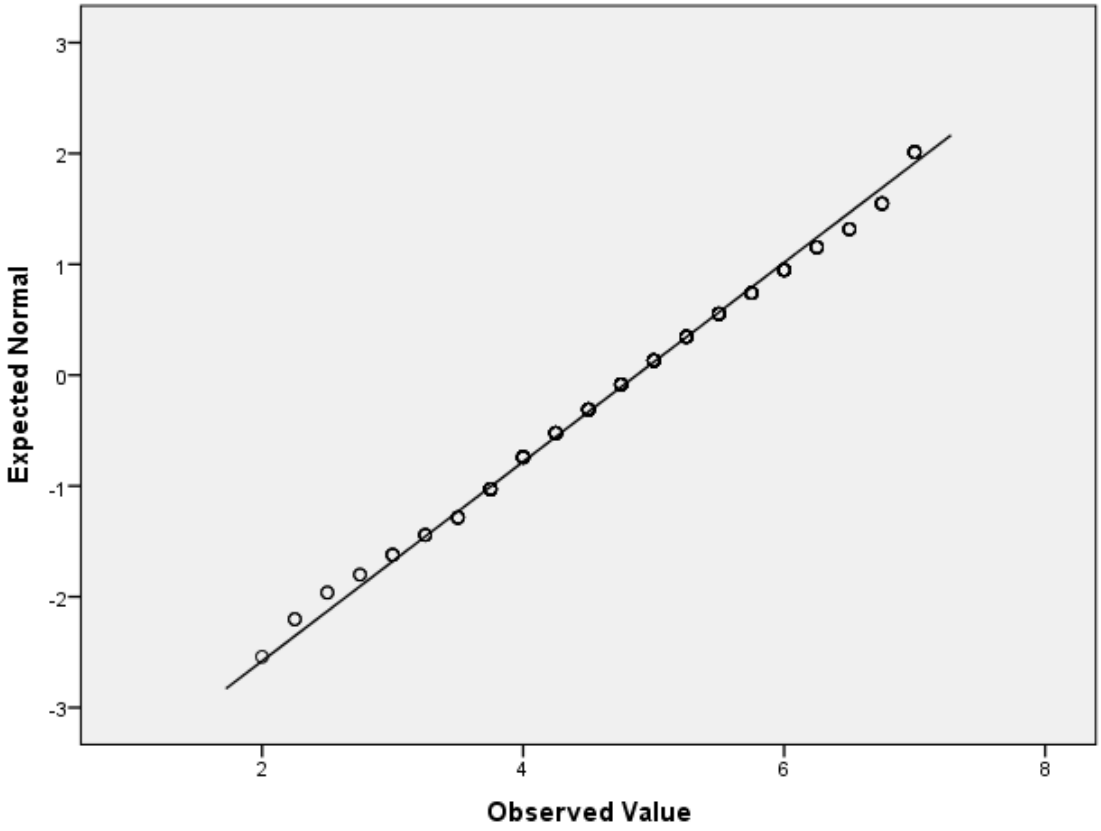
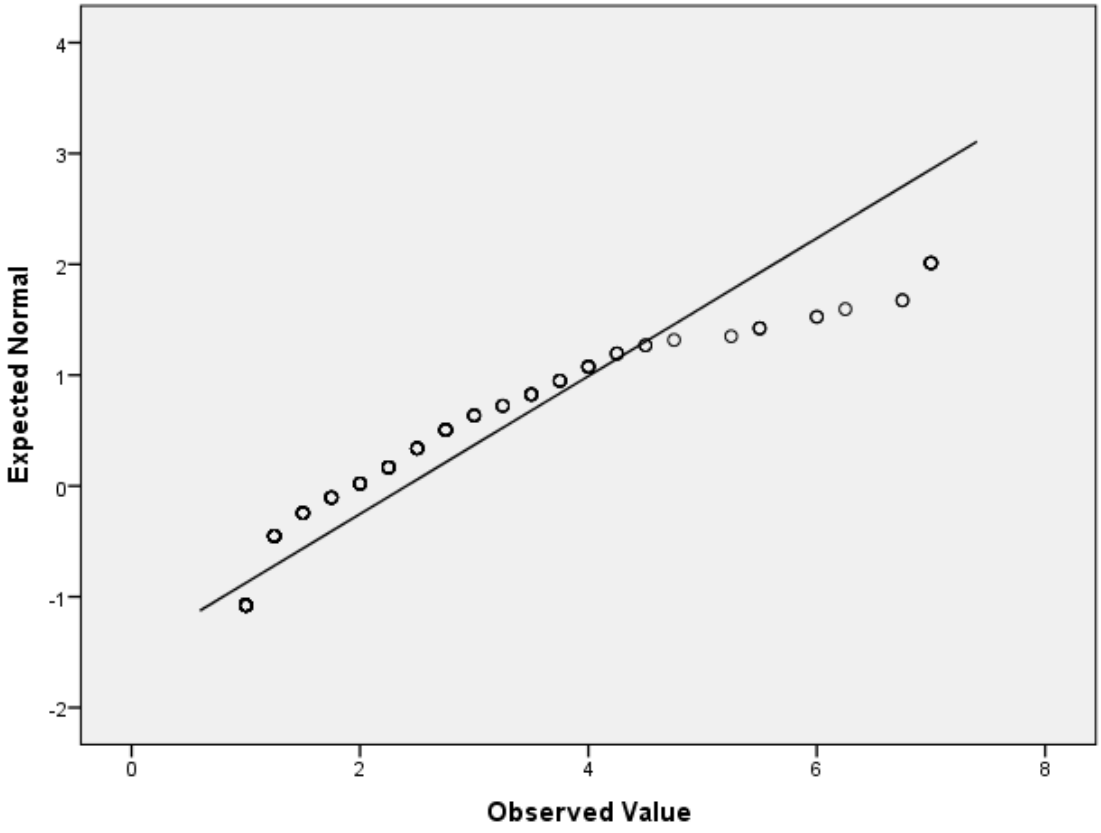


Figure 14: Normal Q-Q Plot of Amotivation



Another assumption that needed to be met was about the homogeneity of variance. Levene's test was computed to test the variance homogeneity, and it was discovered that the variances of all five personality traits and motivation drives for different genders were equal ($p>.05$). In addition, visual inspection of the plots of standardized residuals supported the results of Levene's test.

Moreover, as the study included correlation analyses among variables, linearity between dependent variable; that is, GPA and independent variables, which are personality traits and academic motivation drives, was checked and scatter plots confirmed that linearity assumption was not violated. Finally, multicollinearity was also a concern for the accurate interpretation of the results due to the fact that the last part of the study benefitted from regression analyses. Therefore, variance inflation factor (VIF) and tolerance statistics values were analyzed through SPSS, and as VIF values for every personality type and academic motivation drive were close to 1 and tolerance statistics values were above .20, it was safe to claim that data did not possess any multicollinearity problems (Field, 2013).

As the data met the major requirements of certain assumptions such as normality, linearity, multicollinearity and homogeneity of variance, parametric tests, specifically, correlation and regression tests, could be run. The first part of this chapter aimed at providing results of descriptive analysis. Later, results of correlation analysis between achievement and personality traits were discussed in an attempt to find an answer to the second research question. Moreover, correlation results of achievement and academic motivation drives were mentioned as the third research question aimed at finding out these relationships. In addition, the results of the latest correlation analysis which is on the relationships between personality traits and academic motivation were discussed as an answer to the fourth research question. Finally, regression tests were computed in order to find out the predictive effects of personality traits and academic motivation on academic achievement. As answers to the fifth and sixth research questions, results of the regression tests were presented at the end of this chapter.

4.2. Descriptive Statistics of the Study

Research Question 1: What are the participants' perceived levels of personality traits and academic motivation?

The means and standard deviations of the variables used in the current study were provided in the Table 4.1 below to give general understanding of the participant profile. The variables were Big Five Personality Traits; that is, openness, conscientiousness, extraversion, agreeableness and neuroticism. Furthermore, dimensions of academic motivation, which are intrinsic motivation to know, intrinsic motivation to experience stimulation, intrinsic motivation to accomplish, identified regulation, external regulation, introjected regulation and amotivation, were also presented.

Table 4.1. Means and Standard Deviations for Big Five Personality Traits by Gender

	Gender					
	Female		*Male*		*Total*	
	Mean	*Std. Deviation*	*Mean*	*Std. Deviation*	*Mean*	*Std. Deviation*
Conscientiousness	3.45	.52	3.28	.59	3.41	.54
Openness	3.69	.52	3.69	.59	3.69	.53
Agreeableness	3.97	.48	3.84	.54	3.95	.50
Extraversion	3.11	.62	3.22	.56	3.13	.61
Neuroticism	3.34	.69	2.94	.68	3.25	.71

Table 4.2. Means and Standard Deviations for Academic Motivation by Gender

	Gender					
	Female		*Male*		*Total*	
	Mean	*Std. Deviation*	*Mean*	*Std. Deviation*	*Mean*	*Std. Deviation*
ExternalRegulation	5.61	1.05	5.04	1.36	5.50	1.14
IdentifiedRegulation	5.83	1.03	5.25	1.17	5.71	1.09
IntrojectedRegulation	4.95	1.44	4.46	1.41	4.85	1.45
IMToKnow	5.66	1.06	5.28	1.19	5.58	1.10
IMToExperienceStimulation	4.89	1.19	4.79	1.07	4.87	1.17
IMToAccomplish	4.91	1.10	4.90	1.05	4.91	1.10
Amotivation	2.28	1.56	2.69	1.53	2.37	1.57

As seen in Table 4.1 and 4.2 above, female participants' mean scores for Big Five personality traits ranged from 3.11 to 3.97. The highest mean for female participants in terms of personality traits was Agreeableness (M = 3.97; SD = .48). The lowest mean for the same group with regard to personality traits, on the other hand, was Extraversion (M = 3.11; SD = .62). The highest mean score for male participants in terms of personality traits echoed the one for the female participants. However, the mean score of male participants for Agreeableness (M = 3.83; SD = .53) was a little lower than the female counterparts. The lowest mean score in relation to personality

traits for male participants was that of neuroticism (M = 2.94; SD = .67). As for academic motivation drives, the strongest drive for female participants was Identified Regulation (M = 5.83; SD = 1.03). Different from female participants, the highest mean score for male participants was that of Intrinsic Motivation to Know (M = 5.28; SD = 1.19) slightly higher than the mean score of Identified Regulation. In terms of the lowest mean score, amotivation stood out both female and male participants. However, amotivation mean score for female participants (M = 2.28; SD = 1.56) was lower than that of male counterparts (M = 2.68; SD = 1.53).

In terms of academic motivation drives, the lowest and highest scores for female participants ranged from 2.28 to 5.83. The highest mean score for this group belonged to Identified Regulation (M = 5.83; SD = 1.03). The lowest score, on the other hand, was for amotivation (M = 2.28; SD = 1.56). The lowest score of male participants (M = 2.68; SD = 1.53) was for the same motivation drive, as well. However, the lowest score of amotivation by female participants was lower than that of male participants. With regard to highest score of male participants, Intrinsic Motivation to Know outnumbered the other motivation drives for male participants (M = 5.28; SD = 1.19).

According to the mean scores provided in Table 4.1 and 4.2 above, there are certain similarities and differences between male participants and female participants. While the highest mean scores in terms of Big Five personality traits was the same for both groups, the value for that personality trait was higher for female participants that male counterparts. Similarly, with regard to lowest mean score of academic motivation drives, amotivation stood out in both groups. However, mean score for amotivation by female participants was lower than that of male participants.

4.3. Correlation Matrix of Academic Achievement and Big Five Personality Traits

Research Question 2: Is there a significant relationship between personality traits and academic achievement?

The Pearson-product moment correlation test was run in order to reveal the relationships between academic achievement, which is represented by participants' GPA, and Big Five personality traits. The intercorrelation of the Big Five personality traits and GPA were given in Table 4.3

Table 4.3. Correlation Matrix of the Big Five Personality Traits and GPA

		1	*2*	*3*	*4*	*5*	*6*
1 GPA	***Pearson Correlation***	1					
2 Conscientiousness	***Pearson Correlation***	.315**	1				
	Sig. (2-tailed)	.000					
3 Openness	***Pearson Correlation***	.331**	.323**	1			
	Sig. (2-tailed)	.000	.000				
4 Agreeableness	***Pearson Correlation***	.214**	.326**	.437**	1		
	Sig. (2-tailed)	.002	.000	.000			
5 Extraversion	***Pearson Correlation***	.132	.170*	.390**	.375**	1	
	Sig. (2-tailed)	.065	.019	.000	.000		
6 Neuroticism	***Pearson Correlation***	.044	-.145*	-.119	-.009	-.338**	1
	Sig. (2-tailed)	.539	.047	.104	.897	.000	

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

As seen in the table, several positive correlations existed between GPA and Big Five personality traits; that is; openness, conscientiousness, extraversion, agreeableness, and neuroticism; coefficients ranging from .214 to .331 ($p<.01$). Certain other significant correlations also existed among personality traits. However, as the current study focused on the relationships between achievement and personality traits, the correlations among different personality traits were not discussed.

The results Pearson-product moment correlation test indicated that conscientiousness as one of the Big Five personality traits was positively and significantly correlated with academic achievement of the participants, $r=.315$, $p < .01$. In addition, there was a significant and positive correlation between openness and academic achievement of the participants according to the result of the correlation analysis, $r=.33$, $p< .01$. Finally, there was a statistically significant and positive correlation between academic achievement of the participants and their agreeableness, $r=.215$, $p< .01$. However, no statistically significant relationships were found between academic achievement and extraversion, $r=.132$, $p= .65$. Contrary to common belief in literature, no negative correlations existed between neuroticism and academic achievement, $r=.044$, $p= .53$.

4.4. Correlation Matrix of Academic Achievement and Academic Motivation

Research Question 3: Is there a significant relationship between academic motivation and academic achievement?

In this part of the chapter, the Pearson-product moment correlation test results were presented. This time, correlations between academic achievement and academic motivation drives determined with the help of Academic Motivation Scale (Vallerand, 1992), according to which seven different academic motivation drives existed, were revealed. Based on the scale and the theory, academic motivation drives were called External Regulation, Identified Regulation, Introjected Regulation, Intrinsic Motivation to Know, Intrinsic Motivation to Experience Stimulation, Intrinsic Motivation to Accomplish and finally amotivation. The correlation results were presented in Table 4.4 below.

Table 4.4. Correlation Matrix of the Academic Motivation Drives and GPA

		1	*2*	*3*	*4*	*5*	*6*	*7*	*8*
1 GPA	***Pearson Correlation***	1							
	Sig. (2-tailed)								
2 ExternalRegulation	***Pearson Correlation***	.208**	1						
	Sig. (2-tailed)	.003							
3 IdentifiedRegulation	***Pearson Correlation***	.171*	.680**	1					
	Sig. (2-tailed)	.016	.000						
4 IntrojectedRegulation	***Pearson Correlation***	.157*	.523**	.565**	1				
	Sig. (2-tailed)	.027	.000	.000					
5 IMToKnow	***Pearson Correlation***	.232**	.260**	.560**	.500**	1			
	Sig. (2-tailed)	.001	.000	.000	.000				
6 IMToExperienceStimulation	***Pearson Correlation***	.089	.140*	.316**	.429**	.706**	1		
	Sig. (2-tailed)	.210	.049	.000	.000	.000			
7 IMToAccomplish	***Pearson Correlation***	.153*	.226**	.411**	.576**	.762**	.706**	1	
	Sig. (2-tailed)	.031	.001	.000	.000	.000	.000		
8 Amotivation	***Pearson Correlation***	-.226**	-.100	-.350**	-.090	-.436**	-.170*	-.312**	1
	Sig. (2-tailed)	.001	.159	.000	.205	.000	.016	.000	

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

The results indicated several statistically significant correlations between academic motivation drives and GPA of the participants. According to the correlation analysis results presented above in Table 4.4, both negative and positive correlations were discovered with correlation coefficient ranging from .153 to .232. As in the correlation studies between GPA and Big Five personality traits, the correlations among academic motivation drives were not included in the scope of the present study.

First, external regulation, which is one of the extrinsic motivation subscales, was significantly and positively correlated with GPA of the participants, $r = .208$, $p < .01$. Another strong and positive correlation was observed between GPA and Intrinsic Motivation to Know, $r = .232$, $p < .01$. This correlation stood out as the strongest correlation between GPA and academic motivation. Moreover, in line with the literature, amotivation negatively correlated with GPA, $r = -.226$, $p < .01$.

There were also several other statistically significant correlations at 0.05 level. To illustrate, a positive correlation at that level between Identified Regulation and GPA existed, $r = .171$, $p < .05$. Likewise, Introjected Regulation positively correlated with academic achievement of the participants, $r = .157$, $p < .05$. Another positive correlation between GPA and intrinsic motivation was that of Intrinsic Motivation to Accomplish. The correlation between intrinsic motivation to accomplish and GPA was statistically significant at .05 level, $r = .153$, $p < .05$.

Interestingly, there was no correlation between Intrinsic Motivation to Experience Stimulation and academic achievement, $r = .089$, $p = .210$. This was the only academic motivation drive which did not either positively or negatively correlate with academic achievement.

4.5. Correlation Matrix of Personality Traits and Academic Motivation

Research Question 4: Is there a significant relationship between academic motivation and personality traits?

In this part of the study, correlations among Big Five Personality traits and academic motivation drives were explained. The links among these traits and drives were presented in Table 4.5 below.

Table 4.5. Correlation Matrix of the Academic Motivation Drives and Big Five Personality Traits

		1	2	3	4	5	6	7	8	9	10	11	12
1 Conscientiousness	***Pearson Correlation***	1											
	Sig. (2-tailed)												
2 Openness	***Pearson Correlation***	.323**	1										
	Sig. (2-tailed)	.000											
3 Agreeableness	***Pearson Correlation***	.326**	.437**	1									
	Sig. (2-tailed)	.000	.000										
4 Extraversion	***Pearson Correlation***	.170*	.390**	.375**	1								
	Sig. (2-tailed)	.019	.000	.000									
5 Neuroticism	***Pearson Correlation***	-.145*	-.119	-.009	-.338**	1							
	Sig. (2-tailed)	.047	.104	.897	.000								
6 ExternalRegulation	***Pearson Correlation***	.097	-.046	.040	-.001	.187**	1						
	Sig. (2-tailed)	.180	.527	.571	.986	.009							
7 IdentifiedRegulation	***Pearson Correlation***	.259**	.126	.168*	.119	.173*	.680**	1					
	Sig. (2-tailed)	.000	.080	.018	.097	.015	.000						
8 IntrojectedRegulat.	***Pearson Correlation***	.219**	.105	.119	.154*	.191**	.523**	.565**	1				
	Sig. (2-tailed)	.002	.146	.096	.031	.007	.000	.000					
9 IMToKnow	***Pearson Correlation***	.323**	.380**	.342**	.307**	-033	.260**	.560**	.500**	1			
	Sig. (2-tailed)	.000	.000	.000	.000	643	.000	.000	.000				
10 IMToStimulate	***Pearson Correlation***	.218**	.300**	.204**	.231**	-.074	.140*	.316**	.429**	.706**	1		
	Sig. (2-tailed)	.002	.000	.004	.001	.306	.049	.000	.000	.000			
11 IMToAccomplish	***Pearson Correlation***	.290**	.327**	.284**	.309**	-.016	.226**	.411**	.576**	.762**	.706**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.827	.001	.000	.000	.000	.000		
12 Amotivation	***Pearson Correlation***	-.347**	-.239**	-.363**	-.319**	.201**	-.100	-.350**	-.090	-.436**	-.170*	-.312**	1
	Sig. (2-tailed)	.000	.001	.000	.000	.005	.159	.000	.205	.000	.016	.000	

**. Correlation is significant at the 0.01 level (2-tailed). / *. Correlation is significant at the 0.05 level (2-tailed).

The results of the correlation analysis indicated that Big Five personality traits and academic motivation drives were closely related. Therefore, the analysis revealed numerous correlations between these concepts at both .05 and .01 levels.

To start with, conscientiousness significantly correlated with all of the motivational drives but for external regulation. The strongest correlation was that of amotivation, $r= -.347$, $p < .01$, being the only negative correlation that conscientiousness formed. The correlation with intrinsic motivation to know followed the one with amotivation, $r = .323$, $p < .01$. The third strongest correlation of conscientiousness was with another intrinsic motivation drive, which is intrinsic motivation to accomplish, $r = .290$, $p < .01$. Then, two of external motivation drives, that is; identified regulation and introjected regulation correlated significantly, $r = .259$ and $r = .219$ respectively at $p< .01$ level. Finally, there was a statistically significant correlation between intrinsic motivation to stimulate and conscientiousness, as well, $r = .218$, $p < .01$. As the results revealed, external regulation failed to correlate with conscientiousness.

The second Big Five personality trait was openness. The results of the correlation analysis showed that openness correlated significantly with not only all intrinsic motivation types but also amotivation. However, no relationships were found out between openness and extrinsic motivation types. Intrinsic motivation to know held the strongest correlation with openness, $r = .380$, $p < .01$. Intrinsic motivation to accomplish followed intrinsic motivation to know, $r = .327$, $p < .01$. The last correlation between openness and intrinsic motivation drives was that of intrinsic motivation to stimulate, $r = .300$, $p < .01$. As previously stated, amotivation had negative but strong links with openness, $r = .239$, $p < .01$.

Agreeableness, like the previous personality traits, held several significant correlations with various academic motivation drives. It correlated significantly with all intrinsic motivation drives at .01 level. The strongest correlation with regard to agreeableness, however, was that of amotivation, $r = -.363$, $p < .01$. Intrinsic motivation to know, intrinsic motivation to accomplish and intrinsic motivation to stimulate followed the correlation with amotivation, $r = .342$, $r = .284$, and $r = .204$ at $p < .01$ level, respectively. Finally, the only correlation between agreeableness and extrinsic motivation types was that of identified regulation. However, these two concepts held a less strong relationship, $r = .168$, $p < .05$.

Extraversion, quite similar to agreeableness, had a very significant but negative relationship with amotivation, $r = .319$, $p < .01$. Following this, Intrinsic motivation to accomplish correlated significantly with extraversion $r = .309$, $p < .01$. Fairly close to the correlation, intrinsic motivation to know formed statistically significant relationships, $r = .307$, $p < .01$. The last relationship among extraversion and intrinsic motivation drives was that of intrinsic motivation to stimulate, $r = .231$, $p < .01$. Introjected regulation stood out as being the only extrinsic motivation drive correlating significantly with extraversion, $r = .154$, $p < .05$.

Finally, neuroticism seemed to correlate with all extrinsic motivation drives at different levels. Introjected regulation possessed a strong link with neuroticism, $r = .191$, $p < .01$. Subsequent to introjected regulation, external regulation correlated with neuroticism, $r = .187$, $p < .01$. At a different level, identified regulation and neuroticism seemed to be correlated, $r = .173$, $p < .05$. The strongest correlation of neuroticism, however, was that of amotivation, $r = .201$, $p < .01$. In line with the expectations, neuroticism failed to correlate with any of the intrinsic motivation drives.

4.6. Results of Multiple Regression Analyses

In the present study, two multiple regression analyses were conducted to predict the possible effects of independent variables (i.e. Big Five personality traits and Academic Motivation level) on the dependent variable (i.e. GPA).

As stated at the very beginning of this chapter, major assumptions of multiple regression were checked out before conducting the analyses. Outliers were identified through frequency distributions, visual inspection of Q-Q and P-P plots. (Tabachnick & Fidell, 2001). In addition, Mahalonobis distances were checked out and no cases that violate major assumptions were observed. Moreover, it was also guaranteed that the data were normally distributed and therefore posed no problems for normality assumption. Similarly, scatter plots of the data demonstrated that linearity assumption was also met. Finally, multicollinearity was checked out and no multicollinearity cases were observed as there were no bivariate correlations of .70 or more between GPA and independent variables (Tabachnick & Fidell, 2001). VIF values of the data that did not deviate much from 1 and tolerance values that were higher than .20 supported that multicollinearity was not a concern. VIF values of

personality traits perfectly indicated that multicollinearity was not a problem. VIF values of academic motivation, on the other hand, seemed to be higher than those of personality traits. However, even with academic motivation VIF values, which are below 4, data was considered to be between tolerable ranges according to literature (Rogerson, 2001; Field, 2013). Collinearity tables were presented in Table 4.4.1 and Table 4.4.2.

Table 4.6.1. Collinearity Results for Big Five Personality Traits

Model		Collinearity Statistics	
		Tolerance	VIF
1	Conscientiousness	.827	1.209
	Openness	.718	1.392
	Agreeableness	.719	1.391
	Extraversion	.704	1.420
	Neuroticism	.844	1.185

Dependent Variable: GPA

Table 4.6.2. Collinearity Results for Academic Motivation Drives

Model		Collinearity Statistics	
		Tolerance	VIF
1	ExternalRegulation	.473	2.115
	IdentifiedRegulation	.351	2.848
	IntrojectedRegulation	.473	2.115
	IMToKnow	.265	3.777
	IMToExperienceStimulation	.408	2.450
	IMToAccomplish	.310	3.222
	Amotivation	.711	1.406

a. Dependent Variable: GPA

Research Question 5: What personality traits can predict academic achievement of the participants?

The main aim of this analysis was to observe the predictive effects of the personality traits on academic achievement of the participants. Thus, Big Five personality traits were entered to see the effects of Big Five personality traits on GPA. Table 4.5 was presented below to show the results of the multiple regression analysis.

Table 4.7. Multiple Regression Analysis Results

(Big Five Personality Traits as Independent Variable)

	Model	*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*Sig.*
		B	***Std. Error***	***Beta***		
1	***(Constant)***	1.987	.248		8.010	.000
	Conscientiousness	.128	.042	.230	3.046**	.003
	Openness	.162	.046	.285	3.509**	.001
	Agreeableness	-.005	.053	-.007	-.089	.929
	Extraversion	.002	.041	.005	.060	.952
	Neuroticism	.049	.032	.113	1.514	.132

Multiple R = .42 R^2 = .17 Adjusted R^2 = .15

**p < .01

As it can be seen from Table 4.7. above, after all variables were entered into the equation, Multiple R appeared to be .42 (p < .01). By checking Beta values, it was found out than Conscientiousness and Openness were able to predict GPA grades of the participants positively and significantly (β = .23 and β = .28 respectively, p < .01). In addition, the predictive power of Openness was stronger than that of Conscientiousness. The results demonstrated that other three personality traits failed to predict academic achievement of the participants (p > .05). Thus, the first multiple regression analysis results indicated that personality traits, specifically Conscientiousness and Openness were able to explain 17 % of GPA grade of the participants.

Research Question 6: What motivational drives can predict academic achievement of the participants?

The second multiple regression analysis was run to see the predictive effects of the academic motivation drives on the participants' GPA. Table 4.8. was provided below to present the results.

Table 4.8. Multiple Regression Analysis Results

(Academic Motivation as Independent Variable)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.964	.160		18.526	.000
	ExternalRegulation	.064	.025	.254	2.541*	.012
	IdentifiedRegulation	-.054	.031	-.204	-1.761	.080
	IntrojectedRegulation	.004	.020	.018	.177	.860
	IMToKnow	.063	.035	.238	1.780	.077
	IMToExperienceStimulation	-.022	.026	-.088	-.822	.412
	IMToAccomplish	-.003	.032	-.010	-.082	.935
	Amotivation	-.034	.015	-.185	-2.273*	.024

Multiple R = .32 R^2 = .10 Adjusted R^2 = .07

p < .05

As it can be seen from the table, after all motivation drives were entered in the model, only Amotivation and External Regulation could have a significant predictive power on GPA (β = -.19 and β = .25 respectively; p < .05). While external regulation had positive predictive power, amotivation predicted GPA in a negative way. As a result, academic motivation drives were able to predict 10 % of the GPA grades of the participants. In other words, only 10 % of the academic motivation could be attributed to academic motivation drives.

5. DISCUSSION

5.1. Introduction

In the present chapter, discussion with regard to the results obtained from several statistical analyses is presented. In the first part of this chapter, results regarding Big Five personality traits and academic achievement are discussed. The second part of the chapter deals with the links between academic motivation drives and academic achievement. Finally, the relationships among Big Five personality traits and academic motivation drives are discussed.

5.2. Discussion

The present study was mainly on various possible relationships among Big Five Personality Traits, Academic Motivation drives and academic achievement. The current study aimed at answering these following research questions.

1. What are the participants' perceived levels of personality traits and academic motivation?

2. Is there a significant relationship between personality traits and academic achievement?

3. Is there a significant relationship between academic motivation and academic achievement?

4. Is there a significant relationship between academic motivation and personality traits?

5. What personality traits can predict academic achievement of the participants?

6. What motivational drives can predict academic achievement of the participants?

In an attempt to come up with answers to the research questions, two reliable and valid scales, which are called IPIP Five Factor Markers by Goldberg (1992) and Academic Motivation Scale by Vallerand (1992), were utilized. Later, data from 200 pre-service English language teachers were analyzed with the help of IBM SPSS Version 20.0. In order to shed light to the answers of the research questions, several Pearson-product moment correlation tests and multiple regression tests were run. While there were plenty of independent variables from both Big Five Personality Traits Model and Academic Motivation drives, the only dependent variable in the

study was academic achievement, which was determined by the GPA of the participants.

In the following parts of the chapter, the results regarding the research questions are discussed. First, the results of the descriptive statistics are presented. Later, the results of the first correlation analysis which tries to find out whether there is a significant relationship between Big Five personality traits and academic achievement and the results of the first multiple regression analysis aiming at finding out to what extend Big Five personality traits can predict academic achievement are discussed in the light of previous studies. Then, discussion of the second correlation study dealing with the possible relationships between academic motivation and second multiple regression analysis which determines the extent that academic motivation predicts academic achievement is provided. Finally, results of the last correlation study on the links between personality and academic motivation are presented.

5.2.1. Discussion Regarding Descriptive Statistics of the Study

Descriptive tests were run in order to get a general view of the participant profile of the study. In this part of the study, mean scores of all dependent variable factors were analyzed by gender.

Results regarding the Big Five personality traits showed that Agreeableness was the trait that had the highest mean scores among both female and male participants. Therefore, it is clear that participants of the study were high in Agreeableness. This could be attributed to the society or community participants lived. Although agreeableness could have negative connotations in different cultures, in Turkey, due to traditions and social norms, Agreeableness is perceived as a positive trait. Internalizing such norms, participants might be leading a life in which Agreeableness was promoted. In terms of the lowest mean score of Big Five personality traits, Extraversion appeared to have the lowest mean value for female participants, which could again be associated with the social roles that were enforced on individuals. For male participants, on the other hand, it was Neuroticism.

With regard to academic motivation, the highest mean score for female participants was that of Identified Regulation. Depending on the result, we might conclude that female participants of the study valued extrinsic benefits more than intrinsic ones.

For male participants, IM to Know held the highest mean score. Amotivation, on the other hand, stood out as the academic motivation drive with the lowest mean scores for both female and male paricipants. However, it is worth mentioning that further tests were needed to draw accurate conclusions about the differences between male and female participants.

5.2.2. Discussion Regarding Big Five Personality Traits and Academic Achievement

The second part of the study was about the possible relationships between personality traits and academic achievement and also predictive effects of personality traits on academic achievement. In the light of previous studies, the present study aimed at finding out the potential links between personality traits and academic achievement. Results of the current study indicated that personality and academic achievement were closely and significantly correlated. Specifically, Openness, Agreeableness and Conscientiousness were the personality traits which correlated significantly with academic achievement of the participants. In addition, personality traits all together were able to predict 17 % of the variance in GPA grades. Openness and Agreeableness were the two personality traits which led to statistically significant changes in GPA of the participants.

The results of the study were in line with the literature. The previous studies also alleged that personality traits were always influential factors in foreign language teaching (Dörnyei, 2005). It affected not only behaviors of the individuals but also attitudes and emotions towards certain issues (Hogan, Hogan & Roberts, 1996). Therefore, lots of researchers conducted studies on the concept of personality and related it to language learning (e.g. Chamorro-Premuzic and Furnham, 2004; Rinderman and Neubauer, 2001, O'Connor and Paunonen, 2007). Chamorro-Premuzic and Furnham (2003a), for instance, claimed that personality and academic performance were positively and significantly associated. Similarly, it was also asserted that personality could predict academic achievement significantly (Farsides and Woodfield, 2003). Hakimi et al. (2011) also found out that personality traits were able to predict 48 % of academic achievement, which showed the power of personality traits on academic achievement.

The following parts of the chapter were devoted to the presentation of the results separately in the light of previous studies.

5.2.2.1. Openness and Academic Achievement

Openness to Experience was associated with being curious about new ideas (Komarraju and Karau, 2005). As open learners were eager to have various educational opportunities (Lounsbury, et al., 2005), they were expected to be higher achievers compared to their non-open peers (McCrea and Costa, 1997). In line with previous studies, the results of the current study suggested that a statistically significant relationship between Openness to Experience and academic achievement existed. Openness to Experience stood out among other Big Five personality traits as having the highest correlation value. The result of the correlation test indicated that learners with higher intellectual abilities and broader horizons tended to achieve more than their counterparts. This result indicated that learners with curiosity and desire to learn new things were more likely to achieve more. This could also be associated with self-motivation, a concept that was believed to facilitate learning.

The result of the correlation study was actually in line with many other studies from the literature. For instance, the study by Barrick and Mount (1991) revealed that open learners held favoring attitudes towards stimulating tasks. They preferred though-provoking assignments to the mechanic ones. Likewise, Bidjerano and Dai (2007) asserted that open learners benefitted from effective learning strategies such as time management and effort regulation. Many other scholars (e.g. Lounburry, 2003; Ackerman & Heggenstad, 1997; Busato et al., 2000) also suggested that use of such techniques helped open learners to succeed more.

Multiple regression analysis also revealed that Openness to Experience predicted GPA grades of the learners significantly. Actually, Openness to Experience appeared to be the strongest predictor of GPA among all Big Five personality traits. The fact that the correlation between GPA and Openness was statistically significant and that Openness was able to predict GPA as the strongest predictor proved that Openness is a desirable personality trait while learning. The results of both correlation and multiple regression analyses echoed several other studies from the literature. To illustrate; Farsides and Woodfield (2003) also stated that Openness had a predictive power on the final grades of the participants. Similarly, another study by Komarraju and Karau (2005) indicated that open learners tended to attend classes more regularly and these learners were more achievement-oriented

compared to non-open learners. The results of Öz's study (2015) supported the previous studies by claiming that there was a link between Openness and powerful goal orientations, which fostered learning.

5.2.2.2. Conscientiousness and Academic Achievement

Conscientiousness was associated with traits such as responsible, hardworking, determined, and organized (McCrea and John, 1992; Hogan and Ones, 1997; Busato et al., 2000; Roberts et al., 2005). Therefore, conscientiousness has always been regarded as one of the strongest predictors of academic achievement (Cheng and Ickles, 2009; Diseth, 2003, Feyter et al., 2012).

Aligned with the previous research and assumptions, the results of the study showed that there was a statistically significant correlation between conscientiousness and academic achievement. As seen in Table 4.2. in the previous chapter, a strong correlation existed between Conscientiousness and GPA grades of the participants. However, it is worth mentioning that the correlation value was a little lower than the one between academic achievement and Openness. Likewise, multiple regression analysis also indicated that β value of Conscientiousness was slightly lower than that of Openness. This result revealed that Conscientiousness was the second strongest predictor of the academic achievement. That is, both correlation and multiple regression analyses confirmed the existence of the positive effect of Conscientiousness on academic achievement.

As stated earlier, the results on Conscientiousness were in harmony with many studies from the literature. Chamorro-Premuzic and Furnham (2003), for instance, claimed that Conscientiousness was able to predict exam performance of the participants. Similarly, in his study on the effects of personality traits on SAT scores, Conard (2006) found out that Conscientiousness was associated with academic performance and academic motivation. An earlier study (Busato et al. 2000) also revealed positive and significant relationships between academic achievement and Conscientiousness. Another study by Hakimi et al. (2011) discovered that Conscientiousness was able to predict the variance in academic achievement. When the results of the earlier studies and the nature of Conscientiousness as a personality trait were taken into account, it was quite rational to expect such results.

5.2.2.3. Agreeableness and Academic Achievement

Agreeableness refers to being caring and complying with the people and conditions. Therefore, agreeable learners were thought to be trustworthy and known to enjoy collaborative learning (De Raad and Shouwenburg, 1996). As agreeable learners fitted in with the rules and the norms, researchers found out positive links between Agreeableness and academic achievement (e.g. Kommarraju and Karau, 2005; Clark and Schroth, 2010).

The results of the present study also showed a positive relationship between Agreeableness and academic achievement. The correlation between academic achievement and Agreeableness was statistically significant. However, as Table 4.2. presented, the link was not as striking as it was in Conscientiousness and Openness.

The positive link between academic achievement and Agreeableness may partly be attributed to the education system in conservative communities like Turkey. Although there have been attempts to change the education system from teacher-oriented one to student-centered one, the current generation still holds traditional approaches in which “successful” and “hardworking” students are the ones who do exactly what the teachers say most of the time. Therefore, it is quite predictable that Agreeable learners tend to be higher achievers. In this view, the result appeared to support this notion. Parallel to the current results, earlier studies found out positive links between Agreeableness and academic achievement. Farsides and Woodfield (2003), for instance, asserted that Agreeableness and school grades were positively associated. Similarly, the results of Zhang’s study (2002) stated that agreeable learners focused on higher grades compared to non-agreeable peers. Claiming that agreeable learners made use of critical thinking skills more than others, Bidjerano and Dai (2007) alleged that GPA and Agreeableness were positively correlated.

Yet, as opposed to the results of the correlation analysis, multiple regression analysis indicated that Agreeableness failed to make statistically significant difference in the variance of GPA of the participants. Although the correlation between agreeableness and academic achievement was significant, agreeableness was not a statistically significant predictor of GPA. In line with this result, certain studies (e.g. Hakimi et al., 2011) claimed that despite the existence of the positive correlation, Agreeableness could not predict GPA or academic achievement of the

participants. When both results are taken into account, it can be inferred that Agreeableness is a personality trait that needs closer examination.

5.2.2.4. Extraversion and Academic Achievement

Extraversion could be associated with traits such as being energetic and having dynamic positions in the community (Furnham, 1992). Individuals with higher levels of Extraversion sought for excitement in life (Feyter et al., 2012) and they had strong desires to be leaders (Furnham, 1992). Although there was a consensus on the definition of the extraversion among scholars, the results of the previous studies were more complex. As extraverted individuals were outgoing and enthusiastic, this trait might both help them to achieve more (Poropat, 2009) and also distract them from learning tasks (Hakimi et al., 2011).

The results of the correlation analysis indicated that there were neither positive nor negative relationships between Extraversion and GPA of the participants. Similarly, multiple regression analysis did not find out any predictive effects of Extraversion on GPA. As Duff et al. (2004) stated, nature of the Extraversion led inconclusive results. That is, extraversion included some features such as being socially active, having desires to contact with other people, and these features were expected to help learning, especially peer learning. From this point of view, Extraversion was thought to foster learning. Certain studies (e.g. Chamorro and Furnham, 2003a, Hakimi et al., 2011) came up with results indicating positive relationships between academic achievement and Extraversion. However, there were more studies (e.g. Sampo and Paunomen, 2007; Furnham, Zhang and Chamorro, 2006; Hakimi, 2011; Oswald et al., 2004; Matthews, 1997; Rolfhus and Ackerman, 1996; Furnham and Monsen, 2009) claiming that Extraversion was negatively associated with academic achievement. This negative influence of Extraversion on academic achievement could be explained by some factors such as lack of enough concentration on and interest in school subjects, individuals' search for excitement or getting easily distracted by external factor.

Although more studies claimed the existence of a negative correlation between academic achievement and the Extraversion, the current study did not indicate such relationships. As Bidjerano and Dai (2007) concluded, Extraversion could help or inhibit learning. Interestingly, Dunsmore study (2005) also found out that while

Extraversion helped elementary students' learning, the effect of it turned out to be negative in higher education levels. Therefore, Extraversion is one of the traits that needs to be approached with care.

5.2.2.5. Neuroticism and Academic Achievement

Neuroticism has always been associated with negative emotions (Busato et al., 2000), inclination for stress (McCrea and John, 1992) and insecurity (Clark and Schroth, 2010). Thus, many studies (e.g. Komarraju and Karau, 2005; Laidra et al., 2007; Matthews and Zeidner, 2004, Hakimi et al., 2011) demonstrated negative correlations between academic achievement and Neuroticism due to the fact stress and negative emotions that such individuals experienced hindered learning (Duff et al., 2004).

Different from these results, correlation analysis results of the current study indicated no statistically significant relationships between academic achievement and Neuroticism. Likewise, Neuroticism did not have a negative predictive power on GPA grades of the participants in multiple regression analyses. Although these results were not in line with the studies cited earlier, many studies came up with interesting results with regard to academic achievement and Neuroticism. Komarraju et al. (2009), for instance, stated that the links between Neuroticism and academic achievement were more multifaceted than labeling Neuroticism as a purely negative trait. In that study, Komarraju et al. (2009) discovered certain positive correlations between Neuroticism and achievement. In line with their study, Bratko et al. (2006) argued that neurotic individuals might also achieve because they possessed certain level of anxiety which might, in fact, facilitate learning at various settings.

Like the results of the current study, various studies (Nguyen et al., 2005; Rosander, Backstrom and Stenberg, 2011) found out no relationships between academic achievement and Neuroticism. Even though Neuroticism has always be labelled as a trait hindering learning, such results, in a way, may help individuals to come up with the prohibitive effects of Neuroticism.

5.2.3. Discussion Regarding Academic Motivation and Academic Achievement

The third part of the study focused on academic motivation. Specifically, the study aimed at finding out whether there were significant relationships between academic motivation drives and academic achievement level of the participants. Furthermore, the study also tried to discover how much of academic achievement was predicted by academic motivation, namely, External Regulation, Identified Regulation, Introjected Regulation, Intrinsic Motivation To Know, Intrinsic Motivation to Accomplish, Intrinsic Motivation to Experience Stimulation and finally amotivation.

The results of the correlation analysis revealed statistically significant relationships among academic achievement and all academic motivation drives except Intrinsic Motivation to Experience Stimulation. The strongest correlation was observed between Intrinsic Motivation to Know and academic achievement while the least strong but still significant correlation was with Intrinsic Motivation to Accomplish. These results actually meant that the participants were more likely to be moved by external factors rather than intrinsic desires. This could be associated with the fact that most of the participants were in their senior year in which they tended to contemplate on their future and whether they would be able to get a good job or not. Besides, the education system of which these participants were a part led individuals to learn things to gain benefits which were separable from the learning task itself. Therefore, the focus was always on tangible value or punishment. As a result, these participants might have internalized the practices of the system after long years of exposure and they might have acted accordingly.

The results of the multiple regression analysis showed that academic motivation as a whole was able to predict 10 % of the academic achievement. External regulation and amotivation were the statistically significant predictors. While External Regulation predicted academic achievement positively, the predictive power of amotivation was negative.

5.2.3.1. Intrinsic Motivation and Academic Achievement

As Deci and Ryan (1991) stated in their study, intrinsic motivation referred to individuals' desires to acquire new information about the things around them. In intrinsic motivation, individuals focused on the positive experiences that they went through while learning new things or completing certain tasks (Deci and Ryan,

2000). Therefore, several studies in literature (Deci and Ryan, 2000; Noels et al., 2003) asserted that intrinsically motivated actions had better outcomes. In their study on the links between academic achievement and intrinsic motivation, Pintrick and De Groot (1990) discovered that academic achievement and intrinsic motivation were positively correlated. Similarly, Ehrman (1996) found out positive links between intrinsic motivation and language proficiencies of the participants.

In line with the earlier studies, the results of the correlation analysis showed positive correlations, as well. As the Table 4.3 presented, the strongest correlation of the model was observed between Intrinsic Motivation to Know and academic achievement of the participants. As Intrinsic Motivation to Know was associated with the enjoyment that the individuals felt while conducting the task (Clark and Schroth, 2010), it was quite understandable that a positive correlation existed between Intrinsic Motivation to know and academic achievement. A study by Öz (2015) also found out positive links between Intrinsic Motivation to Know and academic achievement of the participants. Unlike Öz's study (2015), however, the results of multiple regression analysis indicated no predictive power of Intrinsic Motivation to Know on academic achievement.

Second dimension of Intrinsic Motivation according to the Self Determination Theory was Intrinsic Motivation to Accomplish. Noels et al. (2003) stated that Intrinsic Motivation to Accomplish referred to the sense of achievements. That is, individuals who were driven by Intrinsic Motivation Accomplish conducted certain task in an attempt to see that they were able to do that task. Therefore, they tried to outperform the earlier performances of themselves (Hein, Müür and Koko, 2004). As these individuals were interested in improving themselves, positive links between Intrinsic Motivation to Accomplish and academic achievement were expected. In support of the expectations, the results of the correlation analysis confirmed that the link between Intrinsic Motivation to Accomplish and academic achievement was statistically significant. However, as in Intrinsic Motivation to Know, Intrinsic Motivation to Accomplish failed to create statistically significant differences in the variance of academic achievement.

Finally, third component of Intrinsic Motivation in Self Determination Theory was Intrinsic Motivation to Experience Stimulation. Hein et al. (2004) stated that individuals with Intrinsic Motivation to Experience Stimulation were moved by the

stimulation that they expected to gain while doing certain tasks or learning new tasks. However, although it was one of the components of intrinsic motivation, no statistically significant link was found out between Intrinsic Motivation to Experience Stimulation and academic achievement. Likewise, Intrinsic Motivation to Experience Stimulation could not predict academic achievement positively or negatively. This result could be related to the participant profile. The participants of the study were mostly in their senior year and these participants associated high GPA grades with better jobs and higher salaries. Thus, it might be inferred that the participants failed to build bridges between academic achievement and positive feelings associated with learning.

5.2.3.2. Extrinsic Motivation and Academic Achievement

Extrinsic motivation formed the second part of the Self Determination Theory. Deci and Ryan (2000) defined extrinsic motivation as external outcomes that were totally separable from the task itself. Therefore, no positive feelings or internal benefits were attached to the task.

As the focus is on the external factors rather than internal benefits or sensations, the results of studies on the effects of extrinsic motivation are confusing. While certain studies (i.e. Areepattamannil, Freeman and Klinger, 2011) asserted that extrinsic motivation held negative associations with academic achievement, there are a number of studies finding out positive links between academic achievement and extrinsic motivation (i.e. Öz, 2015). At that point, it is worth recalling that although external, there is a factor which leads individuals to act. Thus, positive links between extrinsic motivation and academic achievement are not big surprises.

The results of the correlation analysis indicated that all components of extrinsic motivation, that is, External Regulation, Identified Regulation and Introjected Regulation, significantly correlated with academic achievement of the participants. The strongest correlation was that of External Regulation and academic achievement while statistically significant but the least strong one was that of Introjected Regulation. Furthermore, surprisingly, External Regulation was the only motivation type that predicted GPA of the participants significantly and positively.

External regulation referred to the type of extrinsic motivation in which individuals were moved by rewards or fear of punishment (Öz, 2015). As the benefits and fears

were totally external, this type of extrinsic motivation is considered to be the least self-determined motivation time in the Self-Determination Theory (Deci et al., 1991). Although the links between academic achievement and External Regulation are considered to be negative most of the time, there are studies claiming the opposite. Öz (2015), for instance, found out that External Regulation was a strong predictor of GPA. Similarly, the results of the correlation analysis indicated that External Regulation and academic achievement of the participants were significantly correlated. The Pearson-product moment correlation values also revealed that this relationship was the strongest correlation among extrinsic motivation types. This may mean that external benefits were emphasized more for this specific participant group resulting in a shift from internal pleasure of learning to tangible and external benefits. Furthermore, as most of the participants were about to graduate, benefits such as possessing high GPA grades, getting a better job or earning more money were of higher priority than going through a pleasant learning process.

Secondly, Introjected Regulation referred to the state in which the existence of external rules and desires was accepted by the individuals (Deci et al., 1991). Ryan and Deci (2000) claimed that individuals moved by Introjected Regulation tried to avoid the sense of guilt. Therefore, in an attempt to escape from the sense of guilt and punishment, individuals may perform higher than their actual capabilities. In support of the view, results of the correlation analysis revealed a positive and statistically significant relationship between Introjected Regulation and academic achievement. Although statistically significant, the correlation was not a strong one. Besides, like intrinsic motivation drives, Introjected Regulation could not predict academic achievement according to the results of multiple regression.

Last extrinsic motivation type of the Self-Determination Theory was Identified Regulation. Unlike external regulation, individuals with Identified Regulation held the idea that the task was valuable and reasonable. Therefore, Identified Regulation was more self-determined compared to other two forms of extrinsic motivation (Ryan and Deci, 2000). Even though Identified Regulation was more autonomous than other extrinsic motivation types, no positive feelings were attached to the task or the process. In line with Ryan and Deci's statements (2000), Öz's study (2015) proposed that a positive and statistically significant correlation existed between Identified Regulation and GPA. According to the results of the SEM analyses of the

same study, the strongest correlation between extrinsic motivation types and achievement was that of Identified Regulation. The result of the current study supported such studies, as well. Although Identified Regulation failed to predict the academic achievement significantly, a correlation at a moderate level was observed between GPA grades and Identified Regulation. The positive association between Identified Regulation and academic achievement of the participants might be explained by the setting. As the participants were in a context in which they were informed on things they would benefit while in-service, they might be able to appreciate the rationale behind the learning tasks they were expected to accomplish. From this point of view, positive and significant correlation between Identified Regulation and academic achievement was plausible.

As the results indicated, extrinsic motivation seemed to be positively correlated with academic achievement of the participants. The strongest correlation among extrinsic motivation drives was that of External Regulation. External Regulation stood out not only because it held the strongest correlation but also it was the only motivation type that was able to predict academic achievement positively in the model.

This can be explained by the focus put on external factors such as sense of guilt, rewards and punishments. Participants, who were exposed to the current education system for at least fourteen years, were a part of that system causing them to internalize current practices. Therefore, in an attempt to not to digress from the system, individuals acted accordingly. As a result, rather than concentrating on their progress or pleasure that they might get while doing a task, individuals focused on tangible rewards or punishment. Consequently, the links between extrinsic motivation and academic achievement appeared to be more striking.

5.2.3.3. Amotivation and Academic Achievement

Amotivation formed the last part of the Self-Determination Theory. As the term suggested, it refered to the state in which individuals possessed no desire or intention to act or perform a task. Many scholars (e.g. Legault et al., 2006; Dörnyei, 2005) claimed that amotivation - in other words, lack of any type of motivation- was one of the biggest problems that language learners faced these days. Having their own reasons, learners could neither see the rationale behind learning nor enjoy it.

Such learners believed that external factors forced them to act (Janosz, 2000), and they objected to these factors by not acting. In addition, as Noels et al. (2003) stated such learners were unable to see why they needed to perform such actions. These ideas led them to be passive in and indifferent to learning and learning tasks.

There are numerous studies discussing the negative effects of amotivation on learning and academic achievement. To illustrate, Beaudoin (2006) claimed that learners with amotivation tended to have higher levels of absentee resulting in higher levels of drop-out. Besides, Noels et al. (1999, 2003) stated that amotivated learners associated both their teachers and the learning environment with negative feelings such as control and force. Finally, Baker (2004) also found out that amotivated learners experienced extensive stress while attending the classes. Therefore, these learners were more likely to be low-achievers or drop-outs.

In line with earlier studies cited above, the correlation analyses of the current study also discovered statistically significant relationships between amotivation and academic achievement. According to the results of the correlation analysis, there was a negative link between GPA grades of the participants and amotivation. Furthermore, when the results summarized in Table 4.3. were taken into consideration, this correlation seemed to be stronger than many other correlations in the model. In addition, multiple regression analysis results also indicated that amotivation was one of the two motivation types that could statistically predict GPA. However, as the correlation analyses and the earlier research showed, amotivation predicted GPA negatively.

To sum up, the results covering amotivation seemed to be in line with previous studies. It was found out that no matter how different participant profile was, lack of motivation resulted in negative links with academic achievement. In essence, these results revealed that existence of any motivational drives, regardless of being intrinsic or extrinsic, led better outcomes and higher academic achievement. Moreover, the results of the study demonstrated that the effects of extrinsic motivation had been underestimated and underrated. It was found out that in certain settings extrinsic motivation could motivate as much as and even more than intrinsic motivation. When all the results are considered, it is quite clear that motivation is multidimensional and needs a detail look in every different individual.

5.2.4. Discussion Regarding Big Five Personality Traits and Academic Motivation

This part of the study focuses on the links among Big Five personality traits and academic motivation drives. The correlation test intended to come up with certain relationships among these concepts. Results of the analysis revealed that personality traits and academic motivation drives were directly linked.

Previous studies underlined the links between motivation and personality. Hogan et al. (1996), for instance, claimed that personality affected one's attitudes and actions which can be associated with whether someone was motivated to pursue certain actions or not. In line with this view, Cheng and Ickles (2009) proposed that personality and motivation be hand in hand to get the best of the learning process.

The following parts of the chapter informs about the links that the study discovered in the light of previous studies.

5.2.4.1. Conscientiousness and Academic Motivation

Conscientiousness was known to facilitate learning (Komarraju et al., 2009). Therefore, like in many other studies (Bipp, Steinmayr & Spinath, 2008; Cheng & Ickes, 2009; Feyter, 2012; Öz, 2015), it was hypothesized that conscientiousness would be correlated with not only intrinsic motivation but also extrinsic motivation. The results of the study proved that the hypothesis was accurate.

According to the results of the study, conscientiousness correlated with almost all motivation drives. The only negative correlation with conscientiousness was that of amotivation. In addition to being the only negative correlation, it was also the strongest link that conscientiousness had. This result echoed the results of a study by Komarraju et al. (2009). These scholars also claimed that as conscientious learners were responsible and organized, it was less likely for them to be amotivated.

The results of the study with regard to the links between academic motivation drives and conscientiousness indicated that conscientiousness had significant relationships with all motivation drives except external regulation. The lack of correlation between external regulation and conscientiousness may be attributed to the fact that external regulation is the least self-determined way of motivation (Ryan and Deci, 2000), and it is the motivation drive in which individuals focus on tangible

and separable outcomes from the task. Therefore, conscientiousness learners were not motivated by external regulation. The study conducted by Clark and Schroth (2010) had quite similar results indicating that not only intrinsic motivation but also extrinsic motivation drives were linked to conscientiousness.

5.2.4.2. Openness and Academic Motivation

Openness is a trait that scholar associated with broad-mindedness (Hakimi et al., 2011), curiosity (Komarraju and Karau, 2005), and novelty (Busato et al., 2000). As open individuals preferred more challenging tasks (Barrick and Mount, 1991), these learners were expected to be intrinsically motivated.

The results of the correlation analysis revealed that there were significant links between openness and all intrinsic motivation types. The strongest of these links was the one with intrinsic motivation to know. When the definitions of openness are considered, it is apparent that the results are in line with expectations. In support of the results, Bipp et al. (2008) stated that open learners tended to be more goal-oriented compared to non-open peers.

Another significant correlation of openness was with amotivation. The results of the analysis showed that amotivation and openness were negatively and significantly related. As open learners hold a strong desire to have variety (Busato, 1999), the result is quite deductive.

5.2.4.3. Agreeableness and Academic Motivation

Agreeableness is one of the Big Five personality traits that is associated with compliance, collaboration, and cooperation (Kommarraju and Karau, 2005; Busato et al., 2000). Thus, it is believed that it would have direct links with academic motivation.

The findings of the correlation analysis revealed that agreeableness and intrinsic motivation were highly correlated. The link between intrinsic motivation to know and agreeableness stood out as the strongest one among all intrinsic motivation drives. The results of the study were rather in line with the literature. Kaufman et al. (2008), for instance, claimed that agreeable learners were inclined to be more intrinsically motivated. Similarly, Clark and Schroth (2010) stated that agreeableness catered for intrinsic motivation.

There was also a negative and significant relationship between agreeableness and amotivation. The result can be accredited to the nature of agreeableness as a trait. As agreeable learners try to comply with the environment, they tend to do what is expected from them. In line with the results, Clark and Schroth (2010) found out a negative correlation between agreeableness and amotivation. Likewise, Farsides and Woodfield (2003) stated that agreeable learners were more eager to attend classes at college compared to non-agreeable counterparts.

5.2.4.4. Extraversion and Academic Motivation

Extraversion is different from the aforementioned personality traits in that it is known to have contrasting results in various settings (Dunsmore, 2005). As it focuses on active roles, sociability and close ties with surroundings (Clark & Schroth, 2010; Furnham, 1992; Klinkozs, 2006), it might be either beneficial or harmful in terms of academic motivation.

The correlation analysis revealed that extraverted learners were less likely to be amotivated. In other words, there was a strong correlation between extraversion and amotivation. In line with the results, Kaufman et al. (2008) stated that extraverted learners were both intrinsically and extrinsically motivated.

Regarding other motivation types, the results of the study pointed out that extraverted learners took intrinsic motivation as the main drive. The strongest correlation after amotivation was that of intrinsic motivation to accomplish. The other two intrinsic motivation drives followed intrinsic motivation to accomplish. The only extrinsic motivation drive that correlated significantly with academic motivation was introjected regulation. Although the definitions and name of extraversion give rise to the thought that extraverted learners would be extrinsically motivated, this was not the case in this study. Besides, many researchers found out significant relationships between extraversion and intrinsic motivation. To illustrate, Kaufman et al. (2008) claimed that extraverted learners were both intrinsically and extrinsically motivated. Stating that extraverted learners cared for the productive learning process, Clark and Schroth (2010) expressed that it was quite natural for extraverted learners to be moved by intrinsic motivation drives.

5.2.4.5. Neuroticism and Academic Motivation

Neuroticism has always had negative connotations such as stress, emotional instability, anxiety and psychological abnormalities (McCrea & Costa, 1987; McCrea & John, 1992; Busato et al., 2000). Therefore, many scholars (e.g. Hakimi et al., 2011; Furnham & Monsen, 2009) thought that neuroticism as a personality trait hindered learning.

The findings of the correlation analysis demonstrated that neuroticism and amotivation were significantly correlated. When the nature of neuroticism was taken into account, the finding seemed to be quite plausible. Earlier studies had similar results. For instance, Komarraju and Karau (2005) found out that neurotic learners avoided doing the task, and these learners were low in engagement, which is also an indicator of amotivation. On the other hand, there is plenty of research pointing out the positive links between neuroticism and extrinsic motivation. Feyter et al. (2012) stated that as neurotic individuals were extrinsically motivated due to the fact that they wanted to avoid from the sense of guilt. Similarly, Philips et al. (2003) claimed that there was a significant correlation between neuroticism and introjected regulation.

The findings of this study were parallel to the studies in literature. According to the results of the study, neuroticism and extrinsic motivation were positively linked. Thus, it is obvious that neuroticism cannot be blamed for failure at all times.

6. CONCLUSION

6.1. Introduction

The following part of the chapter is devoted to the overall conclusion of the study. The chapter starts with a summary of the study. Later, concluding remarks are presented. The following part of the chapter is devoted to the implications of the study. Finally, limitations of the study along with suggestions for the future studies are discussed.

6.2. Summary of the Study

The current study aimed at finding out the possible relationships among Big Five personality traits, academic motivation and academic achievement. In the light of previous studies, several statistically significant relationships among these concepts were expected. Considering the small number of studies conducted with pre-service teachers of English, it was believed that there was a gap in literature. In an attempt to contribute the literature, data were collected from 202 pre-service teachers of English majoring at Hacettepe University. Although majority of the participants were in their second years at university, there were participants from third and fourth grade, as well. Two different questionnaires were administered. One of them was IPIP-Five-Factor Markers by Goldberg (1992). Second one was called Academic Motivation Scale (Vallerand, 1992). Both scales had a Likert Scale design. In addition, demographic information such as age, grade and GPA was obtained prior to the questionnaires. After the data collection was over, the data were analyzed with the help of a data analysis software, SPSS 20.0. Correlation and multiple regression analyses were used. The results of the study revealed several significant relationships among personality, academic motivation and academic achievement. To start with, statistically significant relationships between academic achievement and conscientiousness, openness and agreeableness were discovered. However, multiple regression analysis showed that only conscientiousness and openness were able to predict academic achievement significantly. With regard to academic motivation part of the study, it was found out that external regulation and intrinsic motivation to know correlated positively with academic achievement at 0.01 level. At the same level, there was a negative relationship between amotivation and academic achievement. Less strong links were also discovered. Identified

regulation, introjected regulation and intrinsic motivation to accomplish correlated positively with academic achievement at 0.05 level. Among all academic motivation drives, only external regulation could predict academic achievement of the participants. The results of the correlation analyses also showed that academic motivation drives and personality traits were directly linked. Finally, overall findings indicated that personality traits predicted 17 % of the academic achievement while academic motivation was able to predict 10 % of the academic achievement of the participants.

6.3. Pedagogical Implications

The current study discussed two major and essential concepts in learning, that is, personality and motivation. Both of the topics have been studied by many scholars and researchers in not only education but also several other fields such as psychology, sociology, linguistics etc. Therefore, any contribution to the literature would be of a significant help for researchers and scholars from various backgrounds. Therefore, the main aim of the study was to contribute to the vast literature covering personality, motivation and academic motivation. It is believed that the results of the current thesis will provide insights about pre-service English language teachers' conditions in Turkish context.

One of the implications of the study with regard to personality is that the study highlighted that individuals with certain personality traits may act differently in different contexts. To illustrate, although there are many studies claiming a negative relationships between neuroticism and academic achievement, neither such a relationship nor a predictive effect of neuroticism was observed in the current study. Therefore, both the educators and the learners need to remind themselves that no specific personality trait could fully be responsible for a big success or failure. At that point, it is educators' task to guide learners with care, and it is learners' responsibility to be active in the learning process.

Additionally, the results of the study cater for practical implications in terms of academic motivation, as well. Different from many other studies, the current study showed that extrinsic motivation could foster learning or academic achievement more than intrinsic motivation from time to time. The results of the study emphasized that the effects of extrinsic motivation had been underestimated. Thus, the current

study uncovered the positive links between extrinsic motivation and academic achievement. From this point of view, it should be kept in mind that extrinsic motivation may also lead better learning and higher achievement. Educators and learners may benefit from this result and enrich their teaching and learning processes.

Another implication with regard to academic motivation is the multidimensionality of academic motivation. As the Self-Determination Theory proposed, motivation is a miscellaneous concept in which various factors interfere with each other. The study highlighted that motivational factors that are highly expected to predict academic achievement (i.e. intrinsic motivation types) might have less power than expected due to the existence of several other unforeseen factors. Therefore, it is worth recalling that motivation is not a unitary concept.

To sum up, the current study has both theoretical and practical implications for not only researchers and educators but also for the learners. In essence, it highlights the hope that neither educators nor learners should lose with regard to learning. The results gained as a result of various statistical analyses may provide individuals with better insights.

6.4. Limitations

The biggest limitation for the current thesis was the number of participants. As the GPA of the participants were crucial for the results of the study, freshman students, which formed the biggest group in number, were not included in the study. Students in their second, third and fourth year made up of all the participants of the study. More participants from different universities could have been included in the study if the time constraints hadn’t been a problem.

In addition, to have more specific and accurate results, the study could have been conducted with the help of mixed methods. Although the current results provided researchers with clear statistical information, interviewing some of the participants could have enriched the results and might have led more interesting results.

Finally, due to practicality issues and time constraints, IPIP 50-Item Factor Markers was administered. The scale has another version in which there are 100 items. It might have been more powerful while determining the personality traits of the participants.

6.5. Suggestions For Further Research

Both personality and academic motivation are quite broad concepts that need a careful approach. In an attempt to find out possible links between these concepts and achievement, observing participants for a considerable time period may cause interesting results. Whether or not the personality changes while the proficiency level increases might be a topic for a future study.

Additionally, future studies may analyze the data by gender, as well. It would be interesting to discover whether gender has a predictive role in determining the effects of motivation and personality traits on academic achievement.

Finally, researchers may also study the effect of the number of years at university and whether it has an effect on participants' personality, academic motivation types and their effects on academic achievement.

6.6. Conclusion

Individual differences has attracted attention of many researchers for a long time. As every individual holds unique characteristics, personality has been one of the hot topics not only in the field of education but also in many other fields such as business administration, psychology or sociology. In the field of education, where how to motivate learners to learn was under the spotlight all the time, the links between personality, motivation and academic motivation were quite attractive. Therefore, many scholars and researchers conducted studies with various settings and various methods.

The current study also aimed at finding out such relationships in a unique environment with unique participants and as a result, contributing the existing literature. In such an attempt, the study revealed several interesting but promising results for not only educators but also learners. Hopefully, further studies on personality and academic motivation raise better awareness in learners and create better learning environments.

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APPENDICES

APPENDIX 1-ETHICS COMMISION APPROVAL DOCUMENT

T.C.
HACETTEPE ÜNİVERSİTESİ
Rektörlük

Sayı : 35853172/ 433-2308

24 Temmuz 2015

EĞİTİM BİLİMLERİ ENSTİTÜSÜ MÜDÜRLÜĞÜNE

İlgi: 10.07.2015 tarih ve 1338 sayılı yazınız.

Enstitünüz Yabancı Diller Eğitimi Anabilim Dalı İngiliz Dili Eğitimi Bilim Dalı Tezli Yüksek Lisans Programı öğrencilerinden **Şenay KIRKAĞAÇ**'ın **Yrd. Doç. Dr. Hüseyin ÖZ** danışmanlığında yürüttüğü **"Büyük Beş Kişilik Özelliğinin İngilizce Öğretmen Adaylarının Akademik Güdülenme ve Başarılarını Yordamadaki Rolü/The Role of Big Five Personality Tranits in Predicting Prospective English Teachers' Academic Motivation and Achievement"** başlıklı tez çalışması, Üniversitemiz Senatosu Etik Komisyonunun **21 Temmuz 2015** tarihinde yapmış olduğu toplantıda incelenmiş olup, etik açıdan uygun bulunmuştur.

Bilgilerinizi rica ederim.

Prof. Dr. Ömer UĞUR
Rektör a
Rektör Yardımcısı

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APPENDIX 2-INTERNATIONAL PERSONALITY INVENTORY POOL

Dear Participant,
The following surveys are administered to find out your attitudes towards foreign language learning, global personal traits, willingness to communicate in English, and emotional intelligence. There are no right or wrong answers in this list of statements. Your answers will have a valuable contribution to the study. Please also make sure that the answers you give in these questionnaires will remain confidential. Thank you very much for your participation.
Şenay Kırkağaç
Hacettepe University - ELT Department (M.A. Candidate)

Background Information

Your gender: ❑ Female ❑ Male Your age: _____ years old.

Your grade level: ❑First year ❑Second year ❑Third year ❑ Fourth year

Your current gradepoint average (GPA = Academic Average): _____.

Global Personal Traits
Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Indicate for each statement whether it is
1) Very Inaccurate, 2) Moderately Inaccurate, 3) Neither Accurate nor Inaccurate, 4) Moderately Accurate, or 5) Very Accurate as a description of you.

	ITEMS –Personal Traits	*Very Inaccurate*				*Very Accurate*
1.	I am the life of the party.	①	②	③	④	⑤
2.	I feel little concern for others.	①	②	③	④	⑤
3.	I am always prepared.	①	②	③	④	⑤
4.	I get stressed out easily.	①	②	③	④	⑤
5.	I have a rich vocabulary.	①	②	③	④	⑤
6.	I don't talk a lot.	①	②	③	④	⑤
7.	I am interested in people.	①	②	③	④	⑤
8.	I leave my belongings around.	①	②	③	④	⑤
9.	I am relaxed most of the time.	①	②	③	④	⑤
10.	I have difficulty understanding abstract ideas.	①	②	③	④	⑤
11.	I feel comfortable around people.	①	②	③	④	⑤
12.	I insult people.	①	②	③	④	⑤
	ITEMS – Global Personal Traits	*Very Inaccurate*				*Very Accurate*
13.	I pay attention to details.	①	②	③	④	⑤
14.	I worry about things.	①	②	③	④	⑤
15.	I have a vivid imagination.	①	②	③	④	⑤
16.	I keep in the background.	①	②	③	④	⑤

17.	I sympathize with others' feelings.	①	②	③	④	⑤
18.	I make a mess of things.	①	②	③	④	⑤
19.	I seldom feel blue.	①	②	③	④	⑤
20.	I am not interested in abstract ideas.	①	②	③	④	⑤
21.	I start conversations.	①	②	③	④	⑤
22.	I am not interested in other people's problems.	①	②	③	④	⑤
23.	I get chores done right away.	①	②	③	④	⑤
24.	I am easily disturbed.	①	②	③	④	⑤
25.	I have excellent ideas.	①	②	③	④	⑤
26.	I have little to say.	①	②	③	④	⑤
27.	I have a soft heart.	①	②	③	④	⑤
28.	I often forget to put things back in their proper place.	①	②	③	④	⑤
29.	I get upset easily.	①	②	③	④	⑤
30.	I do not have a good imagination.	①	②	③	④	⑤
31.	I talk to a lot of different people at parties.	①	②	③	④	⑤
32.	I am not really interested in others.	①	②	③	④	⑤
33.	I like order.	①	②	③	④	⑤
34.	I change my mood a lot.	①	②	③	④	⑤
35.	I am quick to understand things.	①	②	③	④	⑤
36.	I don't like to draw attention to myself.	①	②	③	④	⑤
37.	I take time out for others.	①	②	③	④	⑤
38.	I shirk my duties.	①	②	③	④	⑤
39.	I have frequent mood swings.	①	②	③	④	⑤
40.	I use difficult words.	①	②	③	④	⑤
41.	I don't mind being the center of attention.	①	②	③	④	⑤
42.	I feel others' emotions.	①	②	③	④	⑤
43.	I follow a schedule.	①	②	③	④	⑤
44.	I get irritated easily.	①	②	③	④	⑤
45.	I spend time reflecting on things.	①	②	③	④	⑤
46.	I am quiet around strangers.	①	②	③	④	⑤
47.	I make people feel at ease.	①	②	③	④	⑤
48.	I am exacting in my work.	①	②	③	④	⑤
49.	I often feel blue.	①	②	③	④	⑤
50.	I am full of ideas.	①	②	③	④	⑤

APPENDIX 3-ACADEMIC MOTIVATION SCALE

Dear participants ;

The test being administered right now aims at finding out whether you hold academic motivation or not and if applicable, what the source of the motivation is. None of the items you are going to read have correct or incorrect answers. Therefore, it is of great importance that you answer properly according to your personal preferences. The information you provide in this test will be kept confidential. Thank you for your valuable contribution.

Şenay Kırkağaç

Hacettepe Üniversitesi- ELT (M.A.)

PERSONAL INFORMATION

Gender: Male: _____Female: _____

Age: _____

Number of years at university?_____

Your GPA: _____

ACADEMIC MOTIVATION SCALE (AMS-28)

Using the scale below, indicate to what extent each of the following items presently corresponds to one of the reasons why you go to university.

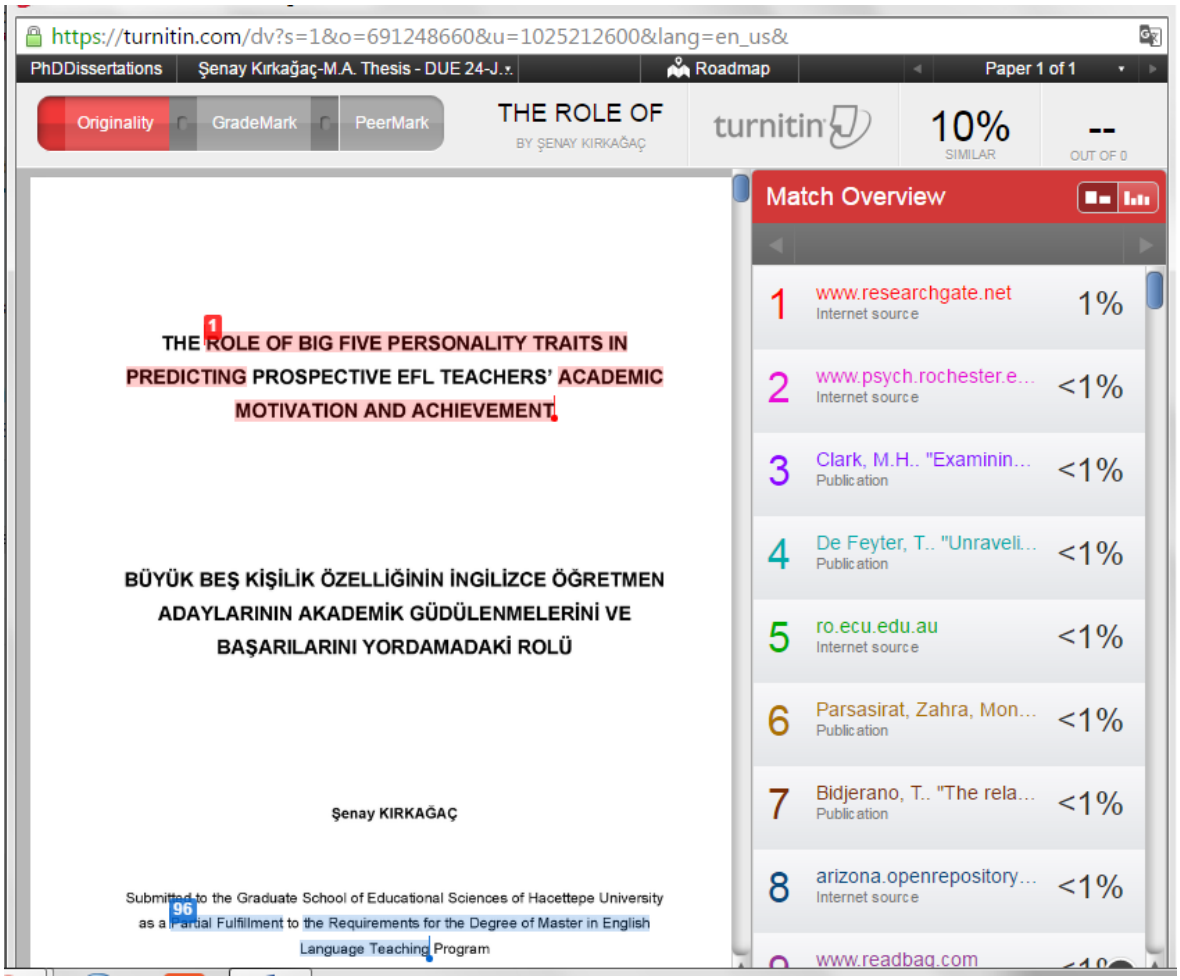
Does not correspond at all		Corresponds a little		Corresponds moderately		Corresponds a lot		Corresponds exactly
1	2		3	4	5		6	7

WHY DO YOU GO TO UNIVERSITY?

1. Because with only a high-school degree I would not find a high-paying job later on.	1	2	3	4	5	6	7
2. Because I experience pleasure and satisfaction while learning new things.	1	2	3	4	5	6	7
3. Because I think that a university education will help me better prepare for the career I have chosen.	1	2	3	4	5	6	7
4. For the intense feelings I experience when I am communicating my own ideas to others.	1	2	3	4	5	6	7
5. Honestly, I don't know; I really feel that I am wasting my time in school.	1	2	3	4	5	6	7
6. For the pleasure I experience while surpassing myself in my studies.	1	2	3	4	5	6	7
7. To prove to myself that I am capable of completing my university degree.	1	2	3	4	5	6	7
8. In order to obtain a more prestigious job later on.	1	2	3	4	5	6	7

9. For the pleasure I experience when I discover new things never seen before.	1	2	3	4	5	6	7
10. Because eventually it will enable me to enter the job market in a field that I like.	1	2	3	4	5	6	7
11. For the pleasure that I experience when I read interesting authors.	1	2	3	4	5	6	7
12. I once had good reasons for going to university; however, now I wonder whether I should continue.	1	2	3	4	5	6	7
13. For the pleasure that I experience while I am surpassing myself in one of my personal accomplishments.	1	2	3	4	5	6	7
14. Because of the fact that when I succeed in university I feel important.	1	2	3	4	5	6	7
15. Because I want to have "the good life" later on.	1	2	3	4	5	6	7
16. For the pleasure that I experience in broadening my knowledge about subjects which appeal to me.	1	2	3	4	5	6	7
17. Because this will help me make a better choice regarding my career orientation.	1	2	3	4	5	6	7
18. For the pleasure that I experience when I feel completely absorbed by what certain authors have written.	1	2	3	4	5	6	7
19. I can't see why I go to university and frankly, I couldn't care less.	1	2	3	4	5	6	7
20. For the satisfaction I feel when I am in the process of accomplishing difficult academic activities.	1	2	3	4	5	6	7
21. To show myself that I am an intelligent person.	1	2	3	4	5	6	7
22. In order to have a better salary later on.	1	2	3	4	5	6	7
23. Because my studies allow me to continue to learn about many things that interest me.	1	2	3	4	5	6	7
24. Because I believe that a few additional years of education will improve my competence as a worker / employer.	1	2	3	4	5	6	7
25. For the "high" feeling that I experience while reading about various interesting subjects.	1	2	3	4	5	6	7
26. I don't know; I can't understand what I am doing in school.	1	2	3	4	5	6	7
27. Because university allows me to experience a personal satisfaction in my quest for excellence in my studies.	1	2	3	4	5	6	7
28. Because I want to show myself that I can succeed in my studies.	1	2	3	4	5	6	7

APPENDIX 4-ORIGINALITY REPORT



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