

THE ATTITUDES OF HIGH SCHOOL STUDENTS' TOWARDS
PHILOSOPHY COURSE

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ABSTRACT

THE ATTITUDES OF HIGH SCHOOL STUDENTS' TOWARDS PHILOSOPHY COURSE

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The purpose of this study is to investigate 11th and 12th grade high school students' attitudes towards philosophy course and to examine whether their attitudes show significant differences with respect to certain background variables such as gender, school type, grade level, GPA of previous semester, philosophy course grade from the previous semester, mother's and father's education level, number of books available at home, and numbers of books read in the previous year.

The sample consisted of 1322 high school students from 11th and 12th grades from 11 public and private high schools in the Province of Ankara. Data were gathered from the participants via Philosophy Course Attitude Scale developed by the researcher. Data were analyzed using both descriptive and inferential statistics. ANOVA was employed to investigate whether there were significant differences among students'

attitude towards philosophy course with respect to certain background variables. Descriptive Statistics were used to analyze the background of information of the sample and attitudes of students towards philosophy course.

The findings indicated that the students have moderate level of positive attitude towards philosophy course. The findings also showed that with the exception of the mother's education, each of the variables examined (gender, grade level, school type, GPA of previous semester, philosophy course grade from the previous semester, father's education, number of books available at home, number of books read in the previous year) created a significant difference in student attitudes towards the philosophy course.

Key Words: attitude, philosophy course, the attitude scale of philosophy course.

ÖZ

LİSE ÖĞRENCİLERİNİN FELSEFE DERSİNE YÖNELİK TUTUMLARI

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Yüksek Lisans, Eğitim Bilimleri Bölümü

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Bu çalışmanın amacı, ortaöğretim lise 3.sınıf ve 4.sınıf öğrencilerinin Felsefe dersine yönelik tutumlarını belirlemek ve öğrenci tutumlarının cinsiyet, okul türü, sınıf, genel not ortalaması, felsefe ders notu, anne ve baba eğitim durumu, evdeki kitap sayısı ve son bir yıl içinde okuduğu kitap sayısı değişkenlerine göre farklılık gösterip göstermediğini incelemektir.

Çalışmanın örneklemini Ankara il merkezinde bulunan 11 devlet ve özel lisesinde okuyan 1322 öğrenci oluşturmuştur. Veriler, araştırmacı tarafından geliştirilen “Felsefe Dersi Tutum Ölçeği” kullanılarak elde edilmiştir. Elde edilen veriler betimsel ve çıkarımsal istatistik yöntemler kullanılarak yorumlanmıştır. İlk olarak betimsel istatistik yöntem kullanılarak katılımcıların özellikleri çözümlenmiş ve öğrencilerin felsefe dersine yönelik tutumlarının düzeyi belirlenmiştir. Son olarak;

öğrencilerin tutumlarının bazı değişkenlere göre farklılaşıp farklılaşmadığını belirlemek için tek yönlü varyans analizi yapılmıştır.

Kullanılan betimsel istatistik yöntemi sonucunda, öğrencilerin felsefe dersine yönelik tutumlarının genel olarak olumlu yönde olduğu görülmüştür. Tek yönlü varyans analizi sonucunda öğrencilerin felsefe dersine yönelik tutumlarının cinsiyet, okul türü, sınıf, genel not ortalaması, felsefe ders notu, baba eğitim durumu, evdeki kitap sayısı, öğrencinin son bir yıl içinde okuduğu kitap sayısı değişkenlerine göre farklılık gösterdiği, anne eğitim durumunun tutum üzerinde farklılık yaratmadığı görülmüştür.

Anahtar Sözcükler: tutum, felsefe dersi, felsefe dersi tutum ölçeği.

To My Lovely Father and Mother

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CHAPTER 1

INTRODUCTION

From the dawn of existence, human beings have wanted to discover the essence of life – of the functioning of nature, of the Earth and the universe, and most of all, of themselves. Behind this wish to know and to discover lies curiosity and wonder about natural events, from sunrise to sunset and from birth to death. Whereas primitive human beings relied on religion and mythology to satisfy their curiosity about themselves and their world, once they began to ‘reason’, the scientific period had begun, as humans attempted to find answers to questions like “What are things *really* like?” and “How can we *explain* the process of change?” through observation and reason (Russell, 2000). As the first person to have posed the question as to the ultimate constitution of physical nature – and to answer this question using philosophico-scientific methods rather than myth and religion (Arslan, 2006) – Thales of Miletos is generally considered to be the world’s first ‘philosopher’ and the period in which he lived to be the period in which philosophy and science were born (Russell, 2000).

A combination of the Greek words ‘*philo*’ and ‘*sophia*’, which is ordinarily translated as ‘wisdom’, ‘philosophy’ – ‘*philosophia*’ – is thus ‘the love of wisdom’ (Edwards, 1967, p.216). As the etymology of the term suggests, the search for knowledge is more important than the possession of knowledge. Questioning is an essential part of this search, and in fact, Socrates believed questions to be the source of knowledge. Philosophy provides a resource for asking questions about meaning

and is itself a part of the ongoing human attempt to understand the world (Honderich, 2005).

There is no singular definition of philosophy, but Honderich (2005) provides a classic description when he says that “philosophy is rationally critical thinking, of a more or less systematic kind about the general nature of the world, the justification of belief and conduct of life” (p.702). Baird and Kaufmann’s (2003) description of the philosopher as someone who attempts to understand the world and the self using human reason fits neatly with Grayling’s (1998) definition of philosophy as the study of knowledge, truth, reason, value, the mind and more. Philosophy involves discovering or inventing relationships between ideas, reasoning to test their validity, and thinking about what might exist beyond the given. It is a matter of making rational judgments and understanding the meaning and principles of knowing (Jaspers, 1969). For Lipman and Sharp (1978) “Philosophical thinking involves on the one hand an appreciation of ideas, logical arguments and conceptual systems, and on the other, a manifest facility in manipulating philosophical concepts so as to be able to take them apart and put them together in new ways” (p.85).

Philosophy entails questioning and speculating, generating and building on ideas, posing hypotheses, applying imagination, making links to new ideas and reflecting on alternative possibilities (Solomon, 2008). As emphasized by Cevizci (2005), a vital feature of philosophy is its interest in re-arranging, shifting, displacing and reframing ideas and beliefs. Another feature is its attempt to exist in places of uncertainty, exploration, possibility and imagination. Engaging in philosophy gives

people the courage and opportunity to think for themselves by strengthening the skills and attitudes essential for authentic and independent thinking.

As a method, as a procedure and as teaching, philosophy makes it possible for individuals to develop their own abilities to question, compare and conceptualise (Lacey, 2003). In other words, philosophy helps to develop critical thinking, which Schafersman (1991) describes as correct thinking in the pursuit of relevant and reliable knowledge about the world. According to Ennis's classic definition, critical thinking is "reasonable, reflective, responsible, and skillful thinking that is focused on deciding what to believe or do" (cited in Nosich, 2005, p.2). A person capable of thinking critically can ask appropriate questions, gather relevant information, efficiently and creatively sort through this information, reason logically from this information, and come to reliable and trustworthy conclusions about the world that enable one to live and act successfully in it (Nosich, 2005). In this sense, argues Noyalalpan (2000), philosophy education is a prerequisite for observing and understanding the meaning and facts of life.

Derrida (1990) also emphasizes the role of philosophy in the teaching of human rights. According to the contemporary French philosopher, an individual's right to philosophize should be guaranteed as a fundamental condition for the implementation of human rights (cited in Direk, 2002, p.3). Kuçuradi (1998) argues that philosophers should play a central role in teaching human rights, the importance of which should be developed within the framework of universal ethics. Proceeding from a Kantian perspective, she maintains that a proper understanding of human

rights essentially involves an appropriate ethical and epistemological engagement on the part of the teacher that can only be supplied by philosophy. In fact, philosophy education is considered today to be a fundamental condition for the implementation of all human rights, since it is through a philosophy education that individuals become more independent and more capable of ‘creative thinking’, i.e., “thought that is novel and that produces ideas of value” (Sternberg 2003, p.326).

Given that the activity of thinking is the fundamental way through which human beings can achieve their aims of a good society and a better future, the development of thinking skills that allow individuals to achieve autonomy has been one of the foremost goals of education. Thinking may be looked at in terms of various components – the ability to think uniquely and independently, to analyse and synthesise, to question, to think critically and creatively. In this regard, philosophy education is an important milestone in the creation of an open-minded, curious and inquisitive, critical and creative knowledge-oriented society.

The 1995 Paris Declaration for Philosophy, a product of the international study days organized in Paris by UNESCO, reaffirms that philosophy education, by training independently minded, thoughtful people, capable of resisting various forms of propaganda, prepares everyone to shoulder their responsibilities regarding the great questions of the contemporary world, particularly in the field of ethics. The declaration stresses that philosophy teaching should be maintained or expanded where it exists, introduced where it does not yet exist, and designated explicitly as “philosophy” (Pol Droit, pp.15-16).

In Turkey, philosophy education was first introduced at the high school level in 1911 (Kafadar, 1994a). The curriculum has undergone several changes since the establishment of the Republic of Turkey in 1923, with the current high school philosophy curriculum first introduced in 1993. Today, all students in Grade 11 are required to attend two hours of philosophy classes per week, the main goal of which is to help students acquire the skill of philosophical thinking. In order to understand whether or not this goal is being met, research needs to examine, among other things, student attitude towards the course.

Attitude is defined as “a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual’s response to all objects and situations with which it is related” (Allport, 1935, as cited in Horowitz and Bordens, 1995, p.228). Given the close relationship between attitude and academic achievement, the measurement of student attitudes towards specific courses have become a vital source of information for all stakeholders in the educational system – pupils, parents, classroom teachers, guidance personnel and administrators – that allows them to identify, analyse and develop solutions to problems as they emerge.

Despite the crucial information provided by studies on student attitude, a review of the literature shows that very few studies have been conducted on student attitudes towards the philosophy course in Turkey. A study by Engin and Yıldırım (1998) found that students in general held positive attitudes towards the philosophy course. Akdağ (2002) found that female students and students at public high schools and

Anatolian High Schools had more positive attitudes and perceived the philosophy course to be more effective than male students and students at private high schools. Küçükkurt (2006) has also studied high school students' attitudes towards the philosophy course and academic performance in the philosophy course. He examined whether or not student attitudes and their academic performance varied significantly with respect to gender, age, school type, grade level, place of birth, parents' income level. He found that female students, students at public high schools and Anatolian high schools and students whose families incomes were above 1000TL per month were more successful and had more positive attitudes than male students, students at vocational high schools and students whose families incomes were below 500TL per month. Çokan (2007) also found female students had a more positive attitude towards the philosophy course than male students, but found home-related factors such as parental education, profession and income level had no effect on student attitudes. Overall, students were found to have a moderately positive attitude towards the philosophy course. In a study examining whether or not students developed critical thinking skills through the philosophy course, Bozoğlu (2008) found that Grade 11 students had a negative attitude towards the course because of an ineffective teaching and learning process.

1.1 Purpose of the Study

The purpose of this study was to investigate attitudes towards the high school philosophy course among Grade 11 and Grade 12 students and to examine whether or not student attitude varies according to certain background variables. Specifically, the study aimed to answer the following research questions:

- What is the attitude of students towards the philosophy course?
- Do student attitudes towards the philosophy course vary significantly by gender, school type, grade level, GPA of previous semester, philosophy course grade from the previous semester, mother’s and father’s education, number of books available at home, and number of books read in the previous year?

1.2 Significance of the Study

This study provides an analysis of high school students’ attitudes towards philosophy course that can provide valuable insight for teachers, school administrators and policymakers. The empirical evidence provided by this study can be used to support the development of educational policy and curriculum content related to the philosophy course as well as to teacher-training programs. Specifically, the study data offers insight into the student perspective that should allow teachers, principals and policymakers to prepare appropriate curriculum and learning materials in light of student expectations in order to implement an effective philosophy education.

1.3 Definition of Terms

The study defines the term ‘**attitude**’ as “a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual’s response to all objects and situations with which it is related” (Allport, 1935, cited in Horowitz and Bordens, 1995, p.228).

The term ‘**philosophy course**’ refers specifically to the course in the Turkish high school curriculum required of all students in Grade 11.

1.4 Limitations

The study sample was limited to students in Grades 11 and 12 in selected high schools in Ankara. Due to the non-representative nature of the sample, the results cannot be fully generalized to Turkey as a whole. Moreover, the administration of the questionnaire towards the end of the school year may have affected the outcome; i.e., many students in Grade 12 were absent from school because they were concentrating on studying for university entrance examinations, and those students who were attending school may have been bored with school and exams. It was assumed that students answered the question genuinely.

CHAPTER 2

REVIEW OF LITERATURE

This chapter presents the review of related literature. In the first part, the importance of philosophy education is presented. Then, the philosophy education at high schools in the world and in Turkey is introduced. The third section presents the concept of attitude. The fourth section includes the summary of the related studies conducted in Turkey.

2.1 The Importance of Philosophy Education

Philosophy begins in wonder and in the propensity of the human mind to ask questions. The history of philosophy education is as old as philosophy. Socrates' dialectical method based on dialogues was the vivid example of philosophy education (Copleston, 1999). For Socrates the path to knowledge begins with the recognition of one's ignorance. The teacher's role can be compared with that of a midwife and the teacher must question in a way that allows the truth to be revealed. Like the midwife, the teacher assists in the birth of ideas (Russell, 1961). The most basic feature of philosophy education is to activate the individual's own ability to understand and express. This also means that asking one's own questions and giving one's own answers.

To gain the critical and creative thinking skills to the students is one of the most important features of philosophy education. Link (1977) stated that philosophy should have a place as an elective in the social studies curriculum of public high

schools because the study of philosophy is valuable in helping to broaden the intellectual horizons, to integrate the knowledge, and to strengthen the critical skills of those students who take such a course. As Mitchell (1979) said:

Social science is often loosely applied to any kind of study which is concerned with man and society but in the strict sense it refers to the application of scientific methods to the study of the intricate and complex network of human relationships and the forms of organization designed to enable peoples to live together in societies (p.191).

Besides critical and creative thinking skills philosophy education helps students to seek, to reach and to produce knowledge. Reaching knowledge by nature increases the social relationships between society. Can (2006) emphasized that in general, social sciences including philosophy intended to cause individuals to gain some basic skills like knowledge acquisition, knowledge production, social participation, communication and critical thinking. Students' gaining basic information about society regulates and enriches this knowledge in the direction of society's expectations through social sciences. Moreover, they respect people from different lifestyles and cultures. Furthermore, students gain the skill of solving problems independently and cooperatively. There are also some other advantages of taking social sciences for students such as realizing his duty of shaping the future, having emotions of art and aesthetics. They know how to formulate the social problems, how to learn ways of analysing and how to search social problems as a social scientist.

Information is the most valuable asset of this era. Philosophy education is very important to produce new knowledge in a rapid changing world. As emphasized by

Engin and Yıldırım (1998) the teaching of social sciences -including philosophy- are very important to educate individuals as a producer of new knowledge and interpreter of knowledge in a rapid changing world. Indeed, with the social sciences' education, it is aimed at for individuals to develop their personality, human relations and economic productivity, the responsibility of citizenship and power of coping with change and life. Here, social sciences especially philosophy course plays an important role in the fulfillment of all these purposes.

Philosophy is very important for children. Because philosophy is the matter questioning and speculating that helps to create self-confident pupils. Verharen (2002) mentioned that teaching children philosophy help them to defend themselves against their abuse by authority figures. Philosophy might be the master art of self-defense. Ayim (1980) stated that:

Philosophy at the pre-college level might have the advantage of helping students to continue asking significant questions keeping open the road to inquiry, and to alternatives, investing less in fallible answers than in a rigorous method, and analyzing and evaluating their own decisions in a world that has never been in greater need of critical rethinking in such matters (p.21).

Philosophy increases social participation and communication while producing knowledge. The UNESCO's study (2007) reports the view that teaching philosophy helps the development of a critical approach, fights against dogmatism, assists students in learning while respecting others, and helps to free them of fanaticism. Kuçuradi (1969) emphasized the aim of philosophy course as thinking on problems (cited in Kaynaradağ, 1998, p.11). Pupils should be taught criticizing and questioning. Philosophy should teach curiosity, rationality and open-mindedness. Lipman (1976) proposed philosophy education for children to help them develop their reasoning skills, self-esteem and moral values.

Philosophy criticizes everything and fights against dogmatism that causes pupils to have multiple choices. Bellatalla (1998) argued that philosophy education may help us in analyzing critically everyday speech and specialistic languages in political, scientific, educational, mass-media by disclosing and reducing the potential tyranny of the words.

Similarly Shaw (2008) mentioned the role of philosophy on developing reflective and critical thinking skills and stated:

Philosophy courses sharpen children's linguistic, logical and cognitive thinking. Philosophy helps students to learn to reason well in discussions where they are free from having to come up with pre-determined results. Philosophy is valuable socially. Through thinking, talking, listening and questioning together and reflecting other ideas, children develop mutual co-operation, trust, care, respect etc. Philosophy is good preparation for life. By discussing real-life dilemmas now, we are preparing students to make better choices in the future (p.x).

Philosophy helps individuals to stand up by themselves. As Taşdelen (2007) emphasized that individuals becomes a person who see with their own eyes and think with their own mind through philosophy education. Timuroğlu (1998) stated that philosophy education strengthens students' thinking skills and revitalize their minds. Philosophy investigates the reality. Seeking the reality requires judging, criticism and questioning which leads freedom.

Niklasson, Ohlsson, and Ringborg (1996) conducted a qualitative study in Sweden and they found that students who were exposed to philosophy twice a week using 'Matthew Lipman's Philosophy For Children' program seemed to argue better and

also seemed to be more self-reliant than those students in a control group who did not use the program.

A similar study conducted by Gasee (1998) revealed that a philosophy course should be offered to Ontario's high school students because studying philosophy develops skill in critical thinking and sharpens understanding by uncovering presuppositions. According to Gasee philosophy course identifies assumptions that underlie theories and arguments. Furthermore, philosophy course demonstrates imaginative, creative and reflective abilities by articulating philosophical insights.

The effect of philosophy course on the students studying at primary school has shown on Shine Trust Report (2006). The report stated that studying philosophy at primary schools improves pupils' listening, talking, questioning and reasoning skills. In addition to that studying philosophy had also positive effect on pupil's English, Maths and science's test scores (cited in Haynes 2008, p. 158). Excellence in Cities action Zone Case study (2006) conducted in England showed that studying philosophy at primary schools improves pupils' speaking and listening abilities and social skills (cited in Haynes 2008, p.158).

Another study on the effect of philosophy on children by Liptai (2002) found that introducing of philosophy to children developed their ability to form longer sentences, expressing more complex and subtle ideas. Fisher (2008) stated that philosophy can help children to think together as a group or class, and to think for themselves as individuals.

Kefeli and Kara (2008) also analyzed the progress of philosophical thinking and critical thinking on children. In their study, it was aimed to develop questioning consciousness of 6 children by using Socratic Method for 2 months. The results of the study indicated that the children comprehended concepts faster than before. Kafadar (1994b) has emphasized the importance of philosophy education in his study. According to his study, rapid socio-cultural changes need to be evaluated from philosophical perspective. Therefore, philosophy education is very important for people to gain this perspective.

Kaynaradağ (1998) has also emphasized the importance of looking at the issues with a philosophical perspective. He argued that cultural pollution and even physical environmental pollution could be prevented through a philosophical understanding. Arat (1994) sees the main purpose of philosophy education as educating students for improving some skills like knowing how to think, making significant criticism, trying to clarify the causes, consequences and solutions of problems, and taking a certain attitude towards certain problems. Ergün and Yapıcı (2006) have also emphasized the importance of philosophy education. As mentioned in their study, philosophy course was required to help students to think freely, to approach problems analytically, and to examine the subjects with logic and reasoning.

In summary, philosophy education helps students to think clear, critical and creative about their potential and their limits. Furthermore philosophy education promotes respect and tolerance for the opinions of others to educate for peace and democratic

values. Students become familiar with the practice of questioning and use this in developing their belief and value systems.

2.2 Philosophy Education in the World and in Turkey

Philosophy education in the secondary level shows some similarities and differences among the countries. In France, all students study philosophy as a core compulsory subject. Similarly in Spain, philosophy is taught as a common core subject on each of the four types of Bachillerato course. In Italy, philosophy course is taught to all students in both *liceo classico* and *liceo scientifico*. In Hungary all students following the National Core Curriculum study philosophy. In Brazil, philosophy is a compulsory curriculum subject in many secondary schools and some primary schools. In Pakistan, philosophy is part of the curriculum as a separate course in 11th and 12th grades. Philosophy has been taught in Egypt at the secondary level since 1925. In India, philosophy is taught as ‘Ethical and Environmental Education’, in order to develop sensitivity among the students on environmental protection and to develop moral and religious values. In Norway, philosophical and ethical subject matter are covered at the primary and secondary levels in a course entitled ‘Christian Knowledge, Religious Education and Ethics’ (UNESCO Publishing, 2007).

There are countries where philosophy is not taught at the secondary level schools. As mentioned in UNESCO’s report (2007)

The almost constitutional absence of philosophy in secondary education in English speaking countries should be noted. At the very best it is available as an option, which is the case in the United Kingdom and in certain schools in North America (p.51).

In Ireland, philosophy course is absent from schools. In the Russian Federation, philosophy is not taught at the secondary level. Philosophy is not included in Jordan's and Sudan's secondary-school curriculum.

Kafadar (1994a) studied the history of philosophy education in Turkey. In his study he stated that philosophy education was first introduced at secondary school level in 1911. From the establishment of Republic in 1923 to the present, 6 different philosophy curriculums have been implemented. The curriculum prepared in 1924 was the first philosophy curriculum of the Republican era and had been implemented for 3 years. Philosophy curriculum prepared in 1938, was the first curriculum in which the objectives of the curriculum have been stated and had been studied for 9 years. Philosophy curriculum prepared in 1957 had been implemented in a longest period in the history of philosophy education at high schools. The curriculum prepared in 1976 was called as 'Beginning of Philosophy Program'. The curriculum prepared in 1985 was called as 'Introduction to Philosophy Program'. The current philosophy curriculum was developed in 1993. The history of philosophy course schedule according to years is presented in the Table 2.1.

Table 2.1 The History of Philosophy Course Program in Republican Era

| Years | 10 th | 11 th | 12 th | | | |
|---------------------------|------------------|--|--|---------------------------|---------------------------|-------------|
| | Grade | Grade | First Term | Second Term | First Term | Second Term |
| 1924-1927 | - | 2 hours for social branch 1 hour for science branch | 2 hours for social branch 1 hour for science branch | | | |
| From 1927 | - | 2 hours for social branch | 2 hours for social branch | | | |
| From 1935 | - | 3 hours for social branch | 3 hours for social branch | | | |
| From 1952-1956 | - | - | - | 2 hours for social branch | 2 hours for social branch | |
| From 1991-1992 | 2 hours | 2 hours | | | | |
| From 1996-1997 | - | 2 hours compulsory for social branch | 2 hours compulsory for social branch | | | |
| From 1998-1999 | - | 2 hours compulsory for all | 2 hours compulsory for all | | | |
| From 1998-1999 to present | - | 2 hours compulsory for all | 2 hours compulsory for all | - | - | |

Kafadar (1994b) stated that according to those curricula the philosophy course aimed helping students to gain world view and love of philosophy. Furthermore, the philosophy aimed to train students to be effective citizens for Turkish society. Another goal of philosophy course is to develop Kemalist mentality.

The current philosophy curriculum contains the following statements:

1. The main goal of this curriculum is to help students to gain philosophical thinking. A particular problem has been dealt in different ways in epistemology, science, ontology, ethics, aesthetics, politics and religion.
2. It is also provided that students can understand the differences and similarities between philosophy and religion, art and culture.
3. The philosophy curriculum provides knowledge about science, scientific knowledge, and scientific method, and scientific research, general and systematic information about the various sciences. On the other hand, it also indicates that human is a practical, a moral, a political, an aesthetic and a religious entity. Thus, it is aimed to develop a rich and wide understanding about human being and culture.
4. It is aimed that students should gain the concepts of National Sovereignty and Secularism in the Philosophy of Politics and Philosophy of Religion units, through Atatürk's opinion.
5. It is aimed that the opinions of Turkish-Islamic thinkers such as Farabi and Ghazali should be taught to students. So, the students can understand the role of Turkish thinkers in the global philosophy world (2384 sayılı Tebliğler Dergisi, 1993).

This philosophy course has been taught to all 11th grade students as a compulsory course 2 hours per week since 1998.

2.3 The Concept of Attitude

2.3.1. Definition of attitude

The study of attitude has been of fundamental concern to social psychologists throughout the history of field. The concept of attitude is central to explaining our thoughts, feelings, and actions with regard to other people, situations, and ideas. One common definition was developed by G.W. Allport: “An attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual’s response to all objects and situations with which it is related” (cited in Horowitz and Bordens, 1995, p.228). This definition shows us three important features of attitudes: They are private and learned. Furthermore, they have an influence on behavior.

2.3.2. The structures of attitudes

Attitudes are global evaluations of stimulus objects that are derived from three sources of information: Affective responses, cognitions and behavioral information (Horowitz and Bordens, 1995). Affective information refers to feelings or emotions associated with an attitude object. Cognitive information refers to beliefs about an attitude object. Behavioral information refers to past behaviors associated with the attitude object (Haddock and Maio 2004, p.36). Thus, an attitude is a summary of these three components which are interconnected to each other.

2.3.3. The function of attitudes

Attitudes have several important functions. Horowitz and Bordens (1995) stated that attitudes define us. Attitudes also give directions to our future feelings and thoughts.

Finally attitudes are the summary of our feelings, thoughts, intentions, and behavior. Bohner and Wanke (2002) also stated that attitudes may have an effect on perception, thinking and behavior. To know the others' attitudes may help us to predict the future. The prediction of the future gives us a chance to control others' behavior by changing their attitudes. All the functions of attitudes explained above show the necessity of the studies on the measurement of the attitudes.

2.3.4. The measurement of attitudes

Social psychologists use a variety of techniques to discover and measure people's attitudes. As emphasized by Bohner and Wanke (2002), these techniques are direct measurement and indirect measurement. In direct measurement technique the respondents are asked to report their beliefs or evaluations about attitude object. Whereas indirect measurement relies studying responses that are thought to be related to attitudes.

Single-item scales and multi-item scales are the instruments for direct measurement. Single-item scales ask a single question about the persons' attitude on an object and wait a response alternative along a numeric response scale (Bohner and Wanke, 2002).

Multi-item scales are classified into semantic differential, Likert scale and Thurstone scale (Bohner and Wanke, 2002). The semantic differential scale contains bipolar adjective scales which are usually divided into seven response categories.

Respondents are asked to rate an attitude object by marking one of the seven categories (Bohner and Wanke, 2002).

Likert Scale is another popular scaling that was developed by Likert. As mentioned by Bohner and Wanke (2002):

Respondents indicate the extent of their agreement, usually on a five-point or seven-point scale, with each of several statements pertaining to an attitude object. These have been pre-selected from a larger pool of statements so that agreement with each item unambiguously implies either a favorable or an unfavorable attitude. Usually, the statements can be characterised as beliefs about the attitude object, but it is possible to use statements about affective reactions or behaviors toward the attitude object. An attitude score on a Likert scale is defined as the sum or mean across all items, after reverse scoring those items on which agreement implies an unfavorable attitude (p.28).

Bohner and Wanke (2002) stated that:

Thurstone's method of equal-appearing intervals includes a first step of stimulus scaling: Judges are asked to sort a large number of belief statements, which vary considerably in their direction and extremity, into a specified number of categories defined as equally spaced according to their subjective favorability (p.28).

Another method of measuring attitudes is indirect measurement that tries to find the attitude of the respondents on an object without asking the attitude on that object directly. There are three kind of indirect measurement techniques. These are 'disguised attitude measures', 'projective measurement techniques' and 'nonreactive measures' (Bohner and Wanke, 2002).

2.3.5. The formation of attitude

How are our attitudes formed? Where is the origin of our attitudes? There are some thoughts about the origin of attitude. These are mere exposure, direct personal

experience, learning and genetic. “Mere exposure is the phenomenon in which simply being exposed to an object increases our feelings, usually positive, toward that object” (Horowitz and Bordens, 1995, p.239). The other way is that the attitudes are formed by through direct personal experience. Most social psychologists would agree that the majority of our attitudes are formed by learning. That is, individuals learn the attitude through socialization. The last way is that the attitudes are formed by heritability that means genetics (Horowitz and Bordens, 1995).

2.3.6. The relation of attitude and behavior

The studies about attitude showed that there are consistencies and inconsistencies between attitudes and behavior (Taylor, Peplau, and Sears, 2000). La Piere (1934) and many psychologists found in their studies that there are inconsistencies between behavior and attitudes (Wicker, 1969). On the other hand high degrees of consistency between attitudes and behavior have been found in later studies. (Kraus, 1995).

The major reason why attitudes are studied is because of the assumption that attitudes influence behavior (Bohner and Wanke, 2002). To change the behavior of an individual on an object is very much related with the change of the attitude of an individual towards that object.

2.4 Studies Conducted on Philosophy Education

The studies conducted on the attitude of the students' towards philosophy course have been reviewed in this section. Küçükkurt (2006) has studied the attitude of the high schools' students towards philosophy course. In this study, whether the

students' attitude shows significant differences with respect to certain background variables such as gender, age, school type, grade level, place of birth, mother and father education were explored. The sample of this study consisted of 358 high school students. The results of this study showed that the students have moderately positive attitude towards philosophy course. This study has revealed that gender has a significant effect on the attitude. Attitudes of females were more positive than the attitudes of males. However, mother and father education did not have any significant effect on the attitude of the students.

Çokan (2007) has studied attitude of the last grade students in the public high schools towards philosophy course. In this study the significance of socio-economical and demographic attributes of the students on the attitude have been analyzed. 219 public high schools' students have participated to this study. The results of this study showed that the students have moderately positive attitude towards philosophy course. Furthermore, the results indicated that gender has a significant effect on the attitude towards philosophy course. Females have more positive attitude towards philosophy course than males. Çokan (2007) has also figured out that students who read books regularly on daily basis have more positive attitude towards philosophy course than those who did not read books regularly and frequently. On the other hand, mother and father education, their occupation did not have the significant effect on the attitude.

Bozoğlu (2008) studied whether critical thinking skills of the students are developed or not at the philosophy courses according to the opinions of the 11th grade students

and the teachers of the philosophy courses. One of the findings of the study was that the students have negative attitudes towards philosophy course because of the inefficient teaching and learning process. The sample of this study consisted of 660 students.

Engin and Yıldırım (1998) investigated how teachers and students assess the implementation of philosophy curriculum at high school level. The sample of this study consisted of 102 teachers from 43 provinces and 161 students from 10 provinces. A survey questionnaire has been asked to the teachers and the students to express their perceptions of the curriculum guidelines, course objectives, materials, instructional and evaluation process. Students were also asked to express their perceptions of the impact of philosophy course on the development of their knowledge, skills, attitude and values. In this study, the results revealed that the students had moderate level of positive attitude towards philosophy course. Engin and Yıldırım (1998) stated that the curriculum focuses mostly on transmission of knowledge.

Akdağ (2002) studied students' perceptions towards effectiveness of philosophy course in secondary education. A questionnaire has been implemented on 1500 high schools' students. The results of this study indicated that the students did not interest in philosophy course. The findings of this study revealed that female students had more positive perceptions on the effectiveness of philosophy course than male students. Private high schools' students perceived philosophy course less effective than Public and Anatolian High schools' students.

The curriculum of the philosophy course in Turkey has also been studied by many researchers. Beydoğan, Cihan, and Taşdemir (2006) studied the philosophy curriculum with respect to the perspectives of teachers and students. The sample of this study consisted of 50 philosophy teachers and 120 students at 12 provinces. In this study, the objectives of the philosophy course, the content of the philosophy course were analyzed. The findings of this study indicated that the philosophy curriculum was insufficient to develop creative and analytical thinking.

The findings of the study conducted by Dombaycı (2002) also showed that the curriculum of the philosophy course has not been improved for many years. The curriculum in terms of teaching materials is not an effective guide for the teachers.

As it was seen in the literature review, the studies done on the philosophy courses are quite limited in number. Besides, there is no enough researches to measure the attitude towards the philosophy course.

In the studies about philosophy education, it is emphasized that the role of philosophy education on the development of critical and creative thinking is very crucial. In fact, since 1992, the general aim of the philosophy course which is compulsory for two hours a week for the third grade of high schools' students has been mentioned as to make the students gain the philosophical attitude and critical thinking. However, all of the aims for philosophy course curriculum mentioned by the Ministry of Education are at the knowledge and comprehension level. As a result, it is quite difficult to make the students gain the ability of philosophical thinking only

with the help of the knowledge and comprehension level aims. Likewise, some studies revealed that philosophy course curriculum applied in high schools is weak in developing the ability of creative and critical thinking of students. Neither the curriculum nor the course books can create the intended philosophy education. Therefore, it is urgently required to do some studies about the philosophy curriculum to improve the ability of students to think creatively and critically.

CHAPTER 3

METHODOLOGY

This chapter describes methodology of the study and includes seven sections. In the first section overall design of the study is summarized. The second section presents the research questions and the third section describes the variables. The fourth section describes the participants of the study. The data collection instrument is explained in the fifth section. Then, data collection procedure and data analysis are presented in the sixth and seventh sections respectively.

3.1 Overall Design of the Study

The purpose of this study is to investigate 11th and 12th grade high school students' attitudes towards philosophy course and to examine whether their attitudes show significant differences with respect to certain background variables such as gender, school type, grade level, GPA of previous semester, philosophy course grade from the previous semester, mother's and father's education, number of books available at home, numbers of books read in the previous year.

The sample of the study consisted of 1322 students from 11 high schools from different neighborhoods of Ankara. Neighborhoods in selection of public high schools were designated with respect to the socio-economic status of the residents and school type.

Cross-sectional survey method was used through administering a questionnaire developed by the researcher. Cross-sectional survey collects information from a predetermined population and the information is gathered at just one point in time rather than at different points in time (Fraenkel and Wallen, 2006). Students were presented with a self-administered questionnaire in which they were asked to answer questions related to their attitudes towards philosophy course. Items used in the questionnaire were selected from the related literature and tested for reliability through a pilot study.

Descriptive and inferential statistics were employed to provide deeper insight into the research questions. ANOVA was employed to investigate whether there were significant differences among students' attitude towards philosophy course with respect to certain background variables. Descriptive Statistics were used to analyze the background of information of the sample and attitudes of students towards philosophy course.

3.2 Research Questions

The following research questions were examined in the study:

- What is the attitude of students towards philosophy course?
- Is there any significant difference among the students' attitude towards philosophy course with respect to gender?
- Is there any significant difference among the students' attitude towards philosophy course with respect to school type?

- Is there any significant difference among the students' attitude towards philosophy course with respect to grade level of the students?
- Is there any significant difference among the students' attitude towards philosophy course with respect to GPA of previous semester?
- Is there any significant difference among the students' attitude towards philosophy course with respect to philosophy course grade from the previous semester?
- Is there any significant difference among the students' attitude towards philosophy course with respect to mother's and father's education?
- Is there any significant difference among the students' attitude towards philosophy course with respect to number of books available at home?
- Is there any significant difference among the students' attitude towards philosophy course with respect to number of books read in the previous year?

3.3 Description of the Variables

Gender: This variable is nominated dichotomous variable with the categories of female (1) and male (2).

School type: This variable is categorical variable with the categories of *İmam-Hatip* High School (1), Anatolia High School (2), Private High School (3), Public High School (4), Vocational High School (5).

Grade level of students: This variable is categorical variable with the categories of 11th grade students (1) and 12th grade students (2).

GPA of previous semester: This variable is categorized as Moderate (0-1-2-3) 2, and High (4-5) 3.

Philosophy course grade from the previous semester: This variable is categorized as Poor (0-1) 1, Moderate (2-3) 2, High (4-5) 3.

Mother's and father's education: These variables are categorical with categories of illiterate (1), literate but no formal schooling (2), primary school (3), middle school (4), high school (5), undergraduate (6), graduate – master or doctoral (7).

Number of books available at home: This variable is categorical variable with the categories of 1-15 books (1), 16-30 books (2), 31-45 books (3), 46-60 books (4), 61 and above (5).

Number of books read in the previous year: This variable is categorical variable with the categories of none (1), 1-5 books (2), 6-10 books (3), 11-15 books (4), 16 and above (5).

3.4 Population and Sample Selection

The population of this study was all the 11th and 12th grade high school students in the province of Ankara. The participants of this study included 1322 students from 11 high schools. In this study cluster random sampling was used by the researcher. Cluster random sampling method is generally used when it is very difficult to choose individuals from a population. Cluster random sampling is used to determine the groups such as schools in this study rather than individuals (Fraenkel and Wallen, 2006). For the purpose of selecting sample, schools are categorized with respect to their programs implemented: *İmam-Hatip* High School, Anatolia High School, Private High School, Public High School and Vocational High School. As a result, one school was selected from the type of *İmam-Hatip* High schools, two schools were selected from the type of Anatolia High schools, three schools were selected

from the type of Private High Schools, three schools were selected from the type of Public High schools, one school was selected from the type of Vocational High schools and one school was selected from the Social Sciences High schools. As the number of students was not sufficient, and student selection procedures were similar, students from Social Sciences High Schools were combined with the students from Anatolian High schools in data analysis. The 11th and 12th grade classes from each school were selected considering the information given by school administrators in terms of convenience of the classrooms regarding time. The name of the schools and the number of the students who responded to the questionnaire from each school are presented in the Table 3.1.

Table 3.1 The Frequencies and Percentages of Students Participated from Each School

| Name of the School | N | % |
|---------------------------------|-----|------|
| İmam Hatip High School | | |
| 1. Tevfik İleri İmam Hatip H.S. | 236 | 17.9 |
| Anatolian High Schools | | |
| 2. Gazi Anatolia H.S. | 166 | 12.6 |
| 3. Atatürk Anatolia H.S. | 34 | 2.6 |
| 4. Social Sciences H.S. | 36 | 2.7 |
| Private High Schools | | |
| 5. Arı Private H.S. | 19 | 1.4 |
| 6. METU Private H.S. | 77 | 5.8 |
| 7. Yüce Private H.S. | 51 | 3.9 |
| Public High Schools | | |
| 8. Leyla Turgut H.S. | 110 | 8.3 |
| 9. 75. Yıl H.S. | 87 | 6.6 |
| 10. Aktepe H.S. | 248 | 18.8 |

Table 3.1 continued

| Name of the School | N | % |
|--|------|-------|
| Vocational High School | | |
| 11. M.R.Uzel Chemistry Vocational H.S. | 258 | 19.5 |
| TOTAL | 1322 | 100.0 |

3.5 Data Collection Instrument

This survey study employed a questionnaire developed by the researcher to collect data on the students' attitude towards philosophy course.

3.5.1 Development of the questionnaire

For the purpose of composing the items of the questionnaire the literature related to attitudes toward philosophy and measurement of attitudes was reviewed (Küçük Kurt, 2006; Çokan, 2007). In addition to literature review, students in two philosophy classes in vocational high school were asked to write an essay on their feelings and opinions about philosophy course. Two questions were asked to guide the essay: "What is your opinion about philosophy course?", "Do you like philosophy course? Why?". The purpose of this activity was to develop items proper to students' own language. Considering the students' answers to open-ended questions and literature review a list of items was developed.

The developed list of items was given to 2 academicians who are experts in philosophy education and literature. According to suggestions of the reviewers some of the items were rewritten.

The first section of the questionnaire covers questions related to background information. Selected background variables were those that might affect students'

responses directly or indirectly. The requested information of this section was about gender, name of the school, grade level of the student, GPA of previous semester, philosophy course grade from the previous semester, mother's and father's educational level, number of books available at home, number of books read in the previous year. The second section of the questionnaire included 33 items related to the students' attitudes towards philosophy course. Items were scored according to a 5-point Likert-type scale from "strongly agree" (5) to "strongly disagree" (1) (See Appendix A). So, the scores of student's will be in the range of 33 points and 165 points in this attitude scale.

3.5.2 Pilot testing of the questionnaire

Pilot testing of the questionnaire was conducted with 105 students from a vocational high school by the researcher. The participant students were asked to fill out the questionnaire and make comments about the statements for clarity. As a result of the pilot study some of the items were eliminated and some of the items which were criticized as being ambiguous were rewritten.

3.5.3 Reliability

The Cronbach Alpha coefficient of reliability of the final version of the questionnaire with 33 items was computed as .94 indicating that the scale had high internal consistency.

3.6 Data Collection Procedure

Before conducting the questionnaire, permission was taken from METU Human Subjects Ethics Committee (See Appendix B). Then, necessary permission to administer the questionnaire in 11 high schools was obtained from Ankara Provincial Directorate of National Education. The administration of the questionnaire took place in May-June 2009. The researcher herself administered the questionnaire to students during their class hours. Administration of the questionnaire took approximately 15 minutes to complete. At the beginning of answering, students were informed about the study and asked not to write their names on the questionnaires with an aim of providing anonymity. A total of 1322 questionnaires were obtained to be analyzed.

3.7 Data Analysis

All sections in the questionnaire were analyzed statistically. The Statistical Packages for Social Sciences (SPSS) Version 11.5 was used. The .05 level was supposed to be the criterion of statistical significance for the statistical analyses carried out. In order to examine whether students' attitude towards philosophy course significantly differ with respect to gender, school type, GPA of previous semester, philosophy course grade from the previous semester, number of books available at home, number of books read in the previous year one-way ANOVA was used. In order to explore whether students' attitudes differ with respect to interaction of mother and father education level two-way ANOVA was employed.

Post hoc analysis to univariate ANOVA with Bonferroni test was conducted in order to see whether there were significant mean differences among school type, father's

education, philosophy course grade from the previous semester, number of books available at home and number of books read in the previous year on the attitude. It was suggested by Field (2009) that if only a subset of pairwise comparisons were required, Bonferroni might sometimes be better. Moreover when the number of contrasts to be estimated is small, about as many as there are factors, Bonferroni is better than Scheffé.

Descriptive statistics -means and standard deviations- were also employed to analyze the data collected through the questionnaire. Moreover, frequencies and percentages were used to analyze data related to background information provided by students.

3.7.1 Assumptions of ANOVA

As mentioned by Field (2005), in the analysis of ANOVA, there were three underlying assumptions that need to be checked. These are 1) Independence of observations; 2) Normality; 3) Homogeneity of variances.

Independency of observations: The data gathering forms were administered to volunteered participants by the researcher in regular class hours and each participant filled the forms by their own. Also, all participants were randomly and independently chosen from the populations. Therefore, it was assumed that independency of observation was not violated.

Normality: For normality assumption, univariate normality was checked by histograms, skewness and kurtosis values. Histograms for the initiator groups appeared to be normally distributed (See Appendix C).

The Skewness values for mutually decided, gender, school type, GPA of previous semester, philosophy course grade from the previous semester, mother's and father's education, number of books available at home, number of books read in the previous year, grade level were .411, -.307, -.654, -1.033, .226, -.192, -.957, .344, 1.400 respectively. Kurtosis values for gender, school types, GPA of previous semester, philosophy course grade from the previous semester, mother's and father's education, number of books available at home, number of books read in the previous year, grade level were -1.834, -1.277, -1.576, .015, -1.159, -1.049, -.502, -1.04, -.040 respectively. Skewness values were in the range of -1.033 to 1.400 and Kurtosis values were in the range of -1.834 to .015 (See Appendix D). Therefore, both Skewness and Kurtosis values were in the range of -3 and +3 which is an indicator of normality (Tabachnick and Fidell, 2007).

Homogeneity of variances: Homogeneity of variance assumption was checked by Test of Homogeneity of Variances. According to Levene's Test results, p was found as 2.494 ($p > .05$) and it was a non-significant value. Therefore, the assumption of homogeneity of variance was not violated.

CHAPTER 4

RESULTS

This study aims to investigate the high school students' attitude towards philosophy course and to find out whether their attitude show significant differences with respect to gender, school type, grade level, GPA of previous semester, philosophy course grade from the previous semester, mother's and father's education, number of books available at home, and number of books read in the previous year.

This chapter includes the results obtained from descriptive statistics and ANOVA. First, the results of descriptive statistics which was employed to present the background characteristics of the participants and attitude of students towards philosophy course were given. Second, the results of ANOVA which was performed to investigate the mean differences in the attitude of students with respect to the certain background variables were presented.

4.1 Results Concerning the Background Characteristics of Participants

Descriptive statistics were employed to describe the background characteristics of the participants, and results were presented in Table 4.1. As it can be seen on Table 4.1, among the 1322 students, 789 (about 60%) of them were female and 525 (about 40%) of them were male.

Table 4.1 Distribution of Students by Background Variables

| Background Variables | | N | % |
|---|-------------------------|------|-------|
| Gender | Female | 789 | 59.7 |
| | Male | 525 | 39.7 |
| | Total | 1314 | 99.4 |
| School type | İmam Hatip H.S. | 236 | 17.9 |
| | Anatolia H.S. | 236 | 17.9 |
| | Private H.S. | 147 | 11.1 |
| | Public H.S. | 445 | 33.7 |
| | Vocational H.S. | 258 | 19.5 |
| | Total | 1322 | 100.0 |
| Grade level | Grade 11 | 1039 | 78.6 |
| | Grade 12 | 453 | 21.8 |
| | Total | 1321 | 99.9 |
| GPA of previous semester | Moderate (0-1-2-3) | 350 | 26.5 |
| | High (4-5) | 665 | 50.3 |
| | Total | 1015 | 76.8 |
| Philosophy course grade from the previous semester | Poor (0-1) | 84 | 6.4 |
| | Moderate (2-3) | 406 | 30.7 |
| | High (4-5) | 781 | 59.1 |
| | Total | 1271 | 96.1 |
| Mother's education | Illiterate and Literate | 48 | 3.6 |
| | Primary School | 455 | 34.4 |
| | Middle School | 199 | 15.1 |
| | Secondary (High School) | 280 | 21.2 |
| | Undergraduate | 266 | 20.1 |
| | Graduate | 58 | 4.4 |
| | Total | 1306 | 98.8 |

Table 4.1 continued

| Background Variables | | N | % |
|---|-------------------------|------|------|
| Father's education | Primary School | 241 | 18.2 |
| | Middle School | 211 | 16.0 |
| | Secondary (High School) | 339 | 25.6 |
| | Undergraduate | 390 | 29.5 |
| | Graduate | 126 | 9.5 |
| | Total | 1307 | 98.9 |
| Number of books available at home | Between 1-15 | 98 | 7.4 |
| | Between 16-30 | 152 | 11.5 |
| | Between 31-45 | 171 | 12.9 |
| | Between 46-60 | 159 | 12.0 |
| | Above 60 | 729 | 55.1 |
| | Total | 1309 | 99.0 |
| Number of books read in the previous year | None | 56 | 4.2 |
| | Between 1-5 | 466 | 35.2 |
| | Between 6-10 | 343 | 25.9 |
| | Between 11-15 | 209 | 15.0 |
| | Above 16 | 237 | 17.9 |
| | Total | 1311 | 99.2 |

This study was conducted in 11 high schools. High schools are categorized into five groups: İmam-Hatip High School, Anatolian High School, Private High School, Public High School and Vocational High School. Among the 1322 students, about 18 percent of them were from İmam-Hatip High School, about 18 percent of them were from Anatolia High School, 11 percent of them were from Private High School, about 34 percent of them were from Public High Schools and 19.5 percent of them were from Vocational High School (Table 4.1). Among the 1322 students, about 79% of them were 11th grade students and 21.8% of them were 12th grade students.

For the students' GPA of previous semester, among 1322 students 26.5% was at moderate level (0-1-2-3) and 50.3% was at high level (4-5). 23.2% of the students did not state their GPA of previous semester.

According to philosophy course grade from the previous semester, among the 1322 students, the percentage of poor achievers was 6.4%, the percentage of moderate achievers was 30.7%, and the percentage of high achievers was 59.1%.

For mother education level, out of 1306 students, 3.6% of mothers were illiterate and literate but no formal schooling, 34.4% of mothers graduated from primary school, 15.1% of mothers graduated from middle school, 21.2% of mothers graduated from high school, 20.1% of mothers graduated from university, 4.4% of mothers have graduate level of education. On the other hand, 18.2% of fathers graduated from primary school, 16% of fathers graduated from middle school, 25.6% of fathers graduated from high school, 29.5% of fathers graduated from university, and 9.5% of fathers have graduate level of education.

In terms of the number of books available at home, the majority of students have more than 61 books at home (55.1%), 7.4% of the students have 1-15 books, 11.5% of the students have 16-30 books, 12.9% of the students have 31-45 books and 12.0% of the students have 46-60 books. As Table 4.1 shows, 4.2% of the students stated that they didn't read any book at all in previous year. Among the remaining students 35.2%, read 1-5 books, about 26% read 6-10 books, 15.0% read 11-15 books and about 18% read 16 and more books in the previous year.

4.2 Students' Attitude Towards Philosophy Course

In order to describe the students' attitude towards the philosophy course, total score was calculated for each individual. As can be seen on Table 4.2 the overall mean value is 102.43 and the SD is 26.078. If a student had marked "indecisive" (3) for all 33 questions, his/her score would have been 99 which is very close to the mean value (102.43). Therefore, these shows that overall the participant students are generally indecisive in their positive attitude towards philosophy course.

Table 4.2 The Means and Standart Deviations of the Student's Attitude Scores Towards Philosophy Course

| | N | Mean | Std. Deviation |
|-----------------|------|--------|----------------|
| Sum of Attitude | 1322 | 102.43 | 26.078 |
| Valid N | 1322 | 95.89 | 26.203 |

4.3 Results Concerning the Difference among Student's Attitude with Respect to Certain Background Variables

Data obtained from 1322 high school students was analyzed through using inferential statistical analyses for the purpose of answering the following research questions:

- Is there any significant difference among the students' attitude towards philosophy course with respect to gender?
- Is there any significant difference among the students' attitude towards philosophy course with respect to school type?
- Is there any significant difference among the students' attitude towards philosophy course with respect to grade level of the students?

- Is there any significant difference among the students' attitude towards philosophy course with respect to GPA of previous semester?
- Is there any significant difference among the students' attitude towards philosophy course with respect to philosophy course grade from the previous semester?
- Is there any significant difference among the students' attitude towards philosophy course with respect to mother's and father's education?
- Is there any significant difference among the students' attitude towards philosophy course with respect to number of books available at home?
- Is there any significant difference among the students' attitude towards philosophy course with respect to number of books read in the previous year?

4.3.1 Gender

In order to examine whether the gender created a significant difference in students' attitude towards philosophy course ANOVA was employed. As can be seen on Table 4.3 ANOVA results indicated a significant mean difference among students with respect to gender ($F(1,1312)=56.916, p<0.05$).

Table 4.3 The Results of ANOVA for the Differences of Participants' Attitudes with Respect to Gender

| | Sum of Squares | Df | Mean Square | F | p |
|----------------|----------------|------|-------------|--------|--------|
| Between Groups | 371144.333 | 1 | 37154.333 | 56.916 | 0.000* |
| Within Groups | 856466.650 | 1312 | 652.795 | | |
| Total | 893620.988 | 1313 | | | |

*Significant at the .05 level

When the mean scores of males and females are examined (Table 4.4), it was seen that females have more positive attitude towards philosophy course (M=106.74, SD=25.106) than males (M=95.89, SD=26.203).

Table 4.4 The Means and Standard Deviations of the Student's Attitude with Respect to Gender

| | N | Mean | Std. Deviation | Std. Error |
|--------|-----|--------|----------------|------------|
| Female | 789 | 106.74 | 25.106 | .894 |
| Male | 525 | 95.89 | 26.203 | 1.144 |

4.3.2 School type

In order to examine whether the school type created a significant difference in students' attitude towards philosophy course ANOVA was employed. Results indicated a significant mean difference among students with respect to school type ($F(4,1317)=16.374, p<0.05$).

Table 4.5 The Results of ANOVA for the Differences of Participants' Attitudes with Respect to School Type

| | Sum of Squares | Df | Mean Square | F | p |
|----------------|----------------|------|-------------|--------|--------|
| Between Groups | 42558.601 | 4 | 10639.650 | 16.374 | 0.000* |
| Within Groups | 855795.360 | 1317 | 649.807 | | |
| Total | 898353.961 | 1321 | | | |

*Significant at the .05 level

In order to examine the differences between schools, Bonferroni post-hoc test was conducted (Table 4.6). The test resulted in significant differences ($p<.05$) between the İmam-Hatip High School and Anatolian High School. There were also significant

differences ($p < .05$) between the Public High School and Anatolia High School, Private High School and Vocational High School.

Table 4.6 Follow-up Test Results for the Effect of School Type on Students' Attitudes Towards Philosophy Course

| (I) School Type | (J) School Type | Mean Difference (I-J) | Std.Error | Sig. |
|-----------------|-----------------|-----------------------|-----------|-------|
| İmam Hatip | Anatolia High | -9.246* | 2.347 | .001 |
| | Private High | -4.408 | 2.678 | 1.000 |
| | Public High | 5.535 | 2.053 | .071 |
| | Vocational | -5.730 | 2.296 | .127 |
| Anatolia High | İmam Hatip | 9.246* | 2.347 | .001 |
| | Private High | 4.837 | 2.678 | .711 |
| | Public High | 14.781* | 2.053 | .000 |
| | Vocational | 3.516 | 2.296 | 1.000 |
| Private High | İmam Hatip | 4.408 | 2.678 | 1.000 |
| | Anatolia High | -4.837 | 2.678 | .711 |
| | Public High | 9.943* | 2.425 | .000 |
| | Vocational | -1.321 | 2.634 | 1.000 |
| Public High | İmam Hatip | -5.535 | 2.053 | .071 |
| | Anatolia High | -14.781* | 2.053 | .000 |
| | Private High | -9.943* | 2.425 | .000 |
| | Vocational | -11.265* | 1.995 | .000 |
| Vocational | İmam Hatip | 5.730 | 2.296 | .127 |
| | Anatolia High | -3.516 | 2.296 | 1.000 |
| | Private High | 1.321 | 2.634 | 1.000 |
| | Public High | 11.265* | 1.995 | .000 |

When the mean scores of school types are examined (Table 4.7), it was seen that Anatolian High School's students have more positive attitude towards philosophy course (M=110.28, SD=22.835) compared to the Vocational High school (M=106.76, SD=26.750), and Private High School students (M=105.44, SD=23.543). The Public High School's students have the lowest mean level (M=95.50, SD=27.550) followed by the İmam-Hatip High School students (M=101.03, SD=23.651).

Table 4.7 The Means and Standart Deviations of the Student's Attitude with Respect to the School Type

| | N | Mean | Std. Deviation | Std. Error |
|-----------------|-----|--------|----------------|------------|
| İmam Hatip H.S. | 236 | 101.03 | 23.651 | 1.540 |
| Anatolia H.S. | 236 | 110.28 | 22.835 | 1.486 |
| Private H.S. | 147 | 105.44 | 23.543 | 1.942 |
| Public H.S. | 445 | 95.50 | 27.550 | 1.306 |
| Vocational H.S. | 258 | 106.76 | 26.750 | 1.665 |

4.3.3 Grade level of the students

In order to examine whether the grade level of students created a significant difference in students' attitude towards philosophy course ANOVA was employed. Results indicated a significant mean difference among student with respect to grade level ($F(1,1319)=4.869, p<0.05$).

Table 4.8 The Results of ANOVA for the Differences of Participants' Attitudes with Respect to Grade Level

| | Sum of Squares | Df | Mean Square | F | p |
|----------------|----------------|------|-------------|-------|-------|
| Between Groups | 3300.327 | 1 | 3300.327 | 4.869 | .028* |
| Within Groups | 894056.190 | 1319 | 677.829 | | |
| Total | 897356.517 | 1320 | | | |

*Significant at the .05 level

When the mean scores of grade level are examined (Table 4.9), it was seen that 12th grade students' attitude towards philosophy course is more positive (M=105.44, SD=26.568) in comparison to 11th grade students (M=101.58, SD=25.889).

Table 4.9 The Means and Standart Deviations of the Student's Attitude with Respect to the Grade Level

| | N | Mean | Std. Deviation | Std. Error |
|----|------|--------|----------------|------------|
| 11 | 1039 | 101.58 | 25.889 | .803 |
| 12 | 282 | 105.44 | 26.568 | 1.582 |

4.3.4 GPA of previous semester

GPA of previous semester is categorized as Moderate (0-1-2-3) 2, and High (4-5) 3. In order to examine whether GPA of previous semester created a significant difference in students' attitude towards philosophy course ANOVA was employed. As can be seen on Table 4.10 a significant mean difference was found among students with respect to GPA of previous semester ($F(1,1013)=39.703, p<0.05$).

Table 4.10 The Results of ANOVA for the Differences of Participants' Attitudes with Respect to GPA

| | Sum of Squares | Df | Mean Square | F | p |
|----------------|----------------|------|-------------|--------|--------|
| Between Groups | 26374.902 | 1 | 26374.902 | 39.703 | 0.000* |
| Within Groups | 672942.931 | 1013 | 664.307 | | |
| Total | 699317.833 | 1014 | | | |

*Significant at the .05 level.

When the mean scores of GPA of the students are examined (Table 4.11), it was seen that students whose GPA was at high level (4-5) have more positive attitude (M=107.12, SD=24.951) than whose GPA at moderate level (0-1-2-3) (M=96.40, SD=27.272).

Table 4.11 The Means and Standard Deviations of the Student's Attitude with Respect to their GPA of Previous Semester

| | N | Mean | Std. Deviation | Std. Error |
|--------------------|-----|--------|----------------|------------|
| Moderate (0-1-2-3) | 350 | 96.40 | 27.272 | 1.458 |
| High (4-5) | 665 | 107.12 | 24.951 | .968 |

4.3.5 Philosophy course grade from the previous semester

Philosophy course grade from the previous semester is categorized as Poor (0-1) 1, Moderate (2-3) 2, High (4-5) 3. In order to examine whether philosophy course grade from the previous semester created a significant difference in students' attitude towards philosophy course ANOVA was employed. As shown on Table 4.12 a significant mean difference was found among students with respect to philosophy course grade from the previous semester ($F(2,1268)=100.139, p<0.05$).

Table 4.12 The Results of ANOVA for the Differences of Participants' Attitudes with Respect to Philosophy Course Grade from the Previous Semester

| | Sum of Squares | Df | Mean Square | F | p |
|----------------|----------------|------|-------------|---------|--------|
| Between Groups | 118252.300 | 2 | 59126.164 | 100.139 | 0.000* |
| Within Groups | 748676.700 | 1268 | 590.439 | | |
| Total | 866929.000 | 1270 | | | |

*Significant at the .05 level.

In order to examine the differences between achievement levels, Bonferroni post-hoc test was conducted (Table 4.13). The test resulted in significant differences ($p < .05$) between the poor achievers and moderate achiever, and between poor achievers and high achievers.

Table 4.13 Follow-up Test Results for the Effect of Grade for Philosophy Course on Students' Attitudes Towards Philosophy Course

| (I) Grade for philosophy Course | (J) Grade for philosophy course | Mean Difference (I-J) | Std. Error | Sig. |
|---------------------------------|---------------------------------|-----------------------|------------|------|
| 1 | 2 | -13.56(*) | 2.913 | .000 |
| | 3 | -29.95(*) | 2.790 | .000 |
| 2 | 1 | 13.56(*) | 2.913 | .000 |
| | 3 | -16.39(*) | 1.487 | .000 |
| 3 | 1 | 29.95(*) | 2.790 | .000 |
| | 2 | 16.39(*) | 1.487 | .000 |

*The mean difference is significant at the .05 level.

When the mean scores of achievement level of the philosophy course are examined (Table 4.14), it was seen that students whose philosophy course's score was the highest level (4-5) have more positive attitude ($M=109.81$, $SD=24.328$) than moderate level ($M=93.42$, $SD=24.831$), and poor level ($M=79.86$, $SD=21.201$).

Table 4.14 The Means and Standard Deviations of the Student's Attitude with Respect to their Grade for Philosophy Course

| | N | Mean | Std. Deviation | Std. Error |
|----------------|-----|--------|----------------|------------|
| Poor (0-1) | 84 | 79.86 | 21.201 | 2.313 |
| Moderate (2-3) | 406 | 93.42 | 24.831 | 1.232 |
| High (4-5) | 781 | 109.81 | 24.328 | .871 |

4.3.6 Mother's education

In order to examine whether the mother's education created a significant difference in students' attitude towards philosophy course ANOVA was employed. According to Table 4.15 there is no significant difference among the students' attitude towards philosophy course with respect to their mother's education ($F(5,1300)=1.699$, $p>0.05$).

Table 4.15 The Results of ANOVA for the Differences of Participants' Attitudes with Respect to Mother's Education

| | Sum of Squares | Df | Mean Square | F | p |
|----------------|----------------|------|-------------|-------|--------|
| Between Groups | 5723.230 | 5 | 1144.646 | 1.699 | 0.132* |
| Within Groups | 875842.200 | 1300 | 673.725 | | |
| Total | 881565.430 | 1305 | | | |

*Significant at the .05 level

4.3.7 Father's education

In order to examine whether the father's education created a significant difference in students' attitude towards philosophy course ANOVA was employed. According to Table 4.16, since $(F(4,1302)=3.375, p<0.05)$, there is a significant difference among the students' attitude towards the philosophy course with respect to their father's education level. In order to understand which dimensions of father education level created the significant difference, Bonferroni test was employed. As can be seen on the Table 4.17 graduate level created a significant difference with primary school level of education. When the mean scores are examined (Table 4.18), it was observed that students whose fathers have graduate level of education have more positive attitude ($M=108.64, SD=26.007$) towards philosophy course compared to students whose fathers have primary level of education ($M=98.49, SD=26.470$). No significant difference was observed between graduate level of education ($M=108.64, SD=26.007$) and secondary education ($M=101.35, SD=26.929$) and between graduate level of education and high school education ($M=102.90, SD=25.940$), and between graduate level of education and undergraduate level of education ($M=103.02, SD=24.871$).

Table 4.16 The Results of ANOVA for the Differences of Participants' Attitudes with Respect to Father's Education

| | Sum of Squares | Df | Mean Square | F | p |
|----------------|----------------|------|-------------|-------|-------|
| Between Groups | 9052.968 | 4 | 2263.242 | 3.375 | .009* |
| Within Groups | 873040.200 | 1302 | 670.538 | | |
| Total | 882093.168 | 1306 | | | |

*Significant at the .05 level

Table 4.17 Follow-up Test Results for the Effect of Father Education on Students' Attitudes Towards Philosophy Course

| (I) Father education | (J) Father education | Mean Difference | | |
|----------------------|----------------------|-----------------|------------|-------|
| | | (I-J) | Std. Error | Sig. |
| Primary | Secondary | -2.89 | 2.439 | 1.000 |
| | High | -4.60 | 2.180 | .348 |
| | Undergraduate | -4.52 | 2.117 | .329 |
| | Graduate | -9.79(*) | 2.848 | .006* |
| Secondary | Primary | 2.89 | 2.439 | 1.000 |
| | High | -1.72 | 2.271 | 1.000 |
| | Undergraduate | -1.63 | 2.211 | 1.000 |
| | Graduate | -6.90 | 2.919 | .182 |
| High | Primary | 4.60 | 2.180 | .348 |
| | Secondary | 1.72 | 2.271 | 1.000 |
| | Undergraduate | .08 | 1.922 | 1.000 |
| | Graduate | -5.18 | 2.706 | .557 |
| Undergraduate | Primary | 4.52 | 2.117 | .329 |
| | Secondary | 1.63 | 2.211 | 1.000 |
| | High | -.08 | 1.922 | 1.000 |
| | Graduate | -5.26 | 2.655 | .476 |
| Graduate | Primary | 9.79(*) | 2.848 | .006* |
| | Secondary | 6.90 | 2.919 | .182 |
| | High | 5.18 | 2.706 | .557 |
| | Undergraduate | 5.26 | 2.655 | .476 |

*The mean difference is significant at the .05 level.

Table 4.18 The Means and Standard Deviations of the Student's Attitude with Respect to the Father's Education

| | N | Mean | Std. Deviation | Std. Error |
|----------------|-----|--------|----------------|------------|
| Primary School | 241 | 98.49 | 26.470 | 1.705 |
| Middle School | 211 | 101.35 | 26.929 | 1.854 |
| High School | 399 | 102.90 | 25.940 | 1.409 |
| Undergraduate | 390 | 103.02 | 24.871 | 1.259 |
| Graduate | 126 | 108.64 | 26.007 | 2.317 |

4.3.8 Mother's and father's education

In order to examine whether the interaction of mother's and father's education creates differences in students' attitude towards philosophy course two-way ANOVA was employed. As seen in Table 4.19, the interaction between father's and mother's education levels did not create a difference in student's attitude towards philosophy course ($F(17,1276)=1.308, p>.005$).

Table 4.19 The Results of ANOVA for the Differences of Participants' Attitudes with Respect to Father and Mother Education Level

| Source | Type III | | | | |
|----------------------------|----------------|------|-------------|----------|------|
| | Sum of Squares | df | Mean Square | F | Sig. |
| Corrected Model | 25356.414(a) | 26 | 975.247 | 1.461 | .063 |
| Intercept | 1657148.262 | 1 | 1657148.262 | 2482.593 | .000 |
| Mother education | 734.722 | 5 | 146.944 | .220 | .954 |
| Father education | 2667.686 | 4 | 666.922 | .999 | .407 |
| Mother edu * father edu | 14847.472 | 17 | 873.381 | 1.308 | .178 |
| Error | 851738.962 | 1276 | 667.507 | | |
| Total | 14551266.000 | 1303 | | | |
| Corrected Total | 877095.375 | 1302 | | | |

a R Squared=.029 (Adjusted R Squared=.009)

4.3.9 The number of books available at home

In order to examine whether the number of books available at home created a significant difference in students' attitude towards philosophy course ANOVA was employed. As can be seen on Table 4.20 ANOVA results indicated a significant mean difference among student with respect to the numbers of books available at their home ($F(4,1304) = 5.328, p < 0.05$). In order to understand which dimensions of the number of books available at home created the significant difference, Bonferroni test was employed. As can be seen on the Table 4.21 having more than 61 books and having 45-60 books have created a significant difference with having 1-15 books. When the mean scores are examined (Table 4.22), having more than 61 books have the highest attitude level ($M=104.60, SD=25.957$) towards philosophy course compared to the number of books 1-15 available at home ($M=94.08, SD=24.007$) and to the number of books 16-30 available at home ($M=97.49, SD=26.198$). No significant difference was observed between having more than 61 books ($M=104.60, SD=25.957$) and having 46-60 books ($M=103.70, SD=26.655$).

Table 4.20 The Results of ANOVA for the Differences of Participants' Attitudes with Respect to the Number of Books Available at Home

| | Sum of Squares | Df | Mean Square | F | p |
|----------------|----------------|------|-------------|-------|-------|
| Between Groups | 14284.491 | 4 | 3571.123 | 5.328 | .000* |
| Within Groups | 874066.750 | 1304 | 670.297 | | |
| Total | 888351.241 | 1308 | | | |

*Significant at the .05 level

Table 4.21 Follow-up Test Results for the Effect of Number of Books Available at Home on Students' Attitudes Towards Philosophy Course

| (I) Number of books available at home | (J) Number of books available at home | Mean Difference (I-J) | Std. Error | Sig. |
|---------------------------------------|---------------------------------------|-----------------------|------------|-------|
| Between 1-15 | Between 16-30 | -3.412 | 3.354 | 1.000 |
| | Between 31-45 | -7.661 | 3.280 | .197 |
| | Between 46-60 | -9.623* | 3.325 | .039 |
| | 61 and above | -10.514* | 2.786 | .002 |
| Between 16-30 | Between 1-15 | 3.412 | 3.354 | 1.000 |
| | Between 31-45 | -4.249 | 2.886 | 1.000 |
| | Between 46-60 | -6.211 | 2.937 | .346 |
| | 61 and above | -7.102* | 2.309 | .021 |
| Between 31-45 | Between 1-15 | 7.661 | 3.280 | .197 |
| | Between 16-30 | 4.249 | 2.886 | 1.000 |
| | Between 46-60 | -1.962 | 2.852 | 1.000 |
| | 61 and above | -2.853 | 2.200 | 1.000 |
| Between 46-60 | Between 1-15 | 9.623* | 3.325 | .039 |
| | Between 16-30 | 6.211 | 2.937 | .346 |
| | Between 31-45 | 1.962 | 2.852 | 1.000 |
| | 61 and above | -.891 | 2.266 | 1.000 |
| 61 and above | Between 1-15 | 10.514* | 2.786 | .002 |
| | Between 16-30 | 7.102* | 2.309 | .021 |
| | Between 31-45 | 2.853 | 2.200 | 1.000 |
| | Between 46-60 | .891 | 2.266 | 1.000 |

Table 4.22 The Means and Standard Deviations of the Student's Attitude with Respect to the Number of Books Available at Home

| | N | Mean | Std. Deviation | Std. Error |
|---------------|-----|--------|----------------|------------|
| Between 1-15 | 98 | 94.08 | 24.007 | 2.425 |
| Between 16-30 | 152 | 97.49 | 26.198 | 2.125 |
| Between 31-45 | 171 | 101.74 | 25.639 | 1.961 |
| Between 46-60 | 159 | 103.70 | 26.655 | 2.114 |
| 61 and above | 729 | 104.60 | 25.957 | .961 |

4.3.10 The number of books read in the previous year

In order to examine whether the number of book read in the previous year created a significant difference in students' attitude towards philosophy course ANOVA was employed. Results shown on Table 4.23 indicated a significant mean difference among students with respect to the number of books that read in the previous year ($F(4,1306)=17.898, p<0.05$).

Table 4.23 The Results of ANOVA for the Differences of Participants' Attitudes with Respect to the Number of Books that Read in the Previous Year

| | Sum of Squares | Df | Mean Square | F | p |
|----------------|----------------|------|-------------|--------|-------|
| Between Groups | 46257.077 | 4 | 11564.269 | 17.898 | .000* |
| Within Groups | 843820.950 | 1306 | 646.111 | | |
| Total | 890078.027 | 1310 | | | |

*Significant at the .05

In order to examine the differences between the number of books read in the previous year, Bonferroni post-hoc test was conducted (Table 4.24). The test resulted

in significant differences ($p < .05$) between the none, 1-5 books, 6-10 books, 11-15 books and 16 and above.

Table 4.24 Follow-up Test Results for the Effect of Number of Books Read in the Previous Year on Students' Attitudes Towards Philosophy Course

| (I) Number of books read previous year | (J) Number of books read previous year | Mean Difference (I-J) | Std. Error | Sig. |
|--|--|-----------------------|------------|-------|
| None | Between 1-5 | -17.686* | 3.595 | .000 |
| | Between 6-10 | -22.237* | 3.664 | .000 |
| | Between 11-15 | -26.750* | 3.825 | .000 |
| | 16 and above | -27.201* | 3.777 | .000 |
| Between 1-5 | None | 17.686* | 3.595 | .000 |
| | Between 6-10 | -4.551 | 1.808 | .120 |
| | Between 11-15 | -9.064* | 2.116 | .000 |
| | 16 and above | -9.516* | 2.028 | .000 |
| Between 6-10 | None | 22.237* | 3.664 | .000 |
| | Between 1-5 | 4.551 | 1.808 | .120 |
| | Between 11-15 | -4.513 | 2.231 | .432 |
| | 16 and above | -4.965 | 2.147 | .209 |
| Between 11-15 | None | 26.750* | 3.825 | .000 |
| | Between 1-5 | 9.064* | 2.116 | .000 |
| | Between 6-10 | 4.513 | 2.231 | .432 |
| | 16 and above | -.451 | 2.412 | 1.000 |
| 16 and above | None | 27.201* | 3.777 | .000 |
| | Between 1-5 | 9.516* | 2.028 | .000 |
| | Between 6-10 | 4.965 | 2.147 | .209 |
| | Between 11-15 | .451 | 2.412 | 1.000 |

When the mean scores of the numbers of books that read last year are examined (Table 4.25), it was seen that the students who read more than 16 books in the previous year have the highest attitude level towards philosophy course (M=108.45, SD=27.437).

Table 4.25 The Means and Standart Deviations of the Student's Attitude with Respect to the Number of Books Read in the Previous Year

| | N | Mean | Std. Deviation | Std. Error |
|---------------|-----|--------|----------------|------------|
| None | 56 | 81.25 | 21.758 | 2.908 |
| Between 1-5 | 466 | 98.94 | 24.778 | 1.148 |
| Between 6-10 | 343 | 103.49 | 25.583 | 1.381 |
| Between 11-15 | 209 | 108.00 | 25.077 | 1.735 |
| 16 and above | 237 | 108.45 | 27.437 | 1.732 |

4.4 Summary of Findings

The findings indicated that the students have moderately positive attitude level towards philosophy course. It was seen that the students are generally indecisive in their positive attitude. The findings also showed that with the exception of the mother's education, each of the variables examined (gender, grade level, school type, GPA of previous semester, philosophy course grade from the previous semester, father's education, number of books available at home, number of books read in the previous year) created a significant difference in student attitude towards the philosophy course.

The findings also showed that there was a significant difference between males and females in terms of attitude towards philosophy course. Females had more positive attitude towards philosophy course than males had.

According to the results, the school type significantly affected the attitude of students towards philosophy course. Anatolian High Schools' students have the highest level of positive attitude towards philosophy course among all school types. Whereas Public High Schools' students have the lowest attitude towards philosophy course.

The grade level of the students has also indicated a significant difference in the attitude of the students towards philosophy course. It was seen that 12th grade students' attitude towards philosophy course is more positive than the attitude of 11th grade students.

The GPA of previous semester and the previous semester's grade of philosophy course have significant affect on the attitude of the students towards philosophy course. As the GPA of previous semester and the grade of philosophy course increases, the attitude of the students towards philosophy course becomes more positive.

The findings of this study indicated that mother's education does not have any significant difference in the attitude of the students towards philosophy course. On the other hand father's education level has shown significant difference in the attitude of the students towards philosophy course. Students whose fathers have

graduate level of education have more positive attitude towards philosophy course compared to students whose fathers have primary level of education.

Both number of books available at home and number of books read previous year have significant difference in the attitude of the students towards philosophy course. The attitude of the students towards philosophy course is linear with the number of books available at home and the number of books read in the previous year. Having more than 61 books have the highest attitude level towards philosophy course compared to the number of books 1-15 available at home and to the number of books 16-30 available at home. Students who read more than 16 books in the previous year have the highest attitude level towards philosophy course.

CHAPTER 5

DISCUSSION, CONCLUSION AND IMPLICATIONS

This study investigated high school students' attitudes towards the philosophy course and whether or not attitude was significantly affected by differences in student gender, grade level, school type, GPA of previous semester, philosophy course grade from the previous semester, mother's and father's education, number of books available at home and number of books read in the previous year. This chapter presents a synthesis of the findings in relation to the relevant literature, conclusions drawn from these findings and implications for practice and future research.

5.1. Discussion

5.1.1 Student's attitude towards the philosophy course

Overall, the high school students participating in this study had a moderately positive attitude towards the philosophy course. This is in line with the findings of Küçükkurt (2006), Çokan (2007) and Engin and Yıldırım (1998), who also found that high school students had a moderately positive attitude towards the philosophy course, but it conflicts with Boloğlu (2008), who found students had a relatively negative attitude towards the course. The author of the latter study explained this negative attitude as related to the lack of effective teaching and learning in the classroom.

It is possible that the manner in which the philosophy course curriculum is implemented inhibits a positive attitude towards the course. As stated by Engin and Yıldırım (1998), "the philosophy curriculum focuses mostly on transmission of

knowledge, while other significant elements like developing thinking skills and positive attitudes towards the subject were emphasized to a lesser degree” (p.103). Bozoğlu (2008) also showed that students were unable to develop critical thinking skills through the course.

Other factors affecting teaching and learning are the widespread use of teacher-centered teaching methods in philosophy classes (Engin and Yıldırım, 1998), which tends to restrict the participation of students in the course; the lack of a clear and simple textbook; and the relatively small number of questions on philosophy in comparison to other subjects in the University Entrance Examinations, which may limit student attention towards the course. Furthermore, students’ late introduction to philosophy – the course is not given until Grade 11 – may prevent students from developing a positive attitude towards philosophy as a subject.

5.1.2 Differences among students’ attitudes with respect to certain background variables

Gender

Female students were found to have a significantly more positive attitude towards the philosophy course than male students. This is in line with earlier studies (Akdağ, 2002; Küçükkurt, 2006; Çokan, 2007). Female students have been found to have a more positive attitude towards social studies courses as well (Corbin, 1994; Hansberry and Moroz, 2001).

The philosophy course is based on thinking, and some studies (Hayran, 2000;

Kökdemir, 2003) have shown females to have relatively higher levels of critical and creative thinking skills when compared to males. For example, Kökdemir (2003) found females scored higher than males on topics requiring a search for truth, analytical skills, curiosity, open-mindedness and self-confidence. It is also possible that female students may feel more comfortable than male students in expressing themselves verbally, which would be likely to increase female student participation in philosophy classes. Furthermore females have been shown to have a more positive attitude than males with regard to the social sciences (Catsambis, 1995; Simpson and Oliver, 1995; Weinburgh, 1995; Ramsden, 1998; Demirci, 2004; Özden, Kara and Tekin, 2008).

Grade level

Students in Grade 12 had a significantly more positive attitude towards the philosophy course when compared to students in Grade 11. It is possible that students in Grade 12, who took the philosophy course in the previous year, might remember the more positive experiences in the course. Moreover, in comparison to students in Grade 11, Grade 12 students are more focused on University Entrance Examinations and may appreciate the important role of the philosophy course in terms of their success on this exam.

School type

Among the various school types attended by the participants, students in Anatolian high schools had the most positive attitude towards the philosophy course, followed

by students in vocational high schools, private high schools, *İmam-Hatip* high schools and regular public high schools students.

This positive attitude of Anatolian high school students towards the philosophy course might be explained in several ways. First, students are selected and placed into Anatolian High Schools through a centralized examination, which may indicate that these students are more determined to succeed in their studies than students at other high schools, and since the ultimate goal of students at Anatolian High Schools is to succeed on their university entrance examinations, they tend to pay a high level of attention to all their school courses. Second, the small class size in Anatolian High Schools in comparison to other high schools allows for a greater level of teacher-student interaction in the classroom, which is likely to increase student participation and improve the effectiveness of student-centered teaching methods. Third, Anatolian high school and Anatolian teacher high school students and graduates have been found to have better critical thinking skills than students and graduates of other types of high schools (Kürüm, 2002; Kaloç, 2005). Given that the philosophy course requires critical thinking skills, students with better critical thinking skills are likely to be more successful and therefore develop more positive attitudes and feelings towards the subject.

In general, vocational high schools are designed to provide vocational education to meet the practical needs of industry; therefore, philosophy and other social science courses carry less weight than vocational courses, which make up the bulk of the curriculum. However, the characteristics of the chemistry vocational high school in

which the questionnaire was administered differs somewhat from other vocational high schools in Turkey in that it is the only school to provide education specifically geared to the field of chemistry. Placement in the chemistry vocational high school is highly selective based on primary school achievement, and it is therefore possible that students at this school have a more positive attitude towards all of their subjects, including philosophy.

In Turkey, private high schools were established to offer students higher standards and facilities than those available in traditional public high schools. The more suitable classroom environment and the smaller class size in private high schools in comparison to public high schools increases student class participation and may explain the relatively more positive attitude towards the philosophy class among private high school students when compared to public high school students.

İmam-Hatip high school students were found to have a less positive attitude towards the philosophy course than Anatolian high school students, chemistry vocational high school students and private high school students. Because *İmam-Hatip* high schools were established to train individuals needed for religious services, the curriculum at these schools is focused on courses related to theology, and it is possible that the relatively negative attitude towards the philosophy course found among *İmam-Hatip* high school students may be related to differences in content between the philosophy course and the rest of the school curriculum.

Finally, public high school students had the least positive attitude towards the philosophy course among all the students participating in this study. This may be related to the high number of students per classroom in public high schools, which has a negative effect on teacher-student communication. The low expectations of public high school students regarding the university entrance examinations may also have a negative effect on their attitude.

GPA of previous semester

Students with higher GPAs (4-5) in the previous semester had a significantly more positive attitude towards the philosophy course than students with lower GPAs (0-3). This is in line with many studies conducted in Turkey and abroad. Başaran (1975) stated that success has a stronger effect than failure which has only a limited effect on the students. Furthermore, a student who has a positive attitude towards a course has a sense of success and self-confidence. This feeling results in more success on that course (Tepe, 1999). In the longitudinal study by Simpson and Oliver (1990) has revealed that as the students attitude towards the science course decreases, their success on the science course decreases.

Altınok (2004) has also found the similar findings in her study. The former achievements of the students have a significant effect on their success on the courses. The successful students have positive attitude about the course, and vice versa. Oruç (1993) has also stated that secondary school students having higher scores on the science course have more positive attitudes towards the course.

Philosophy course grade from the previous semester

Achievement level in the philosophy course creates a significant difference in student attitude towards the course, with students receiving higher grades (4-5) during the previous semester having a more positive attitude than students with lower grades (0-3). Earlier studies examining the effect of student grades on attitude have found mixed results; for example, Öztöpalan (2007) found students with higher grades in a music course had a more positive attitude towards the course than students with lower grades, whereas Sevilmış (2006) found student grades in their geography course did not significantly affect their attitude towards the course.

Mother's and father's education

While the father's education was found to have a significant difference in student attitude towards the philosophy course, the mother's education and the interaction of both parents' education did not have a significant difference. Çokan (2007) found that parents' education did not have a significant effect on student attitudes towards Philosophy course. Similarly, Öztöpalan (2007) found mothers' education did not have a significant effect on student attitudes towards music courses. Furthermore, Özdemir (2008) found that parents' education did not have a significant effect on student attitudes towards Turkish literature courses.

In another study, while the father's education was found to have a significant difference in student attitude towards the Turkish course, the mother's education did not have a significant difference (Yetim, 2006). Uzun (2006) found mothers' education did not have a significant effect on student attitudes towards Social

Science courses. On the other hand, Külçe (2005) revealed that while the mother's education has created a significant difference in the attitudes of the students towards Science course, the father's education did not create a significant difference. Külçe (2005) explained this result as mothers have more interaction with their children than fathers even if both mothers and fathers have the same education level.

In this study, I found that father's education has created a significant difference in students' attitude towards philosophy course. This might be related to fathers being more involved with the intellectual development of children whereas mothers mostly help their children for their essential daily activities.

Number of books available at home

The number of books available at home was found to have a significant difference in student attitude toward the philosophy course. Students having more than 61 books had the most positive attitude towards the philosophy course. This is in line with Papanastasiou's (2002) emphasis on home environment as an agency that aids in the construction of student attitude and school achievement.

Number of books read in the previous year

The number of books read in the previous year was found to have a significant difference in student attitude towards the philosophy course. Akdağ (2002) also found a relation between reading rates and student attitude towards the philosophy course, and Çokan (2007) reported that students who read books on a daily basis

have more positive attitudes towards the philosophy course than students who do not read books on a regular basis.

5.2 Conclusions and Implications

5.2.1 Implications for practice

The main aim of including the philosophy course in high school education program is to assist raising intelligent individuals who can not only think freely, creatively and critically but also in a philosophical way and whoever admires the dogmatic ideas. However, the philosophy course curriculum, the methods applied in the philosophy course and the philosophy text books can not instill the activity of critical and creative thinking into students. Although the students have a positive attitude towards philosophical thinking, this attitude can easily turn into a negative one because of the course curriculum, teaching methods applied in the philosophy course and the philosophy text books.

As a result, it can be said that, an effort to solve the problems mentioned above about the philosophy course should be made instead of using techniques which make the students memorize what is written in the course book, the programs should be arranged according to let the students think creatively and critically. Besides the improvement in the philosophy course curriculum, the modern teaching techniques, the new approaches in teaching and learning process should be taken into consideration.

Although the attitude of students towards the philosophy course tended to be positive, it was not at the level desired, which suggests that certain changes can be initiated in curriculum and classroom practices that may improve student attitudes towards the course. Specifically, teaching methods need to be enriched through the use of a variety of techniques, including group work and discussions. In order to successfully implement these and similar student-centered teaching methods, the number of course hours per week should be increased and teachers should be provided with in-service training activities that will help them to effectively implement student-centered approaches and prepare the necessary materials required by such approaches. Given the suggestion that well-prepared readings, scientific journals and books improve critical thinking ability (Meyers, 1998), teachers and students should be provided with such materials to be used as supplements to the course textbook, which may also be redesigned in terms of content and appearance to present information in a simpler, clearer manner. Finally, a creative and productive classroom environment should be created that incorporates the use of technology-based learning.

In view of the finding that students' reading habits play an important role in their attitude towards the philosophy course, reading and interpretation of texts related to philosophical subjects may be supported through the Turkish Language and Literature course and school philosophy clubs. Improving the implementation of the 'Reading Hour' project designed to promote reading among students may also help improve attitudes among students.

In addition, teachers and principals should be aware of the relatively negative attitude of male students towards the philosophy course when compared to the attitude of female students.

5.2.2 Implications for further research

The findings of the present study have several implications for future research. Specifically, qualitative studies should be conducted in order to provide a more detailed understanding of the factors implicated in influencing student attitude towards the philosophy course, especially the factors of school type and gender. With regard to the latter, additional research that examines how student attitudes towards the philosophy course can be improved should focus especially on male students. Other studies may look at different variables such as student achievement and attitude in other social science courses, academic area of focus, attendance at private courses and opinions regarding course textbooks. In addition to student attitudes, the attitude of teachers of the philosophy course can also be examined. Finally, considering that the 2010-2011 education period is the first in which a new philosophy curriculum will be implemented, future studies may evaluate the effect of this new curriculum on student attitudes towards the philosophy course.

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APPENDICES

Appendix A

FELSEFE DERSİ TUTUM ÖLÇEĞİ

Sevgili Öğrenciler,

Aşağıda Felsefe dersine yönelik duygu ve düşünceleri yansıtan cümleler yer almaktadır. Bu ifadelere vereceğiniz samimi cevapların, Felsefe dersinin işlenişinde etkili olması beklenmektedir. Anketin arka sayfasında vereceğiniz kişisel bilgiler yalnızca bu araştırmada kullanılacaktır. Ankete adınızı yazmanız gerekmektedir. Bu çalışmaya katılıp zaman ayırdığınız için çok teşekkür ederim.

Nilüfer Zencirci, ODTÜ Eğitim Bilimleri Bölümü, Yüksek Lisans Öğrencisi

Bölüm 1

KİŞİSEL BİLGİLER

1. Okulunuzun Adı :
2. Sınıfınız/ Alanınız :
3. Cinsiyetiniz : Kadın Erkek
4. Birinci dönem sonunda karnenizdeki not ortalamanız :
5. Birinci dönem sonunda karnenizdeki Felsefe dersi notunuz :
- (Bu soruyu yalnızca lise 3.sınıflar cevaplayacaklardır)
- Geçen yılki yıl sonu Felsefe dersi karne notunuz :
- (Bu soruyu yalnızca Lise 4.sınıflar cevaplayacaktır)
6. Annenizin en son bitirdiği okul :
 - Okuryazar değil
 - Okuryazar ama bir okulu bitirmedi
 - İlkokul mezunu (5 yıllık)
 - Ortaokul mezunu
 - Lise mezunu
 - Üniversite mezunu
 - Üniversite üstü (yüksek lisans veya doktora)
7. Babanızın en son bitirdiği okul :
 - Okuryazar değil
 - Okuryazar ama bir okulu bitirmedi
 - İlkokul mezunu (5 yıllık)
 - Ortaokul mezunu
 - Lise mezunu
 - Üniversite mezunu
 - Üniversite üstü (yüksek lisans veya doktora)

8. Evinizde ders kitapları dışında kaç kitap var?
 Hiç 1-5 6-10 11-15 16 ve üzeri
9. Son 1 yıl içinde kaç kitap okudunuz?
 Hiç 1-5 6-10 11-15 16 ve üzeri

Bölüm 2

Lütfen aşağıdaki cümleleri dikkatle okuyunuz. Her cümlenin karşısında "Tamamen katılıyorum", "Katılıyorum", "Kararsızım", "Katılmıyorum", "Kesinlikle katılmıyorum" olmak üzere 5 seçenek verilmiştir. Kendinize en uygun olan seçeneklerden yalnızca birini işaretleyiniz.

| | | Tamamen Katılıyorum 5 | Katılıyorum 4 | Kararsızım 3 | Katılmıyorum 2 | Kesinlikle Katılmıyorum 1 |
|----|--|-----------------------|---------------|--------------|----------------|---------------------------|
| 1 | Felsefe dersini seviyorum. | | | | | |
| 2 | Felsefe dersine ayrılan zamanı az buluyorum. | | | | | |
| 3 | Felsefe dersi olaylara çok yönlü bakmamı sağladı. | | | | | |
| 4 | Zorunlu olmasa felsefe dersine girmezdim. | | | | | |
| 5 | Felsefe ile ilgili kitapları okumaktan zevk alırım. | | | | | |
| 6 | Felsefe dersinde kendimi rahat hissedirim. | | | | | |
| 7 | Filozofların hayatlarını merak ediyorum. | | | | | |
| 8 | Evde felsefe dersine çalışırım. | | | | | |
| 9 | Felsefe dersi ile ilgili ödevleri yapmaktan zevk alırım. | | | | | |
| 10 | Felsefe dersini sevmiyorum. | | | | | |
| 11 | Felsefe dersini sadece öğretmenin anlatması sıkıcı oluyor. | | | | | |
| 12 | Felsefe dersi pek çok konuyu sorgulamamı sağladı. | | | | | |
| 13 | Felsefe dersinde çok sıkılırım. | | | | | |
| 14 | Felsefe dersi ile ilgili konuları tartışmaktan mutlu olurum. | | | | | |
| 15 | Felsefe ders kitabı anlaşılır değil. | | | | | |
| 16 | Felsefe dersi aklımı karıştırıyor. | | | | | |
| 17 | Felsefe dersinde öğrenmiş olduğum bilgileri günlük yaşamımda kullanırım. | | | | | |
| 18 | İleride felsefe ile ilgili bir bölümde okumak isterim. | | | | | |
| 19 | Felsefe dersine yalnızca sınıfı geçmek için çalışırım. | | | | | |
| 20 | Felsefe dersi benim için ilgi çekicidir. | | | | | |
| 21 | Felsefe ile ilgili kitapları okurken sıkılırım. | | | | | |
| 22 | Arkadaşlarımla felsefe konularını konuşmaktan hoşlanmam. | | | | | |

| | | | | | | |
|----|---|--|--|--|--|--|
| 23 | Felsefe dersi sınavlarından korkarım. | | | | | |
| 24 | Felsefe dersinde başarılı olmak benim için önemlidir. | | | | | |
| 25 | Felsefe dersi merakımı gideriyor. | | | | | |
| 26 | Felsefe ile ilgili konuları arkadaşlarımla tartışmaktan hoşlanırım. | | | | | |
| 27 | Felsefe ile ilgili ödevleri yapmaktan sıkılıyorum. | | | | | |
| 28 | Felsefe dersinde konu anlatımında teknolojiden yararlanılmalı. | | | | | |
| 29 | Felsefe dersini anlamada güçlük çekiyorum. | | | | | |
| 30 | Felsefe dersi genel kültürümü arttırıyor. | | | | | |
| 31 | Felsefe dersine girerken büyük sıkıntı duyarım. | | | | | |
| 32 | Felsefe dersi gerekli ve önemli bir derstir. | | | | | |
| 33 | Felsefe dersinden korkarım. | | | | | |



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21 Nisan 2010

Gönderilen: Doç.Dr. Cennet Engin Demir

Eğitim Bilimleri Bölümü

Gönderen : Prof. Dr. Canan Özgen

IAK Başkan Yardımcısı

İlgi : Etik Onayı

Danışmanlığımı yapmış olduğunuz Eğitim Bilimleri Bölümü Yüksek Lisans Öğrencisi Nilüfer Zencirci ile birlikte yürüttüğünüz "Lise Öğrencilerinin Felsefe Dersine Yönelik Tutumları" başlıklı çalışmanız "İnsan Araştırmaları Etik Komitesi" tarafından uygun görülerek gerekli onay verilmiştir.

Bilgilerinize saygılarımla sunarım.

Etik Komite Onayı

Uygundur

21/04/2010

Prof.Dr. Canan ÖZGEN

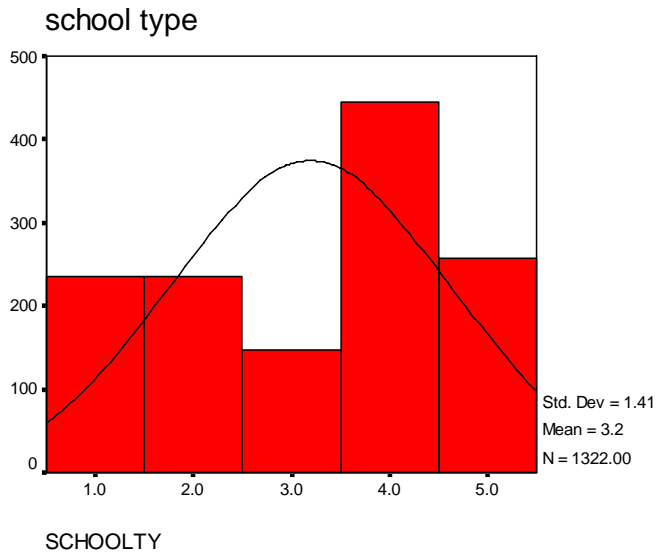
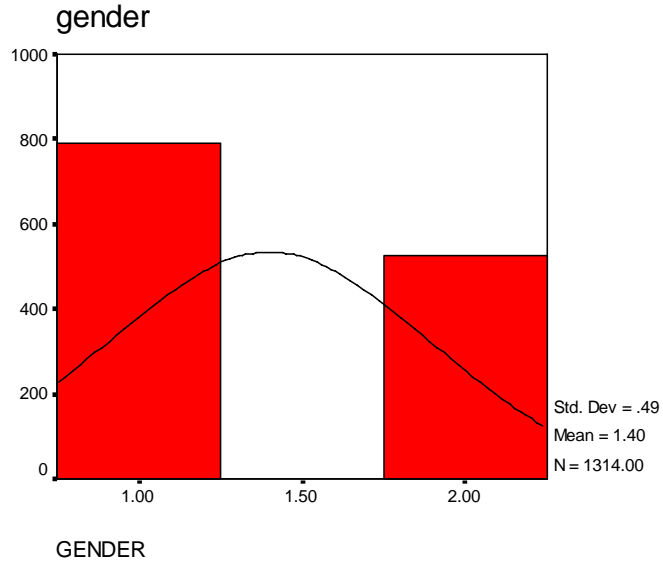
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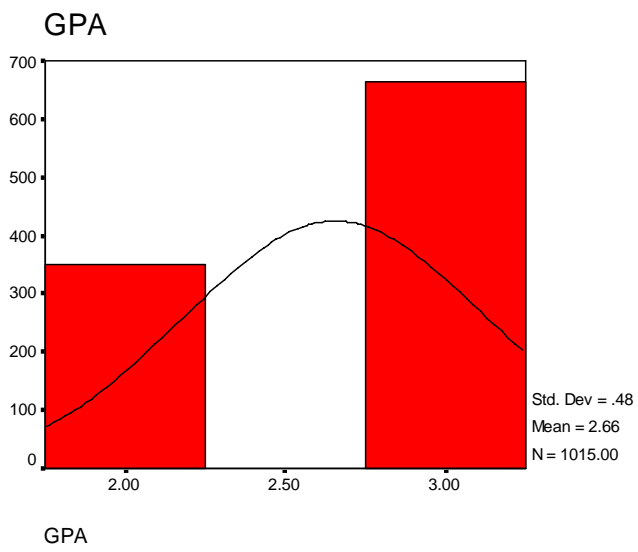
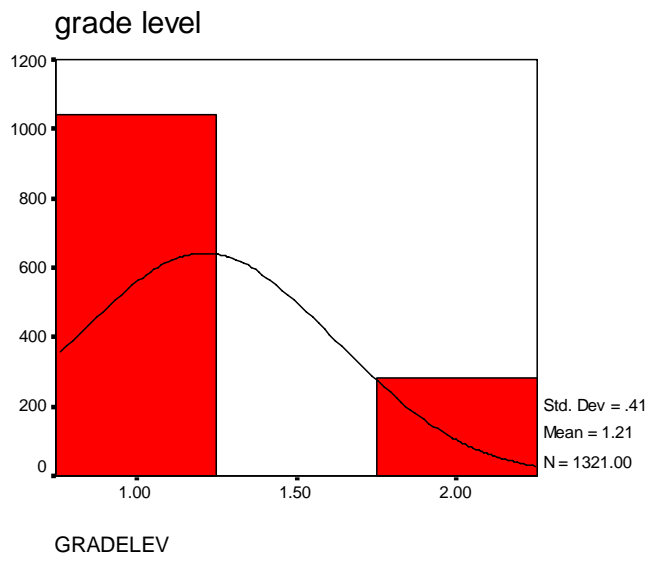
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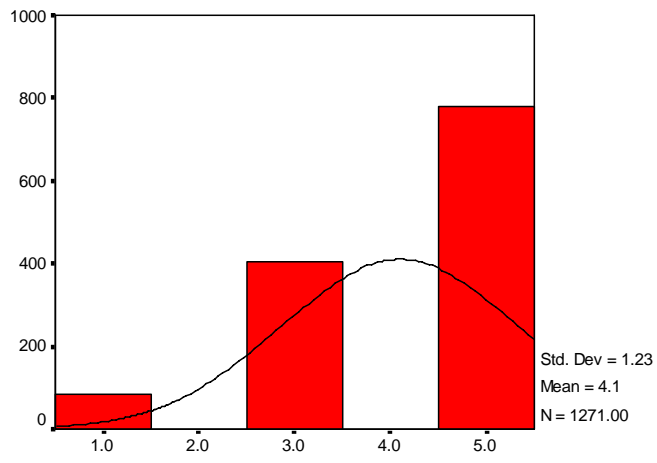
Appendix C

HISTOGRAMS



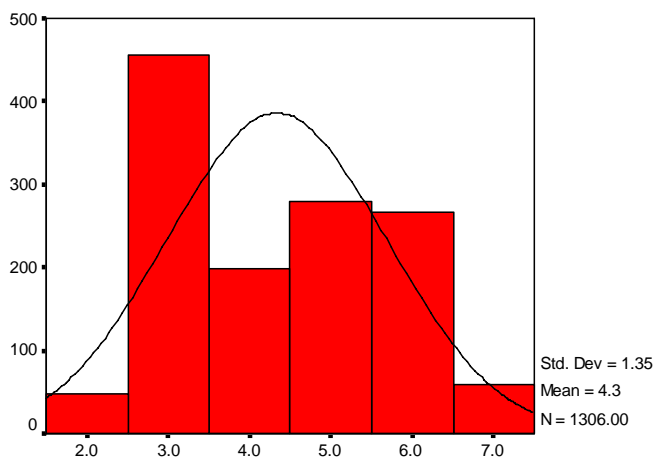


Grade Point of Philosophy Course



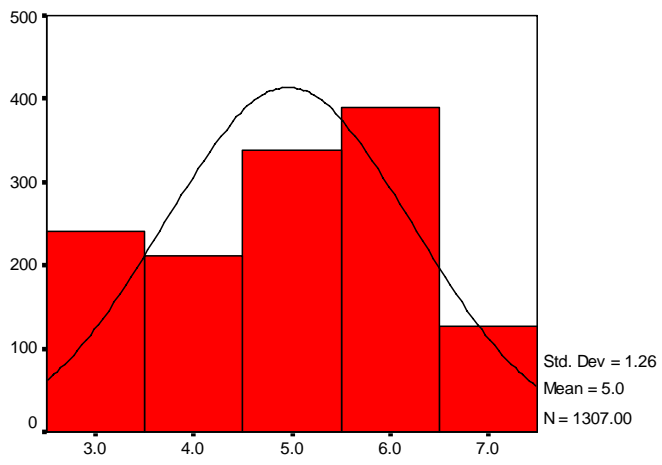
GRAPHIL

mother education



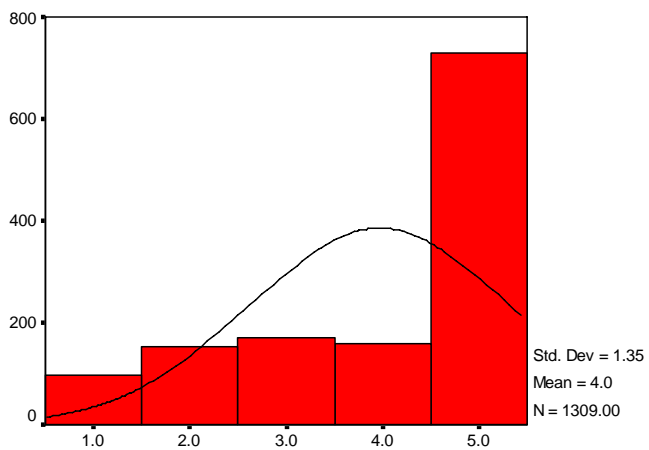
MOTHEDU

father education



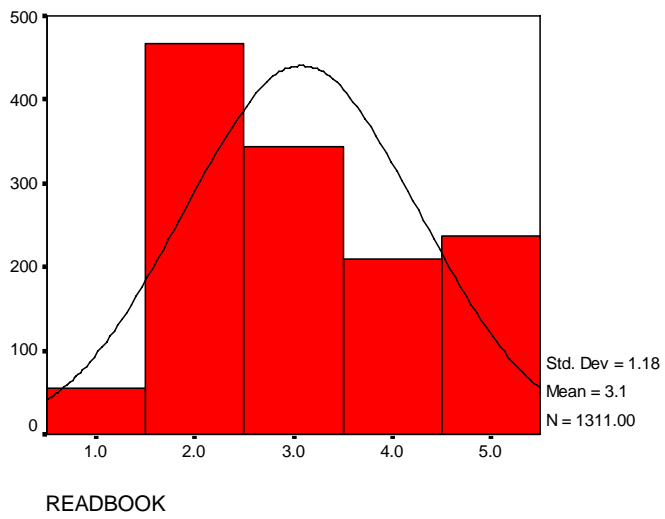
FATHEDU

Number of Books available at home



NUMBOOK

Number of Books Read in the Previous year



Appendix D

SKEWNESS and KURTOSIS

Descriptive Statistics

| | N | Skewness | | Kurtosis | |
|-------------------------|------|-----------|------------|-----------|------------|
| | | Statistic | Std. Error | Statistic | Std. Error |
| School Type | 1322 | -.307 | .067 | -1.277 | .134 |
| Grade | 1321 | 1.400 | .067 | -.040 | .135 |
| Gender | 1314 | .411 | .067 | -1.834 | .135 |
| Father's Education | 1307 | -.192 | .068 | -1.049 | .135 |
| Mother's Education | 1306 | .226 | .068 | -1.159 | .135 |
| # of books read | 1311 | .344 | .068 | -1.040 | .135 |
| # of books at home | 1309 | -.957 | .068 | -.502 | .135 |
| Philosophy course grade | 1271 | -1.033 | .069 | .015 | .137 |
| GPA | 1015 | -.846 | .077 | -.721 | .153 |
| Valid N (listwise) | 981 | | | | |