THE ROLE OF PERCEIVED CAREER BARRIERS AND GENDER IN PREDICTING COMMITMENT TO CAREER CHOICES OF UNIVERSITY STUDENTS

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ABSTRACT

THE ROLE OF PERCEIVED CAREER BARRIERS AND GENDER IN PREDICTING COMMITMENT TO CAREER CHOICES OF UNIVERSITY STUDENTS

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The purpose of the present study was to examine the role of gender and perceived career barriers in career commitment of university students. Participants were 437 (231 females, 206 males) volunteered students from the five faculties of Middle East Technical University (METU). A pilot study was carried out with 285 (122 males and 163 females) volunteered students of METU for the adaptation of Commitment to Career Choices Scale (CCCS). The results of exploratory factor analysis yielded a 28–item scale with two factors; Vocational Exploration and Commitment (VEC) and Tendency to Foreclose (TTF). As for the main purpose of the present study, CCCS was administered to the students together with the Perceived Career Barriers Qustionnaire measured by 11 barriers identified by the researcher as personality characteristics, interests, ability, gender effect, vocational knowledge, economic gain opportunity, employment opportunity, work conditions, other life choices (e.g., marriage, child, etc.), expectations of family and expectations of partner. The results of multiple regression analysis revealed that VEC scores as measured by CCCS were predicted by three independent variables of vocational knowledge, employment

opportunities and personality characteristics. This result indicated that the students who had high perception of barrier on vocational knowledge, employment opportunity and personality characteristics had low commitment to their career choices. The second regression analysis revealed that TTF scores as measured by CCCS were predicted only by employment opportunities, indicating that the students who had higher perception of employment opportunity as a barrier also had lower level of tendency to foreclose and they had a tendency to evaluate different career options. Findings are discussed within the framework of career counseling research and practice.

Key words: Commitment to Career Choices Scale, vocational exploration and commitment, tendency to foreclose, perceived career barriers, university students.

ALGILANAN KARİYER ENGELLERİNİN VE CİNSİYETİN ÜNİVERSİTE ÖĞRENCİLERİNİN KARİYER SEÇİMLERİNE BAĞLILIĞINI YORDAMADAKİ ROLÜ

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Bu araştırmanın amacı, cinsiyet ve algılanan kariyer engellerinin, kariyer seçimlerine bağlılıktaki rolünü incelemektir. Araştırma, Orta Doğu Teknik Üniversitesi'nin (ODTÜ) beş fakültesinden araştırmaya gönüllü olarak katılan 437 (231 kız, 206 erkek) öğrenci üzerinde yürütülmüştür. Kariyer Seçimlerine Bağlılık Ölçeği (KSBÖ)'nin uyarlama çalışması, 285 (163 kız, 122 erkek) gönüllü ODTÜ öğrenci üzerinde yapılmıştır. Açıklayıcı faktör analizi sonuçları, 28 maddelik ölçeğin iki faktörlü olduğunu göstermiştir; mesleki araştırma ve bağlılık ("Vocational Exploration and Commitment") ve erken karar verme eğilimi ("Tendency to Foreclose"). Araştırmanın temel amacıyla ilgili olarak, öğrencilere KSBÖ ile birlikte, araştırmacı tarafından belirlenen 11 algılanan kariyer engelinden oluşan Algılanan Kariyer Engelleri Anketi uygulanmıştır. Bu engeller kişilik özellikleri, ilgiler, yetenekler, cinsiyet etkisi, mesleki bilgi, maddi kazanç olanağı, işe girme olanağı, iş koşulları, diğer hayat seçimleri (evlilik, çocuk sahibi olmak, vb.), ailenin beklentileri ve eş veya kız ya da erkek arkadaşın beklentileri olarak belirlenmiştir.

Çoklu regresyon analizlerinin sonuçlarına göre, mesleki araştırma ve bağlılık puanlarını yordayan değişkenlerin mesleki bilgi, işe girme olanağı ve kişilik özellikleri olduğu saptanmıştır. Bu sonuç, mesleki bilgilerini, iş bulma olanağını ve kişilik özelliklerini engel olarak algılayan öğrencilerin kariyer seçimlerine bağlılık düzeylerinin düşük olduğunu göstermektedir. İkinci regresyon analizi ise erken karar verme eğilimini sadece işe girme olanağının yordadığını ortaya koymaktadır. Bu sonuca göre işe girme olanağını büyük bir engel olarak algılayan öğrencilerin erken karar verme eğilimleri düşmekte ve farklı meslekleri araştırıp değerlendirme eğilimleri artmaktadır. Sonuçlar kariyer gelişimi ve danışmanlığı alanındaki araştırma ve uygulamalar kapsamında tartışılmıştır.

Anahtar kelimeler: Kariyer Seçimlerine Bağlılık Ölçeği, mesleki araştırma ve bağlılık, erken karar verme eğilimi, algılanan kariyer engelleri, üniversite öğrencileri

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CHAPTER I

INTRODUCTION

In the literature, several theories of career choices have been developed in order to explain how and why individuals choose and enter different occupations (Crites, 1969). Historically, Parsons's (1909, as cited in Crites, 1969) pioneering theory of vocational choice was focused on finding the best match between individuals and occupational alternatives. As it was mentioned by Zunker (2006), Parsons' theory constituted the foundation of the entire counseling field by offering a counseling framework beyond a vocational theory. The succeeding theories and models after Parsons continued to progress as trait-oriented models by nourishing from his theory, and emphasized the degree of fit between an individual's personality type, personal expectations and motives, and prospective work environments such as Holland's (1973) well-known typology approach.

After the early trait-oriented theory and models, a developmental perspective emerged with Donald Super. Super (1957) presented his life stage model to the field, and identified each life stage including their unique vocational tasks. These tasks, which start with crystallizing vocational preferences, continue until advancing in the occupation as a life long process in Super's developmental theory. During these stages, individuals also acquire their self-concept gradually by internal factors (e.g., interests, values, abilities and personality) and external conditions (e.g., contextual interactions), and their career choices become a means to express their self-concepts. In addition, Super introduced a life space theory, which highlights the effects of life roles (e.g., son or daughter, student, leisurate, citizen, worker, spouse or partner, etc.) on career development according to how much importance attached to them as well as which contextual factors shape these roles.

Besides Super's contribution with a comprehensive theory that consider the life span developmental experiences and contextual factors on career development, some other theories referred to specifically university students' career development from again a developmental perspective. As a pioneering one, Perry (1953; as cited in Gordon, 1981) studied the university experiences of students and found a logical and cognitive developmental process. According to his developmental model, university students' early approach of a simple reasoning, which rely on authority suggestions for the right answers, gradually improve by self-processing and gaining responsibility for their own lives, and reach a commitment stage. At the commitment stage, the students are committed to one alternative, which is in accordance with their potential and becomes a conscious part of their identity. Tiedemann (1963; as cited in Gordon, 1981) also emphasized a gradual process of improving awareness and specification in career choices, which reach a clarification stage to verify the commitment. Furthermore, Harren (1979), who developed a decision making model that nourished from Tiedemann's views, also included the necessity of alternatives besides the prior commitment that has congruence with the self-concept. Thus, a committed individual is not stuck on just one option but is flexible to consider some other alternatives when it is necessary with the help of his/her advanced self-concept.

Nourishing from these major developmental theories and models, Blustein, Ellis and Devenis (1989) pointed out the gradual process that the individuals progress from a level of being undecided to being highly committed, which is beyond the career decidedness concept. Career decidedness corresponds to the level of certainty about career choices, whereas career commitment includes certainty as well as self-confidence about one's choices, a positive sense of one's vocational future and an awareness of potential obstacles. Commitment to career choices, which is investigated in the current study as the dependent variable, has two dimensions. First one, which is vocational exploration and commitment, refers to openness to explore different career options before committing to a choice while the second dimension, which is tendency to foreclose, refers to prematurely commit

to a choice without a true exploration of potential career options (Blustein et al., 1989).

Corresponding to the scope of awareness on potential obstacles and tendency to foreclose dimension of career commitment notion, the emphasis of theories that mention the limiting effects of contextual factors on career development is another base for the present study. For example, Gottfredson's theory of occupational aspirations presented the perception and internalization of sex roles, social status and intellectual ability as major factors that limit the range of occupational aspirations. Furthermore, Social Cognitive Career Theory developed by Brown and Lent (1996) is another theory that mentions the elimination of some potential career options due to inaccurate self-efficacy beliefs and outcome expectations and suggests interventions that identify, analyze and prepare for possible career choice barriers.

Derived from these major theories and views, the role of perceived barriers or the factors that impede the career choice process of university students has been investigated by several researchers (Leal-Muniz and Constantine, 2005; Lent, Brown, Talleyrand, McPartland, Davis, Chopra, Alexander, Suthakaran, & Chai, 2002; Luzzo, 1995; Luzzo & McWhirter, 2001; Swanson & Tokar, 1991; Wu, 1994). The common examples of barriers found in these studies were financial concerns, role conflicts due to concurrent work and family plans, gender discrimination, perceived opportunities in labor market, expectations and influences of family and significant others, etc. In all these studies, gender differences in perceived career-related barriers were also controlled, yielding contradictory findings regarding the differences in the perceptions of barriers for male and female university students.

Although the perceived career barriers are widely studied, the limited number of studies investigated the relationship between perceived barriers and commitment to career choices. In a series of studies conducted for developing Commitment to Career Choices Scale, Blustein, Ellis and Devenis (1989) found a significant

relationship between high level of commitment to a career choice and overcoming barriers to achieve career choices. Although limited in number, their results took scientific attention of some researchers in understanding the role of perceived barriers in career commitment. In one study, Wu (1994) investigated the relationship between career commitment and perception of career barriers. The results showed that college women who perceived career related barriers as obstacles were more uncertain about their career choice and had more tendency to foreclose. Moreover, senior women reported gender discrimination as the most significant barrier. In a more recent study (Leal-Muniz & Constantine, 2005), it was found that greater perceived ethnic and gender related occupational barriers positively predicted the tendency to foreclose dimension of career commitment.

These two studies mentioned above provide a base for increasing the understanding regarding the important role of occupational barriers perceived by the university students in their career commitment. One further conclusion can also be drawn from the results of these studies that socio-economic and cultural issues might play an important role in the relationships between perceived barriers and career commitment which provided the rational for the present study. The career research in the field of counseling in Turkey are generally focused on the factors that influence the career decision making prior to university and only a very limited number of them investigated the current career development of university students (Kağnıcı, 1999; Kaya, 1996). Thus, investigating the relationship between perceived barriers and commitment to career choices of university students become crucial not only in terms of filling the gap in the Turkish literature but also providing an initial assessment of university students' career commitment process for the educators and student support services.

1. 1. The Purpose of the Study

Thus, the purpose of the present study was to examine the role of perceived barriers and gender in career commitment of a sample of university students. More specifically, present study investigated the extent to which vocational exploration

and commitment, and tendency to foreclose dimensions of career commitment measured by Commitment to Career Choices Scale were predicted by perceived career barriers outlined in the present study as personality characteristics, interests, ability, gender effect, vocational knowledge, economic gain opportunity, employment opportunity, work conditions, other life choices, expectations of family and expectations of partner. Gender was also controlled based on the suggestions of both career barriers and career commitment literature.

1.2. Research Questions

Research questions of present research are as follows:

1. To what extent Vocational Exploration and Commitment (VEC) as measured by Commitment to Career Choices Scale is predicted by gender and perceived career barriers identified as personality characteristics, interests, ability, gender effect, vocational knowledge, economic gain opportunity, employment opportunity, work conditions, other life choices, expectations of family and expectations of partner?

2. To what extent Tendency to Foreclose (TTF) as measured by Commitment to Career Choices Scale is predicted by gender and perceived career barriers identified as personality characteristics, interests, ability, gender effect, vocational knowledge, economic gain opportunity, employment opportunity, work conditions, other life choices, expectations of family and expectations of partner?

1.3. Definition of the Terms

The definitions of the terms that were presented in this study are as follows:

Vocation, Occupation, Job: Activities of employment and positions of employment (Tolbert, 1974).

Career: The sequence of occupations, jobs, and positions engaged in or occupied throughout the lifetime of a person (Super, 1970, p. 113).

Career Development: The lifelong process of developing beliefs, values, skills, aptitudes, interests, personality characteristics and knowledge of the world of work (Tolbert, 1974).

Career Commitment: As a product of vocational decision process, career commitment means the certainty and self-confidence about vocational choice and having a positive expectation regarding a future with this choice (Blustein et al., 1989). The two primary constructs of career commitment process are vocational exploration and commitment and tendency to foreclose. The former refers to openness to explore different career options before committing to a choice while the latter refers to commit to a choice without a true exploration of potential career options (Blustein et al., 1989).

Perceived career barriers: These barriers refer to obstacles perceived to influence an individual's educational and occupational plans or conflicts that impede one's career choices (Wu, 1994). Some common examples from the literature are financial concerns, role conflicts due to concurrent work and family plans, gender discrimination, perceived opportunities in labor market, expectations and influences of family and significant others, etc.

1.4. Significance of the Study

The present study aims at investigating the role of perceived career barriers in two dimensions of career commitment among male and female university students. The importance of the present study is two fold: Research and counseling practices.

For Erikson (1968), commitment to career choices is a major developmental task in late adolescence and early adulthood period and the inability to decide on an occupational identity is what disturbs young people in general. However, the situation in Turkey is quite different which made the present study significant in

examining the role of career-related barriers in career commitment of university students. First of all, it should be mentioned that many students in Turkey have to make their career decisions very early about the ages of 15 and 16 since the study areas that they choose in high school determine the range of their alternative university majors. Accordingly, they specify their vocational or major choices prior to university. However, there are some important factors that may impede an effective vocational exploration and career decision making process. For instance, the first concerns of many students and parents are being successful in university entrance exam (UEE) because of a very competitive election system. When the main aim becomes entering a university and preferably to the top university, the competition and hard preparation to UEE process may outshine the importance of a true exploration for a mature and satisfying career choice consistent with personal aspirations as well as the necessity of gaining ability to decide on one's own occupational identity.

On the other hand, top universities in Turkey (such as the one from which this study's sample was derived) started to have more students from diverse regional and socio-economic backgrounds. Students from small regions begin their university education from behind with disadvantages such as lack of a background on English language and computer technology. They may also bring their economic difficulties to university as a growing problem due to university life costs away from their families. For many of such students, career concerns may not be a matter of personal interest and true exploration, besides the limitation of UEE system.

Furthermore, career choice does not only and simply mean the choice of a major or vocation in the university but also what kind of jobs and activities to do within that area. The students, who are uncertain or uncommitted to their majors, still have some limited and competitive alternative ways in the university such as changing their majors and choosing a second branch. For this reason, university students' ongoing engagement in career exploration and planning as well as their need for

related skills are crucial to assess and to understand for helping their future planning.

State policy makers and universities are seeking ways to improve the quality of university education, and they are focusing on the improvement of curriculums or increasing the percentage of their 'successful' students, who are hired by top companies. However, what determines the contribution of a high quality education to the society is the welfare and satisfaction of overall student population, who should have the willingness, motivation, opportunities and plans for a successful school-to-work transition. Our educational system is eliminating the students according to their test achievement beginning from primary school years rather than paying attention to their unique individual talents and potentials, and finally, the top students are being chosen and coming to universities. However, we do not know how many of these most successful and hard working students have mature and goal-oriented career decisions in tune with their personality and aspirations or we do not know whether they have any effective exploration skills for further goal setting and planning. In addition, it is not clear to what extent university students are left with the consequences of possible early and immature choices, how they are managing with a challenging career exploration process and what kind of barriers limit their choices.

Turkey, as being a collectivist culture, in which our family and social interaction concerns have important effects on life decisions, and also as a developing country with a dense youth population that cause a competitive educational system, rapidly changing world of work and demanding labor market, contextual factors are essential to study, and are expected to be related to commitment to career choices. In spite of all these contextual limitations and lack of knowledge about current situation, the factors that influence career commitment during the university years did not receive any attention in Turkey. Therefore, the present study is of importance in studying the role of career-related barriers perceived by the university students in the components of career commitment.

From the counseling perspective, it is known that career choice and career development tasks are major concerns on people's lives, which may bring different levels of stress, anxiety and confusion as well as an increasing demand for professional support in mental health field with regard to career-related problems (Blustein et al., 1989). However, in our country, the vocational guidance services in high schools are reported to be inadequate and less important by school counselors compared to other school counseling activities due to huge numbers of students in schools (Gazioğlu-İşmen, Bekçi, Güler-Yavuz, & Çayırdağ, 2007). In consequence, the university students may not have enough knowledge as well as certainty on their choices of major. Accordingly, university career counseling services and academic departments need a more comprehensive understanding of students' career commitment for more effective and goal-oriented career counseling or academic advice services.

Besides the inadequate vocational guidance support and the challeges due to educational system in Turkey, university students are still in the exploration process according to major theories (e.g, Super, 1957). Their interests, skills, values and aspirations are subject to change and reshape during university years. However, they are also expected to make more specific choices and plans in the second half of this process. During this transition from education to work life by taking the responsibilities of new roles, university students have special circumstances that they also have to learn new skills for establishment in their new lives and choices. Investigating the role of perceived barriers as well as gender in the current study are expected to provide some initial information on specific career development needs of the university students and to start to close the related gap in Turkish literature.

1.5. Limitations of the Study

The present study has some limitations. First, the data were collected only from the Middle East Technical University (METU). Thus, the results cannot be generalized to the students in other universities. Second, all measurement tools utilized in the

present study are self-report measures and prone to validity problems. The use of self-report measures instead of experimentations and actual behavioral observations makes it impossible to draw causal inferences.

CHAPTER II

REVIEW OF THE LITERATURE

This section starts with the historical development of career theories which provide a base for career commitment approach. The second part presents the research conducted abroad regarding university students' career commitment, perceived career barriers and the relationship between career commitment and perceived barriers. The third part includes the studies on university students' career development conducted in Turkey. Finally, the fourth part summarizes the reviewed literature.

2.1. The Historical Development of Career Theories

Studies of working such as choice of a vocation and finding a job are rooted in the effects of industrialization in the late 1800's in the United States and Europe. Industrialization caused rapidly growing occupational options in urban areas by resulting in a significant loss of jobs in the agricultural sector; immigration from rural to urban areas; and overcrowded living and working conditions. During this period, many people but especially poor immigrants started to be in need of job placement whereas the young people were faced with longer educational experiences and diverse occupational options. Vocational guidance activities started at this time with Frank Parsons's sincere interest in social reform and a belief in equality and opportunity for everyone (Blustein, 2006). He worked with people from poor workers to students, who had an increasing number of educational alternatives. Parsons's conceptualization of vocational guidance in his book "Choosing a Vocation" (1909) constituted the foundation for the entire field. Parsons developed a three-step framework in choosing a vocation: "(1) a clear understanding of yourself, aptitudes, abilities, interests, ambitions, resources, limitations, and their causes; (2) a knowledge of the requirements and conditions of success, advantages and disadvantages, compensations, opportunities, and prospects in different lines of work; and (3) true reasoning on the relations of these two groups of facts" (as cited in Crites, 1969, p. 90).

Following this approach, known as the trait-factor model, studies of human abilities through mental measurement movement after World War I (such as measurement of intelligence, aptitudes, vocational interests, personal characteristics, etc.) started the use of tests by vocational counselors and applied psychologists with the aim of finding the best match between individuals and the requirements of jobs (Blustein, 2006; Zunker, 2006). Trait-factor model continued to be a base of many theories. For example, John Holland (1973) developed a theory of types and personenvironment interactions that was aimed to investigate the best match in the name of congruence, which means the degree of fit between an individual's personality type and current or prospective work environment.

While early trait-factor approaches and person-environment fit model considered vocational choice a one time decision making based on a rational reasoning and separate from other life roles and experiences with the aim of finding the most effective and suitable vocation, Super (1957) started his first works on a developmental theory, which introduced the life stage and self-concept models. Vocational life stages that he postulated through the Buehler's analysis of life histories were growth (from birth to about age of 14), exploration (from the age of about 15 to about 25), establishment (from the age of 25 to 45), maintenance (from the age of about 45 to 65), and decline (starting at about the age of 65). Later, the vocational tasks belong to each life stage were also identified: crystallizing a vocational preference, specifying it, implementing it, stabilizing in the chosen vocation, consolidating one's status, and advancing in the occupation (Super, 1970). In accordance with offering a developmental process including stages and tasks rather than a basic vocational choice concept, Super brought a new notion called career, which is "the sequence of occupations, jobs, and positions engaged in or occupied throughout the lifetime of a person" (Super, 1970, p. 113).

Super's theory has been criticized by Niles and Haris-Bowlsbey (2002) because of two points. Firstly, he approached career choice as a product of a gradual process that starts in early childhood and supposed as if every child has opportunities and initiatives for the exploration of self and various options in the world of work. Although his developmental model is a very ideal one for optimal career choice, it is also far away from the realities of many young people who are even unaware of their interests, abilities and personality traits. Moreover, certain career development tasks such as crystallizing and specifying occupational preferences for future planning in the exploration stage are not on the agenda for many young people whose options are limited to a few ones that they can easily reach with minimum cost and that are within the restricting conditions of their possible educational preparation, gender, social and familial circumstances. Secondly, Super also developed a life space theory, which is based on the notion of life style that is constituted by the simultaneous combination of life roles people play. For Super, there are nine major roles that people play throughout their lives, which are (1) son or daughter, (2) student, (3) leisurate, (4) citizen, (5) worker, (6) spouse (or partner), (7) homemaker, (8) parent, and (9) pensioner. According to the priority of these life roles and the importance attached to them, people develop life role selfconcepts, which are shaped by contextual factors (for example, family, school, peer groups, the economy, community). However, many people are unaware of how contextual factors affect their self concepts and life roles (Blustein, 1994). Thus, Super's theory can also be regarded as a leading one that brings up the effects of other life experiences on the work decisions and lives. Compared to early traitfactor models that consider to find the best match between personal characteristics and the various aspects of vocational alternatives, Super signalized the importance of a developmentally continuous career exploration and decision making process, which is also taking the effects of other life roles and contextual factors into consideration.

There are some other very contributing theories and models that pay attention to developmental and contextual factors, and which specifically underlie the university students' career development and decision making as they are briefly

summarized by Gordon (1981). Gordon presents the summary and integration of two other important theories that approach to university students' career decision making from a developmental perspective. Gordon reports that, besides Super as the first one, Perry (1953, as cited in Gordon, 1981) also studied the career development and decision making of university students in the form of stages too. According to the first stage of Perry, which is dualism, the students have an external locus of control that they need direct guidance from authority such as teachers and counselors without self-processing, and they purely rely on test results and authority suggestions. They perceive the situation as if there is only one right choice to seek through a simplistic reasoning. In the second stage, multiplicity, although students are still influenced by the external forces such as parents, peers, faculty or the job market, they realize the possibility of multiple right and wrong decisions. They experience an anxiety of failing to find the right decision and seek for help from counselors or advisors. However, they understand that they themselves have to involve in this exploration and decision-making process since another person (even the authority) can not have the right decision for them. In the third stage, relativism, the students can put together the various elements of an exploration and reasoning process and make decisions by taking the responsibility of their own lives. They also shape their decisions according to their needs and interests. Finally, in the fourth and last stage, which is called commitment, career choices come to be very conscious as a part of identity and the individual realizes the nature of commitment as an on-going process that require a continuous effort to integrate new experience and knowledge. Perry points out that a few students reach the commitment process when they are in university.

As the second one, Gordon (1981) summarizes Tiedemann's theory of career decision making (1963, as cited in Gordon, 1981). In the center of Tiedemann's views, there is the responsibility of individuals for their own behavior besides their capability to take purposeful action. Tiedemann has a stage approach too, and the first four of his stages represent the university students' experiences. These four stages start with the exploration stage that students do not have even any positive or negative alternatives. The second stage is crystallization, which brings some

alternatives and an improving comparison and evaluation process. The third stage is career choice that the students commit themselves to a specific career choice and experience a satisfaction and relief as a consequence. Accordingly, they also start to prepare their action plans to reach their career goals. Fourthly, in the clarification stage, students internalize their choices and verify their commitment. Moreover, for Harren (1979) who developed a career decision making model nourishing from Tiedemann's views, commitment requires an alternative in tune with one's vocational self-concept, which is also integrated with self-concept. It can be concluded that these pioneering theories and views on career development and decision making point out a common developmental process from being uncertain or uncommitted to being committed, which is elaborated by similar steps such as exploration, crystallization, evaluation, decision making and verification.

Besides the developmental perspectives underlie the career commitment concept, it is also crucial to review some other major theoretical contributions to understand the contextual or social influences on career development and decision making process. One of them is Gottfredson's (1981) theory of occupational aspirations. In her theory, she introduced two very important concepts to the literature by analyzing relevant research studies: circumscription and compromise. Although, developmental theories stress the specification of career choice in late adolescence, Gottfredson is drawing attention to already specified or limited group of career alternatives because of the perceived accessibility of occupations due to restricting factors. The major restrictions that she mentions are sex role expectations, social class, ability level and seeking for a prestige level. Although, she is also presenting a developmental process while she is detailing the development of self-concept, she places a greater emphasis on the priority of social self as well as on the external forces on career choice such as children's internalization of sex roles, social status and intellectual level. Individuals make decisions about where they fit in the society and what their accessible alternatives can be, which form Gottfredson's social space concept. Circumscription refers to this decision making process about their social space during which individuals narrow their alternatives. Compromise, on the other hand, is another process that individuals adjust their aspirations to meet the external reality such as the employment opportunities and economic conditions to take the necessary education or training. In Gottfredson's (1996) words, "individuals often discover, when the time comes that they will be unable to implement their most preferred choices" (p.187). Thus, Gottfredson's contribution addresses that career choice and career commitment are not the last points that determines the direction after a challenging exploration and career decision making process. There may still be other factors that limit or reshape the choices.

Another important and more recent theory that addresses the determination and certainty of career choice is Social Cognitive Career Theory (SCCT). According to SCCT, career exploration and decision-making process develop through selfefficacy beliefs, outcome expectations and goal setting (Albert & Luzzo, 1999; Zunker, 2006; Brown & Lent, 1996), which are shaped by learning activities and reinforcements. As a result of inaccurate self-efficacy beliefs and/or outcome expectations, individuals may eliminate some potentially rewarding and suitable career options (Brown & Lent, 1996), which is similar to Gottfredson's circumscription process. Goal setting, on the other hand, regulates individuals' behaviors to implement their choices according to their personal agency derived from self-efficacy and outcome expectations. However, these three components are not simply functioning alone to create career interests and choices (Albert & Luzzo, 1999). Brown and Lent (1996) also call attention to the interaction between person and environment by mentioning that even truly well-developed and specific personal interests in a career path may not be enough to choose and pursue it if the individuals perceive challenging contextual factors such as barriers on their ways. Thus, after Gottfredson's emphasis on social and personal factors (sex-roles, intellectual ability and social status) that shape self-concept and social space, and later on determination of the career choice by compromising according to the external realities (conditions), SCCT is providing with a further conceptualization of contextual factors. According to Brown and Lent (1996), self-reported measures are not sufficiently proving a true identification of discrepancies between individual's vocational interests to be able to understand their faulty perceptions and prematurely foreclosed occupational options. Thus, they suggest counselors to help clients identify, analyze and prepare for possible career choice barriers.

In the light of these main theories and views, career development is considered a gradual process beginning from early childhood years and continuing all life long. As Super (1970) presented, this process has some stages as well as tasks in each of them. The targeted population of this study, university students, is in the exploration stage, and their stage level is critical because of their closeness to establishment. Moreover, various theories mentioned above are addressing the direction of university students' career development from an authority-controlled, uncommitted level to a committed level that students reach after a self-processing exploration. The theories are also stressing the role of social and contextual factors on career choice, and suggest an overall assessment of the person, environment and the interaction of both.

Although, the career decision may be thought just as vocational choice or the decision on a major before university in Turkey, rapidly changing demands in the world of work are challenging students, and require specific career choices and plans. Challenges can be in various forms such as facing with numerous options and indecisiveness, the lack of guidance for a true self-exploration in comparison to educational and occupational alternatives, and contextual barriers or restrictions including for example, the availability of a certain occupation for a specific gender, the expectations of family, the conflicts with other life roles, the suitability of educational background for an occupational preference, the opportunity to take the necessary education or training, etc. Moreover, the occupations and their requirements are changing so rapidly, which make the careers much less stable and safe. Thus, the ability to make efficient career choices through a challenging exploration process and every time the contextual or occupational conditions change and require adaptation, is now more important than making a one time decision.

On the other hand, career decidedness or the certainty about career choice, although widely studied in Western and Turkish culture, is not comprehensive enough to attend to individuals' way and progress in a true exploration process. Because of the reasons such as the complexity of the process, lack of support or encouragement and contextual difficulties such as educational limitations and economic barriers, some people may prefer to avoid the anxiety and discomfort of a challenging exploration period, and make early career decisions. In such a case, career decidedness is not providing a true measurement of an individual's choice quality.

In the literature, there is an alternative notion known as commitment to career choices. Beyond the certainty, commitment to career choices includes selfconfidence about one's choices, a positive sense of one's vocational future, and an awareness of potential obstacles. Blustein, Ellis and Devenis (1989) developed a two-dimensional model for this notion. These dimensions are vocational exploration and commitment and tendency to foreclose. The former refers to openness to explore different career options before committing to a choice while the latter refers to prematurely commit to a choice without a true exploration of potential career options that may be predictive of lower levels of occupational satisfaction and success. Career commitment as defined by Blustein, Ellis and Devenis is meeting the need of a more comprehensive understanding of career decision making by (1) vocational exploration and commitment level, which assesses individual's perceived level of self-knowledge, occupational knowledge, confidence about and overall commitment to a specific occupational preference, as well as the perceived need to engage in career exploration, uncertainty with regard to career choices, and awareness of and willingness to overcome potential obstacles and (2) tendency to foreclose, which assesses one's willingness to consider more than one occupational option at a time, belief that there is more than one specific occupation suitable for each person, and overall tolerance for ambiguity and cognitive dissonance in the commitment to career choices process.

Besides the rarely studied career commitment concept, which is important for university students in preparation for establishment stage, the role of perceived barriers and gender on career commitment is examined in this study in the light of reviewed theories' emphasis on developmental, social and contextual factors. The following part presents the limited research studies in Western cultures on career commitment as well as the factors that affect it.

2.2. Western Research Studies

There are a limited number of studies that investigated the career-related barriers of university students. In one of them, Swanson and Tokar (1991) aimed to determine the types of barriers that college students perceive and expected significant differences in the types of barriers identified by women and men. They elicited 48 (24 women and 24 men) undergraduate students' perceptions of potential career-related barriers by an instrument that was developed in a thought-listing format. Their study showed that college students perceived the existence of career-related barriers and they identified four main barriers to the choice of a major or career: not being informed, not being capable, current or future financial concerns and significant others' influence. On the other hand, results did not indicate any significant gender difference in the types of barriers as opposed to what they expected. However, the all responses that point out children, child-care concerns and role-conflicts were belonging to the women in this study whereas the men's responses were more likely to be about financial issues.

In another study on perceived career barriers, Luzzo (1995) investigated the gender differences in college students' career maturity and perceived barriers in career development. He applied both quantitative and qualitative measures to 401 (250 female, 151 male) college students in a large state university of U.S. Besides the assessment of career maturity through a number of standardized instruments such as Career Maturity Inventory-Attitude Scale and Decision Making Scale of the Career Development Inventory's University and College Form, Luzzo also conducted interviews. Quantitative analyses indicated significantly higher scores

on career maturity for females. The qualitative analyses, on the other hand, revealed two main differences in the career development of female and male college students: career planning and perceived barriers related to role conflicts. Female students reported a clear approach to career planning and decision making, which followed a series of previously determined goals and steps, whereas the career plans and decisions of male students were unplanned and more improvised. With regard to perceived barriers, Luzzo used a series of categories to analyze them: family-related barriers, study skill barriers, gender-related barriers, ethnic identity barriers, and financial barriers. The responses of female and male students were similar on financial concerns. On the other hand, in this sample, 48 female students out of 78 (over 60 %) reported that decision of when to have children, juggling work and family responsibilities and making sacrifices to have children as their primary concerns, while only 3 male students out of 50 reported similar concerns. The results supported Swanson and Tokar's study with the existence of perceived barriers and the difference between female and male students on only role conflicts and family concerns.

In their study, Luzzo and McWhirter (2001) investigated sex and ethnic differences in the perception of educational and career related barriers, and levels of coping efficacy. Their sample was composed of 286 (168 female, 118 male) first-year college students. Perception of Barriers Scale that was used in the study had two scales. The first one was measuring career related barriers such as the expectation of gender and ethnic discrimination, child care difficulties and family concerns in the future. The second scale, educational barriers was measuring current barriers that impede the educational development such as money problems, family problems, lack of support from the teachers, desire to have children, relationship concerns, gender, not having enough confidence, etc. The results revealed that female students, as compared to male students, perceived significantly greater barriers with reasons of gender discrimination and difficulty of getting hired. On the other hand, female and male students reported relatively equal barriers about family (e.g., finding daycare for children), which is a contradictory result with the previous studies.

In their qualitative study, Lent, Brown, Talleyrand, McPartland, Davis, Chopra, Alexander, Suthakaran, and Chai (2002) examined the perceived influences on college students' selection and implementation of career choices. They interviewed with 19 university students (with a mean age of 22.21 years) and 12 technical college students (with a mean age of 25.50 years). The students' reported barrier perceptions overlapped and the most frequently mentioned barriers were financial concerns. The other ones, which had moderate frequency, were personal difficulties (e.g., adjustment to college, time-management), ability considerations (e.g., problems with academic progress and perceived ability), and negative social/family influences. Role conflicts, excessive educational requirements, negative school/work experiences and work conditions/reinforcers were the barriers that had low frequency. Although, the greater number of more frequently mentioned barriers were contextual such as financial concerns, negative social/family influences and role conflicts, some participants cited personal factors primarily such as ability considerations and personal difficulties. The researchers found contextual and personal factors essential to be included together in theoretical accounts and future research studies.

In a series of studies for developing Commitment to Career Choices Scale, Blustein, Ellis and Devenis (1989) reported that individuals attaining high level of commitment to a career choice were prepared to overcome barriers to achieve their career choices. Based on their results, understanding the career commitment in relation to perceived barriers have started to take scientific attention by some researchers and provided with significant relationships. In one such study, Leal-Muniz and Constantine (2005) explored the predictors of the career commitment process in a sample of 204 Mexican American undergraduate students with a mean age of 20.03 years. The predictor variables were perceived parental support, perceived career barriers and adherence to career myths. With regard to perceived career barriers, the study expected greater perceived career barriers as an evidence of lower vocational exploration and higher tendency to foreclose in career choices. The results indicated that greater perceived ethnic and gender related occupational barriers were positively predictive of tendency to foreclose prematurely on career

options, which impede career exploration process by an early decision without full consideration of other possible options.

Wu (1994) also investigated the relationship between career commitment and perception of career barriers with a sample of 147 freshmen and senior undergraduate female students. The findings supported the relationship between career barriers and vocational exploration and commitment. The results showed that college women who perceived career related barriers as obstacles were more uncertain about their career choice and had more tendency to foreclose. Moreover, senior women reported gender discrimination as the most significant barrier.

In the light of these research results from the Western literature, it can be concluded that, although there are some gender differences, the career-related barriers that the university students perceived play an important role in committing to their careers. However, as it was presented in the following section, the lack of Turkish studies regarding how the Turkish university students perceive career-related barriers and the role of these barriers in their career commitment need to be investigated which was the focus of the present study.

2.3. Turkish Research Studies

Career development and counseling literature is based on three main directions in Turkey. The first one is about career development and planning of adults in the industry and organizations that include studies such as employee satisfaction and motivation (e.g., Atila, 2002; Işık, 2004; Kırçı, 2007). The second direction is about the efficiency of vocational guidance and counseling group programs in the elementary and secondary schools (e.g., Ay, 2002; Aydin, 2002; Çakır, 2003; Nedim Bal, 1998; Öksüz, 2001; Usluer, 1996). The third direction is about career maturity levels and career decision making of middle and high school students regarding self-efficacy and vocational self-concept factors (e.g., Acisu, 2002; Bahar, 1995; Otrar, 1997; Sahranç, 2000; Zeren, 1999).

There are a very limited number of studies about the career development of university students (Abişeva, 1997; Erdil, 2006; Kağnıcı; 1999; Kaya, 1996; Gazioğlu Özkök, 1990; Özyürek, 1995; Uysal, 2001), and these studies focus on the variables that effected university students' career choice prior to university such as UEE scores, family educational level, socio economic status, high school type, etc. With regard to university students' current career development, Kaya (1996) investigated the congruence between interests and abilities of 165 first grade university students and their choice of majors. The results did not reveal a strong association between the students' interests and abilities and their major choices. Especially, their interests were not related to their current majors. On the other hand, 77% of the students reported that they would not change their majors if they had a chance to do so, which may be related to limitation of the fact that these students were in the first grade and may not have verified their choices yet.

In another study, Kağnıcı (1999) investigated the vocational maturity of Middle East Technical University preparatory school students. Out of 272 students (92 female and 180 male students with a mean age of 18.6), 73.9 % of them were reported as immature. No significant relationship was found between vocational maturity level and age and gender.

The results of the limited studies conducted in Turkey are not providing a clear understanding on university students' current certainty of their choices and their ongoing career exploration attitude if they are not committed.

2.4. Summary of the Literature Review

Although, a few studies in U.S. directly examined university students' career commitment and perceived career barriers, the results revealed a significant relationship between commitment to career choices and perceived career barriers, supporting the expectation of current study. Moreover, findings indicated similar types of barriers perceived by university students such as financial problems, family/relationship concerns, gender discrimination, ethnic barriers, and issues

related to self-confidence and self-concept. Studies did not point out a significant difference between men and women in overall perceived career barriers. However, family and child concerns were significantly more reported by women compared to men, with the exceptional contrary results of Luzzo and McWhirter's study (2001).

The suggestions of the theories and research support the need for a more comprehensive exploration of career decision making with a focus on its process and influencing factors. As it was previously mentioned, Turkish studies are limited in understanding these factors. Turkey, as being a developing country and a collective society, is one of the examples that young people are not all engaged in a true exploration of themselves and many alternatives in the world of work. Accordingly, as the targeted population of this study, the university students have a critical standing in the life stage model. They are in the stage of exploration but at the same time, very close and in preparation to next stage, which is establishment. As the task of this transitional stage, they are supposed to specify their career choices and start to engage in planning for their goals. Moreover, they are in between the other life roles such as being a son/daughter, partner/spouse, student and worker, which complicates the career choice and planning process. Thus, believing that the knowledge regarding career commitment level of university students will provide with an understanding of their involvement in an open and mature career exploration and goal setting process as well as their awareness on potential obstacles, the present study investigated career commitment as the main variable and the factors that have predictive power on it.

CHAPTER III

METHOD

This chapter is devoted to the presentation of the methodological procedures of the present study. The first section describes the sample of the present study. The second section presents the data collection instruments used in the study. The third section introduces data collection procedures. Finally, the fourth section presents the data analysis procedures.

3.1. Participants

Convenient sampling procedure was used in the present study. Participants were 448 volunteered students of the five faculties of Middle East Technical University (METU). Due to the exclusion of 11 subjects as multivariate outliers in the preliminary analysis, the results are derived from a sample of 437 students (231 females, 206 males). The distribution of students by faculties, gender, and grades is presented in Table 3.1.

Table 3.1
The Distribution of Students by Faculties, Gender and Grades

Faculties	Gender	Freshmen	Sophomore	Junior	Senior	Missing	Total
	Male	-	_	-	4	-	4
Architecture	Female	1	1	11	5	-	18
	Total	1	1	11	9	-	22
	Male	10	8	6	6	-	30
Arts and Sciences	Female	36	12	7	5	-	60
	Total	46	20	13	11	-	90
Economic and	Male	4	4	5	4	-	17
Administrative	Female	12	14	4	10	-	40
Sciences	Total	16	18	9	14	-	57
	Male	1	1	7	26	-	35
Education	Female	7	8	18	53	1	87
	Total	8	9	25	79	1	122
	Male	30	6	8	76	-	124
Engineering	Female	6	5	1	14	-	26
	Total	36	11	9	90	-	146
	Male	45	19	26	116	-	206
Total	Female	62	40	41	87	1	231
	Total	107	59	67	203	1	437

As seen in Table 3.1, the number of the students within each faculty is not representative in terms of gender and grade. Considering that the variables of faculty and grade are not used in this study and that the total numbers of students by gender are evenly distributed, the number of participants was considered as representative for the present study. The age range of the participants was between 17 and 30, with the mean age of 21.7 (SD = 1.77).

3.2. Instruments

In the present study, three instruments were administered to the students, namely, a demographic information form (Appendix A), Commitment to Career Choices Scale (see Appendix B, for the sample of items), and Perceived Career Barriers Questionnaire (Appendix C) was developed for this study by the researcher.

3.2.1. Demographic Information Form

Demographic information form was developed by the researcher to obtain information about the participants' gender, age, department, grade level, GPA, mother's education level, father's education level and perceived socio economic status. Gender was one of the criterion variables in this study whereas the other demographic data were used in the validity studies of CCCS.

3.2.2. Commitment to Career Choices Scale (CCCS)

The Commitment to Career Choices Scale (CCCS) is an instrument developed by Blustein, Ellis, and Devenis (1989). It has two dimensions and 28 self-reported items, including 6 reversed scored items. The sub-scales are Vocational Exploration and Commitment (VEC) and Tendency to Foreclose (TTF). VEC has 19 items, which measure individual's progress in career commitment process from an uncommitted, exploratory phase to a highly committed phase. An example from the items is, "I feel uneasy about committing myself to a specific occupation because I am not aware of alternative options in related fields." TTF has nine items

that measure how much the individuals limit their career options. An example of TTF sub-scale is "I believe that only one single occupation is right for me". CCCS has a seven-point-Likert-type scale ranging from 1 (never true about me) to 7 (always true about me). Low scores on VEC mean greater certainty and commitment on career choice whereas high scores indicate an uncommitted posture. Higher scores on TTF, on the other hand, means stronger tendency to foreclose on career choices in contrast to low scores on TTF that reflect the weak end of tendency to foreclose, which means being comfortable in tolerating the ambiguity and open to the commitment process as well as to the exploration.

Blustein et al. (1989) reported a series of correlations between demographic variables and the two subscales of the CCCS. According to the results, VEC scores were found to be significantly correlated with age (r = .24, p < .0001), GPA (r = .21, p < .0001), and the number of occupations that the students had in their minds (r = .25, p < .0001), which was asked prior to the scale. No significant correlations were found between TTF and any of the demographic variables. Results also yielded no significant gender differences either in VEC or in TTF scores. However, significant differences were found for the two subscales in terms of grade levels. The correlations calculated between two subscales scores of CCCS and social desirability measures were not found as significant. Thus, the two scales of CCCS are reported as internally consistent and reliable measures, which are allowed for further investigation of the commitment process.

Blustein et al. (1989) reported Cronbach's alpha coefficients as .91 and .83 for the VEC and TTF sub-scales, respectively. In a recent study conducted by Leal-Muniz and Constantine (2005), these coefficients were reported as .83 for VEC and .89 for TTF sub-scales. Reported test-retest reliability coefficients are .82 and .90 for the 2-week interval whereas they are .84 and .92 for 4-week interval.

3.2.2.1 Adaptation Study of CCCS

After receiving the necessary permission from the researchers who originally developed the scale (Appendix D), the adaptation studies of CCCS were carried out by the researcher for the present study. Translation, validity and reliability studies are presented in the following sections.

3.2.2.2. Translation studies of CCCS

CCCS was translated into Turkish separately by the researcher and her supervisor who are fluent in English. Second, the translated versions of CCCS items as well as their English version were given to three other judges by asking them to choose the best fitting translation for each item. The judges were one professor in guidance and counseling, one psychological counselor who had a master degree, and another psychological counselor with a PhD degree who was working in an international school. All the judges had excellent command of English and had translation experiences. The recommended changes were made based on the feedback given by the judges. Finally, the researcher has decided to use the instrument after these modifications made for ensuring the adequacy of the translation.

3.2.2.3. Validity and Reliability Study of the Turkish version of CCCS

The validity and reliability studies of Turkish version of CCCS were carried out with 285 (122 males and 163 females) students. These students were then included in the main study. Age of the students ranged from 17 to 30 (M = 21.2, SD = 1.83). The instrument was administered to the students in the classroom settings.

3.2.2.4. Construct Validity of CCCS

In order to assess the construct validity of Turkish version, factor structure of CCCS was investigated by employing only exploratory factor analysis. Confirmatory factor analysis was not conducted in the present study.

3.2.2.5. Exploratory Factor Analysis of CCCS Scores

In the present study, before starting the factor analysis of CCCS, the suitability of the data for factor analysis was assessed through examining: (1) the adequacy of the sample size, and (2) the strength of the relationship among the items. In these assessments, "5 cases for each item formula" suggested by Tabachnick and Fidell (1996); Bartlett's test of sphericity, that should be statistically significant at p < .05 and the Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy, that should be .6 or above, were utilized generated by SPSS to assess the factorability of the data (Pallant, 2001). The Barlett's test of sphericity was 2956.064 (p < .0001) and the KMO measure was .873 revealing the adequacy of the present data for a good factor analysis in addition to the adequacy of the sample requirements.

Then, for the purpose of verifying that the original version of 28 items of CCCS has the hypothesized 2 dimensions, Principal Component Analysis with varimax rotation was applied to the CCCS scores of the students.

The initial solution revealed 7 factors with eigenvalues greater than 1. Although, these 7 factors explained the 59.81 % of the total variance, the examinations of items loaded in the factors were not theoretically sound and were loaded on several factors. Thus, it was decided to restrict the number of factors. Four criteria were used to determine the number of factors to rotate: (1) the a priori hypothesis stemming from the original scale that the measure has 2 dimensions, (2) the scree test together with the eigenvalues, (3) the interpretability of the factor solution, and (4) the factor loadings of the items. Then, the analysis was repeated for the second time and the results of principal component factor analysis with varimax rotation

revealed 2 identifiable factors similar to that of the original factor structure. The eigenvalues of the 2 factors are 7.356 and 2.923, respectively. These factors accounted for 36.71 % of the total variance. The existence of these 2 factors was also confirmed by the scree test. The subscales explained the total variance of 26.27 % for the VEC and 10.44 % for the TTF. Table 3.2 presents the factor loadings and communalities of the CCCS in the explanatory factor analysis.

Table 3.2

Varimax-rotated Factor Loadings of Turkish Version of CCCS

Item Number	Factor 1	Factor 2	Communalities
19	.764	127	.600
25	.736	029	.543
26	.729	270	.604
12	.728	.023	.530
23	.720	226	.570
14	.664	149	.464
20	.587	042	.347
13	.567	095	.330
17	.560	253	.377
21	.541	089	.300
18	.540	037	.293
6	.522	160	.299
7	.488	087	.245
24	.466	239	.274
11	.456	256	.274
27	.425	.095	.189
4	.384	065	.152
3	.381	305	.238
5	.313	159	.123
10	081	.832	.698
22	115	.809	.667
2	152	.800	.663
28	120	.774	.614
8	068	.635	.408
1	145	.513	.284
15	083	.334	.118
9	045	.199	.042
16	010	.183	.034

As can be seen from Table 3.2, although most of the items were loaded in the relevant factors, item 9 and items 16 had low factor loadings of .199 and .183, respectively. However, since no translation mistakes were found these two items were kept in the respected scale, considering that this is the first attempt to examine the factor structure of CCCS and confirmatory factor analysis can be conducted with a larger sample in future studies which would yield a more valid result. Thus, the structure revealed by the exploratory factor analysis was found to be acceptable for the present study since the items loaded on the respected factors were consistent with the original CCCS. Accordingly, the first factor named as Vocational Exploration and Commitment (VEC) subscale was formed by the items 3, 4, 5, 6, 7, 11, 12, 13, 14, 17, 18, 19, 20, 21, 23, 24, 25, 26, 27, whereas the second factor named as Tendency to Foreclose (TTF) subscale was made up by the items 1, 2, 8, 9, 10, 15, 16, 22, 28. The correlation between TTF and VEC subscales was r = -.363, p < .01. As same with the original scale, Turkish version of CCCS had the same reversed scored items, which are 3, 6, 7, 15, 21, and 24.

3.2.2.6. The Examination of Turkish Version of CCCS in Terms of Demographic Variables

In accordance with the studies of Blustein et al. (1989) for the development of original scale, a series of analyses were conducted in order to examine the relationships of CCCS with some variables in the Demographic Information Form. As for the gender differences, the results of two separate t-tests showed that TTF scores for male students (M = 32.3, SD = 8.16) were significantly higher than female students (M = 29.8, SD = 8.43), t (283) = 2.46, p < .01 whereas in VEC scores, female students (M = 72.4, SD = 16.4) were significantly higher than male students (M = 66.8, SD = 16.7), t (283) = 2.84, p < .01. These results are not consistent with the findings of Blustein et al. (1989) who found no gender differences in both subscales of CCCS. A series of correlations were then calculated separately for male and female students in order to assess the relationships of TTF and VEC scores with the demographic variables included in Demographic Information Form, namely age, grades, GPA, mothers' education,

fathers' education, and perceived economic status, the existence of priority in career choices, a question which was presented in the original CCCS and the results are presented in Table 3.3.

Table 3. 3

Correlations of TTF and VEC Scores with Demographic Variables

	T	TF	VEC		
Demographic Variables	Male	Female	Male	Female	
Age	024	057	145	.093	
Grade	.007	021	211*	.096	
GPA	.009	.059	.044	023	
Mother education	.064	024	124	136	
Father education	052	071	088	058	
Economic status	.109	107	.015	065	
Priority in career choice	.125	.190*	171	291**	

^{**}p < .01, *p < .05, N = 122 for males, N = 163 for females.

As can be seen from Table 3.3, for male students, a significant negative correlation was found between grade and VEC scores (r = -.211, p < .01), indicating that being in lower grades or initial years of university leads to an uncommitted posture on commitment to career choices, which is in consistent with Blustein at al. (1989)'s results and the reviewed theories of Perry and Tiedemann (as cited in Gordon, 1981).

For female students, the scores regarding the existence of a priority in career choice were found to be positively correlated with TTF scores (r = .190, p < .05) and negatively correlated with VEC scores (r = .291, p < .01), indicating that having a priority in career choice leads to higher tendency to foreclose and at the same time, it reflects an uncommitted phase. Although, this variable was not used in the original scale's validity assessments, it can be speculated that having a priority in career choices can verify a tendency to foreclose if the priority is prematurely decided as well as a high commitment to a career choice if the individual gained a certainty for one choice after a true exploration period. In both cases, this variable is not sufficient alone to explain these dimensions as the other variables are.

3.2.2.7. Internal Consistency of CCCS (Cronbach alpha reliability)

In the present study, the internal consistency of the CCCS was calculated by Cronbach alpha coefficient formula. The results showed that the Cronbach alpha coefficient was .77 for the TTF and .89 for the VEC subscales. Although somewhat lower than the original scale, these results were considered as satisfactory support for the internal consistency of CCCS.

3.2.3. Perceived Career Barriers Questionnaire

An instrument was developed by the researcher to assess perceived career related barriers of university students. Based on the literature review and the available scales of McWhirter (as cited in Luzzo & McWhirter, 2001) and Swanson and Tokar (1991b) as well as by taking the suggestions from three professionals (a professor in psychological counseling program, an associate professor and a professional counselor who works in a school), 11 factors were identified as the most common barriers: (1) personality characteristics, (2) abilities, (3) interests, (4) the effect of gender, (5) vocational knowledge, (6) economic gain opportunity, (7) employment opportunity, (8) work conditions, (9) the other life choices (e.g., marriage, child, etc.), (10) family expectations and (11) partner's expectations. The scale is a 7-point Likert type scale ranging from 1 (not hindering) to 7 (hindering very much). High scores on each perceived barrier item indicate that the barrier hinders the individuals to a great extent.

3.3. Procedure

Before administering the instruments, necessary permissions were obtained from the Ethic Committee of METU (Appendix E). After getting the permissions, the researcher visited the faculties of METU and made appointments with the instructors for the available classes to apply the instruments in classroom settings. During the administration, the researcher firstly distributed the informed consent forms (See Appendix F) to briefly explain the reason of the study to the

participants and to ask for their voluntary participation. Then, the instruments were administered to those who volunteered to participate in the study. The administration of the instruments took approximately 20-25 minutes. Lastly, the researcher distributed debriefing forms (See Appendix G) to the participants after collecting the instruments back. Debriefing forms were prepared to present the details of research topic and aim as well as some further information that may be needed with regard to related concerns.

3.4. Analysis of Data

In the present study, two separate stepwise multiple regression analyses were carried out for the Vocational Exploration and Commitment (VEC) and Tendency to Foreclose (TTF) scores of CCCS, as being two dependent variables. Independent variables were gender (coded as dummy variable) and 11 perceived career barriers identified as personality characteristics, abilities, interests, the effect of gender, vocational knowledge, economic gain opportunity, employment opportunity, work conditions, the other life choices (e.g., marriage, child, etc.), family expectations and partner's expectations. All the analyses were conducted by using subprograms of SPSS, version 15.0.

CHAPTER IV

RESULTS

This chapter consists of two major sections. In the first section, preliminary analyses of the data are presented. In the second section descriptive statistics of the study variables are introduced. Third section includes correlation matrix of the study variables. Finally, in the fourth section, results of stepwise multiple linear regression analyses are presented.

4.1. Preliminary Analyses

Before conducting the main analyses, all the major variables were checked for missing data and for the scores that were out-of-range. The missing values were replaced by a series mean scores since the percentage of missing values was not greater than % 5. Crucial assumptions were also checked out for stepwise multiple linear regression analyses. First dummy coding for the categorical variable of gender was done. Then, multivariate outliers were analyzed by taking into consideration Mahalonobis distance. As a rule of thumb, the maximum Mahalonobis distance should not exceed the critical chi-squared value with degrees of freedom equal to the number of predictors and Alpha Level = .001, otherwise outliers may be a problem in the data (Tabachnick & Fidell, 2001). In the present study, Mahalonobis distance was taken into consideration with p < .001 and $\chi^2 = 32.909$. Among 448 participants, 11 subjects were excluded from the data because of being outlying cases. Thus, the analyses were carried out with 437 (231 female and 206 male) students. The mean age of the participants was 21.7 with a standard deviation of 1.77.

4.2. Descriptive Statistics of the Variables

The means and standard deviations of the variables used in the present study were presented by gender in Table 4.1.

Table 4.1

Mean and Standard Deviation of the Variables by Gender

		Gen	der			
Variables	N	Iale	Fe	male	Total	
	M	SD	M	SD	M	SD
Personality characteristics	2.3	1.40	2.3	1.59	2.3	1.50
Interests	2.4	1.57	2.3	1.68	2.4	1.62
Abilities	2.3	1.50	2.3	1.73	2.3	1.62
The effect of gender	1.4	1.07	1.9	1.37	1.7	1.25
Vocational knowledge	2.4	1.55	2.6	1.69	2.5	1.62
Economic gain opportunity	3.4	1.77	3.4	1.80	3.4	1.79
Employment opportunity	3.4	1.80	3.9	1.72	3.6	1.77
Work conditions	3.5	1.65	3.7	1.74	3.6	1.70
Other life choices	3.5	1.99	3.2	1.88	3.4	1.93
Family expectations	3.0	1.94	2.6	1.88	2.8	1.91
Partner expectations	2.2	1.64	1.9	1.47	2.0	1.56
VEC	68.2	16.02	71.4	14.77	69.9	15.43
TTF	31.1	7.26	29.9	7.73	30.5	7.52

As can be seen from Table 4.1, in the total sample, the highest means for the career barriers were 3.6 both in employment opportunity and in work condition, with the standard deviations of 1.77 and 1.70, respectively whereas the lowest mean was 1.7 in gender effect with the standard deviation of 1.25. The means and standard deviations for the dependent variables of VEC and TTF scores were 69.9 and 15.43 and, 30.5 and 7.52, respectively. For males, the means and standard deviations of VEC scores were 68.2 and 16.02 and for females, they were 71.4 and 14.77. The means and standard deviations of TTF scores were 31.1 and 7.26 for males and 29.9 and 7.73 for females.

4.3. Correlation Matrix of the Study Variables

The results of the correlations among the independent variables of gender, personality characteristic, interest, ability, gender effect, vocational knowledge, economic gain opportunity, employment opportunity, work conditions, other life choices, expectations of family and expectations of partner and dependent variables of VEC and TTF scores for the total sample of the study are presented in Table 4.2.

Table 4.2

Correlations among Independent and Dependent Variables in the Total Sample

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Gender	1													
2. Personality	00	1												
3. Interests	.01	.64	1											
4. Abilities	01	.58	.73	1										
5. Gender effect	18	.10	.10	.18	1									
6. Voc. knowledge	06	.40	.40	.56	.32	1								
7. Economic gain	01	.30	.32	.37	.14	.37	1							
8. Employ. opport.	14	.28	.26	.38	.21	.40	.61	1						
9. Work condition	07	.29	.32	.40	.18	.38	.49	.63	1					
10. Life choices	.08	.30	.34	.33	.22	.24	.25	.24	.44	1				
11. Family expect.	.09	.32	.31	.31	.11	.29	.35	.39	.37	.46	1			
12. Partner expect.	.12	.12	.17	.20	.16	.19	.24	.21	.22	.45	.45	1		
13. VEC	09	.32	.29	.28	.19	.37	.30	.37	.34	.19	.27	.08	1	
14. TTF	.08	05	05	03	09	.07	.02	10	09	04	06	.06	18	1

As can be seen from Table 4.2, the correlation coefficients among independent variables changed between -.18 (gender and gender effect) and .73 (ability and interest). The correlation coefficients between independent and dependent variables ranged from .37 (between VEC and vocational knowledge and employment opportunities) to -.10 (between TTF and employment opportunities). These results indicated no multicollinearity among the variables.

The intercorrelation of independent and dependent variables used in the present study are presented for males (lower triangle) and for females (upper triangle) in Table 4.3.

Table 4.3

Correlations among Independent and Dependent Variables for Males (Lower Triangle)
and Females (Upper Triangle)

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Personality	1	.65	.57	.07	.51	.32	.35	.34	.27	.43	.20	.37	07
2. Interests	.63	1	.75	.05	.53	.31	.26	.32	.27	.37	.18	.31	02
3. Abilities	.60	.70	1	.15	.64	.34	.41	.38	.28	.39	.23	.31	03
4. Gender effect	.16	.19	.22	1	.29	.04	.12	.15	.29	.09	.14	.14	11
5. Voc. Knowledge	.25	.22	.46	.37	1	.35	.44	.33	.22	.33	.19	.38	09
6. Economic gain	.28	.34	.42	.31	.40	1	.60	.51	.27	.36	.17	.29	.04
7. Employment opp.	.21	.26	.36	.29	.35	.62	1	.62	.28	.44	.22	.35	08
8. Work conditions	.23	.32	.42	.20	.44	.45	.63	1	.48	.42	.26	.25	12
9. Life choices	.35	.42	.41	.17	.27	.24	.23	.40	1	.45	.51	.11	04
10. Family expect.	.18	.25	.21	.18	.26	.34	.38	.32	.47	1	.41	.33	11
11. Partner expect.	.03	.16	.19	.25	.22	.31	.24	.20	.38	.47	1	.04	.03
12. VEC	.26	.27	.25	.24	.35	.32	.36	.43	.29	.22	.14	1	30
13. TTF	03	09	02	03	03	09	11	04	05	02	.08	18	1

As seen in Table 4.3, in males, the correlations among independent variables changed between .16 (personality characteristics and gender effect; interests and partner's expectation) and .70 (abilities and interest). The correlation coefficients between independent variables and VEC scores ranged from .43 (in work condition) to .14 (in partner's expectation). As for the TTF scores, these correlations ranged from -.11 (in employment opportunity) to .08 (in partner's expectation) in males. In females, the correlations among independent variables changed between .04 (economic gain and gender effect) and .75 (abilities and interest). The correlation coefficients between independent variables and VEC scores ranged from .38 (in vocational knowledge) to .04 (in partner's expectation). As for the TTF scores, these correlations ranged from -.12 (in work conditions) to .02 (in interests) in females. The correlation coefficients between VEC and TTF scores were -.18 for males and -.30 for females.

4.4. Results of Stepwise Multiple Linear Regression Analyses

In this study, two separate stepwise multiple linear regression analyses were conducted to predict the effect of the independent variables (gender coded as dummy variable, personality characteristic, interest, ability, gender effect, vocational knowledge, economic gain opportunity, employment opportunity, work conditions, other life choices, expectations of family and expectations of partner) on two separate components of CCCS (VEC and TTF). Additionally, the assumption for Multiple Regression normality, linearity, independence observation, and independence of error (residual) were performed. Finally, *multicollinearity*, which was defined as "unacceptably high level of intercorrelation among predictor variables", was checked for the assumptions of Multiple Regression. As a rule of thumb, intercorrelation among the independents above .80 signals a possible problem (Stevens, 2002). Any intercorrelation higher than .80 among independent variables was not detected for the present study.

4.4.1. Results Concerning the Predictors of VEC

The second Stepwise Multiple Linear Regression Analysis was conducted to evaluate how well gender coded as dummy variable, personality characteristic, interest, ability, gender effect, vocational knowledge, economic gain opportunity, employment opportunity, work conditions, other life choices, expectations of family and expectations of partner predict VEC scores of the students. Table 4.4 presents the summary of multiple linear regression analysis predicting the VEC scores of the sample. Table 4.5 presents the β and beta coefficients for each step and other coefficients.

Table 4.4

R and R Square Change Predicting the VEC Scores

Variables	R	R Square	Adjusted R Square	R Square Change	F Change	df1	df2	Sig. F Change
Vocational	.370	.137	.135	.137	68.98	1	435	.000
knowledge	.570	.137	.133	.137	00.90	1	733	.000
Vocational								
knowledge								
Employment	4.42	105	101	050	21.24	1	12.1	000
opportunities	.442	.195	.191	.058	31.34	1	434	.000
Vocational								
knowledge								
Employment								
opportunities								
Personal	166	210	212	022	12.50	1	422	000
characteristic	.466	.218	.212	.023	12.50	1	433	.000

Table 4.5 β, Beta's Correlations and Significance Level Predicting the VEC Scores

Variables	β	Std. Error	Beta	t	р
(Constant)	61.049	1.268		48.16	.000
Vocational knowledge	3.515	.423	.370	8.31	.000
(Constant)	55.267	1.603		34.49	.000
Vocational knowledge	2.525	.446	.266	5.67	.000
Employment opportunity	2.288	.409	.263	5.60	.000
(Constant)	53.421	1.666		32.07	.000
Vocational knowledge	1.990	.465	.209	4.28	.000
Employment opportunity	2.075	.408	.238	5.09	.000
Personality characteristics	1.706	.483	.166	3.54	.000

As can be seen in Table 4.4, vocational knowledge was the first variable entered into equation. As stepwise regression was requested, SPSS first tested a model with the most correlated independent variable, that is, the vocational knowledge. The regression equation with the vocational knowledge scores was significant, $R^2 = .137$, F(1,435) = 68.98, p = .000. This variable alone accounted for approximately 14 % of the variance, having significant contribution to prediction equation, t(435) = 8.31, p = .000.

Then a model was tested with the vocational knowledge plus the variable with the highest partial correlation with the dependent variable controlling the vocational knowledge. This second variable was employment opportunities. The second regression with employment opportunity was also significant with the values of R^2 = .195, F(1, 434) = 31.34, p = .000. Employment opportunity alone accounted for an additional 6 % of the variance having significant contribution to prediction equation, t(435) = 5.60, p = .001.

Finally, the third variable entered into the equation was the personality characteristics. The regression equation with the personality characteristics score was also significant, $R^2 = .218$, F(1, 433) = 12.50, p = .000. The personality

characteristics alone accounted for an additional 2 % of the variance, having significant contribution to prediction equation t (435) = 3.54, p = .000.

In sum, vocational knowledge, employment opportunity and personality characteristics appeared as significant predictors explaining approximately 22 % of the total variance of VEC scores of the students. Results showed that the other barriers did not make any contributions to the model, and gender did not enter the equation.

4.4.2. Results Concerning the Predictors of TTF

In order to examine how well gender, personality characteristic, interest, ability, gender effect, vocational knowledge, economic gain opportunity, employment opportunity, work conditions, other life choices, expectations of family and expectations of partner predict TTF scores of the students, a Stepwise Multiple Linear Regression Analysis was conducted by taking gender, personality characteristic, interest, ability, gender effect, vocational knowledge, economic gain opportunity, employment opportunity, work conditions, other life choices, expectations of family and expectations of partner as predictors, and TTF scores of the students were taken as dependent variables. Table 4.6 presents the summary of Stepwise Multiple Linear Regression Analysis results. Table 4.7 presents the β and beta coefficients for each step and other coefficients.

Table 4.6 *R and R Square Change Predicting the TTF Scores*

Variables	R	R Square	Adjusted R Square	R Square Change	F Change	df1	df2	Sig. F Change
Employment								_
Opportunity	.100	.010	.008	.010	4.35	1	435	.038

Table 4.7
β, Beta's Correlations and Significance Level Predicting the TTF Scores

Variables	β	Std. Error	Beta	T	P
(Constant)	32.023	.816		39.25	.000
Employment opportunity	423	.203	100	-2.09	.038

As can be seen in Table 4.6, the only variable entered into the equation was the employment opportunity. The regression equation with the employment opportunity was significant, $R^2 = .01$, F(1, 435) = 4.35, p = .038. This variable alone accounted for the 1% of the total variance, having significant contribution to prediction equation t(435) = -2.09, p < .05. Gender did not enter the equation.

Overall, the results reveal that vocational exploration and commitment dimension was predicted by three independent variables with a positive relationship, which were vocational knowledge, employment opportunities and personality characteristics whereas the tendency to foreclose dimension was predicted by only employment opportunities as a barrier to a career choice with a negative relationship. In all analyses, gender did not enter the equations.

CHAPTER V

DISCUSSION

This chapter presents the discussion of the results. The first section is devoted to the discussion of the predictors of two dimensions of career commitment; vocational exploration and commitment, and tendency to foreclose. In the second part, implications of the present study and recommendations for future studies are presented.

5.1 Discussion of the Results

The purpose of the present study was to investigate the predictive power of gender and perceived career barriers (identified as personality characteristics, interest, ability, gender effect, vocational knowledge, economic gain opportunity, employment opportunity, work conditions, other life choices, expectations of family and expectations of partner) in two dimensions of Commitment to Career Choices Scale (CCCS); Vocational Exploration and Commitment (VEC), and Tendency to Foreclose (TTF). Two separate stepwise multiple regression analyses were carried out for each dependent variable of VEC and TTF scores.

The results of the first stepwise multiple regression analysis indicated that vocational knowledge, employment opportunities and personality characteristics were found as the predictors of the Vocational Exploration and Commitment (VEC) dimension of the Commitment to Career Choices Scale, accounting for approximately 14 %, 6 %, and 2 % of the total variance of VEC scores, respectively.

The first type of barrier entered into the equation was vocational knowledge. This result indicated that there was a positive relationship between perceiving vocational

knowledge as a barrier and VEC scores. High VEC scores reflect an uncommitted posture with regard to career choices and as this result showed the students who had high perception of barrier on vocational knowledge had an uncommitted posture or in other words, low commitment to their career choices.

The second predictor variable entered into the equation was employment opportunities. In accordance with the positive relationship between this barrier type and VEC score, high perception of employment opportunities as barriers predicts an uncommitted level. For this sample, university students who perceived employment opportunity as a barrier tended to be uncommitted to a career choice.

The final variable evaluated was that of personality characteristics and the results suggest that university students who perceived their personality characteristics as a barrier to their career choice had an uncommitted posture. These students perceive their personality characteristics as unsuitable and inconsistent with their career choices.

The results of the second stepwise multiple regression analysis indicated that, although it explained a small portion of the variance (1%), only one variable which is the perception of employment opportunity as a barrier was found as a significant predictor of the Tendency to Foreclose (TTF) dimension of Commitment to Career Choices Scale. This finding indicated that there is a negative relationship between perception of employment opportunity as a barrier and TTF scores. This relationship demonstrated that students who had higher perception of employment opportunity as a barrier also had lower level of tendency to foreclose and they had a tendency to evaluate different career options.

To conclude, among the perceived career barriers and gender as predictive variables, vocational knowledge, employment opportunity and personality characteristics explained the lack of commitment to a career choice whereas the perceived barriers of employment opportunity variable alone predicted a low tendency to foreclose.

When these findings were considered as a whole, it can be argued that the most meaningful results of the study were the significant contribution of vocational knowledge as a predictor of vocational exploration and commitment as well as its presence along with personality characteristics. These results demonstrated students, who perceived their vocational knowledge as inadequate and who perceived their personality characteristics as inconsistent with their preferred career choices, were not committed to a career choice. As it was mentioned in the Introduction and Review of Literature Chapters, there are a limited number of studies that investigated the relationships between career barriers and career commitment. The results of the present study are consistent with the findings reported in a small number of previous studies. For example, the finding regarding vocational knowledge as a barrier was supported by the findings of Swanson and Tokar (1991) who found that not being informed about career options was the first main barrier to the choice of a career among college students. The findings of Leal-Muniz and Constantine (2005) indicated that lower vocational exploration might be considered as evidence of lower vocational knowledge. Together with the personality characteristics, the perception of vocational knowledge as a barrier to commitment to a career choice may be considered as an indicator of poor and inadequate vocational guidance activities in high schools as it was found in some studies conducted in Turkey (e.g., Gazioğlu-İşmen, Bekçi, Güler-Yavuz, & Çayırdağ, 2007). In addition to an inadequate vocational guidance background from high school, the university experience may also be an indicator of missing vocational knowledge and confusion on the congruence between personality characteristics and career choices. Since the reviewed theories on university students' career development identified a gradual process of change from being uncommitted to a career choice and dependency to authority suggestions to a level of advanced self-processing on career decision making and commitment (Perry, 1953; Tiedemann, 1963; as cited in Gordon, 1981), these results may also be a consequence of grade levels which can be considered as university experience. Thus, further research should examine the differences in these barriers according to grade level.

Employment opportunity was the other variable, which predicted both vocational exploration and commitment, and tendency to foreclose dimensions of career commitment. This finding is not surprising since it may be an indicator of the increasing difficulties and concerns regarding the employment opportunities and competition in the labor market of Turkey due to its still developing economic structure and very dense youth population. According to the reviewed Circumscription and Compromise Approach of Gottfredson (1981) and Social Cognitive Career Theory (Lent & Brown, 1996), individuals eliminate their career alternatives according to their perception on the availability and accessibility of those alternatives. More specifically, Gottfredson mentioned that even when individuals discover their most preferred choices, they may still need to adjust their aspirations according to external realities such as employment opportunities and economic conditions. As a developing country with a very dense youth population, the high competition with regard to employment and limited opportunities in labor markets of Turkey are inevitable. Results of the present study verify the possible concerns of university students on employment opportunities. They perceive employment opportunity as an important barrier as it predicts both vocational exploration and commitment and tendency to foreclose.

Concerns and anxieties about employment may cause the students lack self-confidence about their choices and they can not have a positive sense of vocational future which may be crucial in the operational definition of commitment to career choices (Blustein et al., 1989). Such students may feel helpless and hopeless, and give up their aspirations and a true exploration process. However, the surprising role of employment opportunity in the present study, in spite of its small effect, also provides support for the fact that such students with high perception of barrier on employment opportunities are open for a diverse career exploration and they are able to tolerate the ambiguity. This result might be interpreted as the consequence of a possible different effect of a barrier. Besides the barriers' effect on limiting the career options and causing confusion and uncertainty as presented in the previous literature, the barriers may also provide a motivating effect that may yield to more effort for a diverse exploration. Furthermore, when the students perceive the reason

of the ambiguity and discomfort of the commitment process as an external factor such as employment opportunity that is not under their control, this may bring the feeling of comfort, tolerance and openness to the experience of commitment process as well as to the consideration of different options. To conclude, when the students perceive employment opportunities as barriers, they are less committed to a career choice, meaning that they are still in exploratory process, which may verify the openness to the exploration of different career options as a consequence of low tendency to foreclose on the career choices as the other role of this perceived barrier type.

Previous research has identified gender as a significant predictor (e.g., Luzzo, 1995; Luzzo & McWhirter, 2001) whereas there are also findings that do not support a significant gender difference in the perception of career barriers (Blustein et al. 1989; Swanson & Tokar, 1991). The supporting findings indicate that gender differences exist in especially the perception of role conflict and family concerns as a barrier. Female students reported significantly more barriers on these barrier types. However, the related barriers, namely the perception of gender effect, other life choices (e.g. marriage, child, etc.), expectations of family and expectations of partner, and gender were not found to be related to commitment to career choices in the present study. On the other hand, it should be noted that this study is conducted with a limited number of university students in one university. For this reason, the lack of these gender and family related barriers may be due to specific sample characteristics such as being a student in a large central state university where the students experience relatively modern and equal life standards as generally separate from their families, which may not truly reflect the actual cultural effects. Thus, the barriers related to gender, family and relationship concerns should be investigated with more diverse student groups in the future.

5.2. Implications and Recommendations for Future Research and Practice

The present study has some implications for both counseling research and practice. These implications with some recommendations are presented below.

First of all, in the present study, the assessment of commitment to career choice and perceived career barriers appeared as an important issue which should be considered in identifying their dimensions. More specifically, two dimensions of Commitment to Career Choices Scale (CCCS); Vocational Exploration and Commitment (VEC), and Tendency to Foreclose (TTF) could not be verified by the results of the present study. The low factor loadings of items 9 and 16 in TTF subscale should be considered and reevaluated in the future studies. Besides, a confirmatory factor analysis should also be conducted with a larger and diverse sample. Future research should also specify the range of perceived career barriers by a more detailed identification of barriers. This identification could be derived from an initial study with a diverse sample of Turkish students with regard to economic, living and education conditions. Similar to the Western examples in the literature, a qualitative inquiry such as conducting interviews or having focus groups can provide with a more specified and culture specific list of alternatives as well as an opportunity to group them under major barrier types to have a standardized measure. The results of the current study explained only %22 of the commitment to career choices dimensions. Further detailed investigations can help to learn more about the unexplained % 78 and other possible variables that may predict commitment to career choices.

Furthermore, the generalization of the current study was also limited to a sample of students in one university, METU. METU has the top students who have already dealt with many challenges successfully and have better education standards compared to other universities. In this respect, the examination of perceived barriers in this sample can not indicate a true range of perceived career barriers. The same fact is also valid for the commitment to career choices since the METU students are among the most successful students in the nation and have the highest University Entrance Examination scores that put them in more control of choosing their most preferred majors. Although METU, as being one of the top state universities, has students from low socio economic backgrounds and different regions of Turkey, it is still crucial to examine the commitment to career choices of

the students in other universities along with a deeper focus on the range of perceived barriers, especially in the universities with limited academic conditions.

With regard to implications and recommendations for counseling practice, the present study verified the career counseling need of university students supported by a comprehensive approach. The results showed that the students need both vocational and personal exploration to improve their knowledge level for mature and effective career decision making as a consistent finding with the traditional career counseling views. Furthermore, the findings of perceived career barriers indicated that even the students in a well-known top university experience challenges that cause the lack of commitment to a career choice (so a lack of self-confidence and a positive sense of vocational future) in spite of their high potential and capacities. For this reason, university career centers should take into account the necessity of a comprehensive counseling process that includes efficient reality checks on perceived barriers and offers ways to deal with the barriers. As Brown and Lent (1996) suggests, counselors should help students identify, analyze and prepare for possible career choice barriers.

Besides the importance and need of improving vocational and personal knowledge in the counseling practice, the presence of employment opportunity as a perceived barrier indicates the significance of a contextual factor on career development of university students. Along with counseling practices, the departments and university career centers can also provide students with information and discussion sessions on the current demands of labor market to present a reliable view on economic and employment opportunities. Such sessions in the form of seminars or conferences are already taking place in METU but they generally address to crowd student groups from a limited number of areas. The other departments and related vocational areas should also be presented with regard to their place in the labor market and employment demands in the near future. By such services, the students should be supported to gain the skills and learn sources for exploring and following their interest areas. Although, the presentation of the companies and their advantages are important as well as helping the students for employment, the

crucial exploration and decision making process should not be kept in the background. The university career centers should offer more individual and group counseling services to be able to sure that the students make choices in maximum congruence with their true potential and interests. In this way, the company presentations and job fairs can also be more efficient and goal-directed as a way to minimize the hindering effect of employment opportunities.

Furthermore, the counselors in Turkey should also improve their own knowledge level of rising, highly demanded and emerging new careers. Although, they may not be able to know all specific vocational areas and their future in the labor market, they should at least have the necessary equipment to show their clients the ways and tools of a true vocational exploration.

The results of the present study supported the limiting role of vocational knowledge, personality characteristics and employment opportunities on commitment to career choices that seemed more directly related with the career concerns. The barriers related to gender, family and relationship factors were not appeared as significant predictor variables in the present study. However, the role of other social and relationship factors should not be excluded from consideration. They should be taken into consideration with larger and more diverse samples in the future research studies. In addition, these results suggest the counselors be aware of the inevitable interdependence between other life concerns and roles and career issues as it was mentioned in Super's (1970) reviewed views.

In conclusion, the results of the present study initiated the examination of commitment to career choices of university students in Turkey whereas previous career related investigations were generally on high school students. Moreover, the range of possible perceived career barriers was also taken into consideration for the first time. The results were consistent with earlier theories and research results by displaying the role of both vocational knowledge and personality characteristics on career development, and verified a significant factor in the specific world of work conditions, namely the role of employment opportunities.

As a last point, it is also important to remind that the main purpose of counseling in general is to search for strengths and supports to improve and use them in our daily life to deal with the challenges and barriers for more life satisfaction. In the vocational realm, career choices that are prematurely made without a comprehensive exploration of different career options may be predictive of lower levels of occupational satisfaction and success (Jordaan & Super, 1974; as cited in Blustein et al., 1989). Such occupational satisfaction is an essential part of overall life satisfaction. For this reason, future research studies with university students and career counseling practices at university career centers in Turkey should also focus on discovering the strengths and positive factors, which may present further information, tools and sources for the field to overcome perceived career related barriers.

REFERENCES

- Abişeva, Ş. (1997). Eğitim fakültesi öğrencilerinin meslek seçimini etkileyen bazı etmenler [Some factors that effect the occupational choices of university students in faculties of education]. Unpublished master's thesis. İstanbul University.
- Acisu, S. (2002). Korunma altında olan lise ve meslek lisesi öğrencilerinin mesleki olgunluk düzeylerinin bazı değişkenlere göre incelenmesi [Vocational maturity level of high school and vocational high school students who are under the protection of SHÇEK]. Unpublished master's thesis. Gazi University.
- Adams, G. R., Gullotta, T. P., & Montemayor, R. (1992). *Adolescent identity formation*. California: Sage Publications, Inc.
- Atila, Ö. (2002). Motivasyonun bireysel kariyer yönetimine etkisi [The effect of motivation on personal career management]. Unpublished master's thesis. Afyon Kocatepe University.
- Ay, M. (2002). Mesleki yönlendirme, ilköğretim okulları sekizinci sınıf öğrencileri üzerine bir alan çalışması [Professional orientation in primary schools, a research on eight class students]. Unpublished master's thesis. İstanbul University.
- Aydin, D. (2002). Grup rehberliğinin lise 1. sınıf öğrencilerinin alan tercihlerinde gerçekçi davranmalarına etkisi [The effectiveness of a group guidance program on the realistic study field choice amongst first year high school students]. Unpublished master's thesis. Ankara University.
- Bahar, D. (1995). Transliteral equivalence and reliability of the Turkish form of the problem solving sub-test of the career maturity inventory; a study on the 8th grade Turkish students. Unpublished master's thesis. Boğaziçi University.
- Blustein, D. L. (2006). *The psychology of working*. New Jersey: Lawrence Erlbaum Associates.

- Creed, P. A., Patton, W., & Bartrum, D. (2004). Internal and external barriers, cognitive style, and career development variables of focus and indecision. *Journal of Career Development*, 30(4), 277-294.
- Crites, J. O. (1969). Vocational psychology: The study of vocational behavior and development. New York: McGraw-Hill.
- Çakır, M. A. (2003). Bir mesleki rehberlik grup programının lise öğrencilerinin mesleki kararsızlık düzeylerine etkisi [The effect of a career group guidance program on the career indecision level of high school students]. Unpublished master's thesis. Ankara University.
- Erikson, E.H. (1968). *Identity: Youth and Crisis*. New York: Norton.
- Farmer, H. (1985). Models of career and achievement motivation for women and men. *Journal of Counseling Psychology*, 32, 363-390.
- Gazioğlu-İşmen, A. E., Bekçi, B., Güler-Yavuz, Ç., & Çayırdağ, N. (2007). İstanbul İli Özel ve Devlet Okullarında Mesleki Rehberlik Çalışmalarına İlişkin Durum Saptaması [Investigation of vocational guidace activities in state and private schools in Istanbul]. *Eğitim Araştırmaları*, 27, 97-109.
- Gazioğlu Özkök, G. (1990). Çukurova Üniversitesi'nde Eğitim, Fen-Edebiyat, İktisadi ve İdari Bilimler, Mühendis-Mimarlık, Tıp ve Ziraat Fakültesi öğrencilerinin, yetenek, ilgi ve değerleri doğrultusunda, meslek sahibi olacakları fakültelere göre dağılımı [The distribution of medical education, science-literature, engineering, and agriculture students to their faculties according to skills, interests and values]. Unpublished master's thesis. Çukurova University.
- Gordon, V. N. (1981). The undecided student: A developmental perspective. *Personel and Guidance Journal*, 59, 433-439.
- Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology Monograph*, 28, 545-579.

- Gottfredson, L. S. (1996). Gottfredson's theory of circumscription and compromise. In D. Brown, L. Brooks &Associates (Eds.) *Career choice and development* (3rd ed.), (pp. 179-228). San Francisco: Jossey-Bass.
- Harren, V. A. (1979). A model of career decision making for college students. *Journal of Vocational Behavior*, 14, 119-133.
- Işık, A. (2004). Kariyer geliştirme ve uygulamayla ilgili bir model çalışması [Career development and a model study about practice]. Unpublished master's thesis. Yıldız Technical University.
- Kırçı, Z. (2007). Motivasyon unsuru olarak kariyer geliştirme ve bir uygulama [Carrer development as a motivation element and an application]. Unpublishedmaster's thesis. Atatürk University.
- Kağnıcı D. Y. (1999). *Vocational maturity of METU preparatory school students*. Unpublished master's thesis. Middle East Technical University.
- Kaya, A. (1996). Zonguldak Karaelmas Üniversitesi birinci sınıf öğrencilerinin yetenek ve ilgileri ile eğitimini aldıkları mesleklerin uygunluğunun incelenmesi [Study on the consistency between Zonguldak Karaelmas University first class students career choice and their abilities and interests]. Unpublished master's thesis. Karadeniz Technical University.
- Kroll, A. M., Dinklage, L. B., Lee, J., Morley, E. D., & Wilson, E. H. (1970). *Career development: Growth and crises.* New York: Wiley.
- Leal-Muniz, V. & Constantine, M. G., (2005). Predictors of the career commitment process in Mexican American college students. *Journal of Career Assessment*, 13, 204-215.
- Lent, R. W., Brown S. D., Talleyrand, R., McPartland, E. B., Davis, T., Chopra, S. B., Alexander, M. S., Suthakaran, V., & Chai, C. M. (2002). Career choice barriers, supports, and coping strategies: College students' experiences. *Journal of Vocational Behavior*, 60, 61-72.
- Luzzo, D. A. (1995). Gender differences in college students' career maturity and perceived barriers in career development. *Journal of Counseling & Development*, 73, 319-322.

- Nedim Bal, P. (1998). Ergenlik döneminde mesleki karar verme olgunluğunun incelenmesi ve mesleki karar verme eğitim programının etkisinin araştırılması [The Study of career maturity and the effectiveness of career decision making program on high school adolescents]. Unpublished master's thesis. Marmara University.
- Niles, S. G., & Harris-Bowlsbey, J. (2002). *Career development interventions in the 21st century* (1st ed.). New Jersey: Pearson Education.
- Otrar, M. (1997). Endüstri meslek liseleri ve çıraklık eğitim merkezlerinde öğrenim görmekte olan 16-18 yaş grubundaki öğrencilerin mesleki olgunluk düzeyleri ile bazı kişilik özelliklerinin karşılaştırılması [The Relationship between career maturity and a set of personality characteristics of vocational high schools and apprenticeships students who ages were ranged 16 to 18 years old]. Unpublished master's thesis. Marmara University.
- Öksüz, H. (2001). Mesleki grup rehberliğinin lise öğrencilerinin ilgi ve yeteneklerine uygun alan seçmelerine etkisi [The effect of career group guidance to high school students to choose professional area in accordance with their interests and abilities]. Unpublished master's thesis. Gazi University.
- Özyürek, R. (1995). Fen Bilimleri alanını seçen öğrencilerin kariyer yetkinlik beklentisi ile kariyer seçenekleri zenginliği ve üniversiteye giriş sınavlarındaki performansları arasındaki ilişkiler. [The relationship between the career self-efficicacy, career choices richfulness, and the performance in university entrance examination of the students chosen science field]. Unpublished doctoral dissertation, Çukurova University, Adana, Turkey.
- Pallant, J. (2001). SPSS survival manual. Buckingham: Open University Press.
- Sahranç, Ü. (2000). Lise öğrencilerinin mesleki olgunluk düzeylerinin denetim odaklarına göre bazı değişkenler açısından incelenmesi [A Study on some variables affecting career maturity levels of high school students depending on their locus of control]. Unpublished master's thesis. Hacettepe University.
- Stevens, J. P. (2002). *Applied multivariate statistics for the social sciences* (4th ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.

- Super, D. E. (1957). *The Psychology of careers* (1st ed.). New York: Harper & Brothers.
- Super, D. E., Crites, J. O., Hummel, R. C., Moser, H. P., Overstreet, P. L., & Warnath, C. F. (1957). *Vocational development*. New York: Teachers College Press.
- Super, D. E. & Martin, J. B. Jr. (1970). *Occupational psychology*. London: Tavistock Publications.
- Swanson, J. L. & Tokar, D. M. (1991). College students' perceptions of barriers to career development. *Journal of Vocational Behavior*, 38, 92-106.
- Tabachnick, B. G. & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Boston: Allyn and Bacon.
- Tolbert, E. L. (1974). *Counseling for career development*. Boston: Houghton Mifflin.
- Usluer, E. (1996). Meslek inceleme yaşantısının mesleki olgunluğa etkisi [The Effects of occupational investigation on the career maturity]. Unpublished master's thesis. Ankara University.
- Uysal, F. (2001). Kariyer mesleklerinden akademisyenliğin tercihinde ailenin rolü: Hacettepe Üniversitesi örneği [The Role of the family for the choice of becoming an academician among the professional sobs: The model of the Hacettepe University]. Unpublished master's thesis. Hacettepe University.
- Wu, M. S. R. (1994). *College women's career commitment in relation to their ego identity status*. Unpublished doctoral thesis. University of Iowa.
- Zunker, V. G. (2006). *Career counseling: A holistic approach* (7th ed.). CA: Thomson-Brooks/Cole.

APPENDICES

APPENDIX A

KİŞİSEL BİLGİ BÖLÜMÜ

1. Cinsiyet: () K	() E		
2. Yaş:			
3. Bölüm:			
4. Sınıf: () 1	()2 ()3	() 4	
5. Genel Not Ortala	ması (CGPA):		
6. Anne ve babanızı	n en son mezun olduğu	ı eğitim düzeyi:	
Anne	1	Baba	
() İlk Okul) İlk Okul	
() IIK OKUI	•) IIK OKUI	
() Ortaokul	() Ortaokul	
() Lise	() Lise	
() Üniversite	() Üniversite	
() Üniversite üstü	() Üniversite üstü	
7. Genel olarak aile	nizin gelir durumu aşa	ğıdakilerden hang	isine uygundur?
() Düşük () Or	ta () Ortanın üsti	i () Yüksek	() Çok yüksek

APPENDIX B

KARİYER SEÇİMLERİNE BAĞLILIK ÖLÇEĞİ'NDEN ÖRNEK MADDELER

Aşağıda verilen maddelerdeki ifadelere ne derecede katılıp katılmadığınızı en uygun ve doğru şekilde yansıtan sayıyı, altta verilen derecelendirmeyi kullanarak belirtiniz. Şu anda belirgin bir kariyer hedefiniz yoksa, aşağıdaki maddeleri mesleki bir tercih yapmış olduğunuzu varsayarak, böyle bir durumdaki davranışlarınızı ve tutumlarınızı yansıtacak şekilde yanıtlayınız.

1	2	3	4	5	6	7			
/	/	/	/	1	1	/			
Hiç	Neredeyse	Genellikle	Bir fikrim	Genellikle	Neredeyse	Her zaman			
doğru	hiç doğru	doğru değil	yok/ Emin	doğru	her zaman	doğru			
değil	değil	değil	değilim		doğru				
**									
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		riyer hedefine östergesi oldı			a siki tutuiiii	iaiiii oii			
	organiak g	ostergesi olut	iguna mamye	num.					
:	5. Benim icin	bir kariyer he	edefi üzerinde	karar verme	ek cok zor cü	nkü cok			
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		eğitim ve kari							
	•	zayıflık işaret	idir; bir kişi s	eçimini yapı	nalı ve ne ol	ursa olsun			
	onu izleme	elidir.							
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1	-	kariyer seçene mesleğe bağla				enaimi			
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1′	3- Belirli bir l	kariyer hedefi	ne odaklanan	nadığım icin	hölüm değis	tirmevi			
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10	6- İş dünyası	yla ilgili bildik	derime dayar	ıarak (örneği	n, çeşitli me	sleklerin			
		gibi), aynı an		•	defini ciddi o	olarak			
	gözden ge	çirmem gerek	tiğine inanmı	yorum.					
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20	b- Ne tür bir i	iş yapmak iste	dığımden tan	n emin değili	ım.				

APPENDIX C

KARİYER ENGELLERİ ÖLÇEĞİ

Aşağıda kariyerinizle ilgili planlar yaparken, kararlar alırken size engel oluşturduğunu düşünebileceğiniz etmenlere ilişkin maddeler verilmiştir. Bu maddelerdeki her bir ifadenin sizi istediğiniz kariyer hedefini belirleme ve ona ulaşmak konusunda ne kadar engelledigini, maddenin sağında yer alan derecelendirmeleri dikkate alarak çarpı (X) ile işaretleyiniz.

	Hiç engel değil						Çok engel
	1	2	3	4	5	6	7
Kişilik özelliklerim							
İlgilerim							
Yeteneklerim							
Cinsiyetim							
Mesleki bilgim							
Maddi kazanç olanağı							
İş bulma olanağı							
İş koşulları							
İş dışındaki yaşam seçimlerim (evlilik, çocuk, vb.)							
Ailemin beklentileri/tutumu							
Kız/erkek arkadaşımın beklentisi							
Diğer:							
(Belirtiniz ve derecelendiriniz)							

APPENDIX D

PERMISSION TO USE COMMITMENT TO CAREER CHOICES SCALE



DAVID L. BLUSTEIN, PH.D.

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E-Mail: DAVID.BLUSTEIN@BC.EDU

Dear Colleague:

I am providing you with the items for the Commitment to Career Choices Scale. Naturally, I am granting you permission to use the Commitment to Career Choices Scale (CCCS) in your research study. In this correspondence, I will provide you with the items for the CCCS along with scoring criteria for the CCCS. The scoring pattern for the CCCS is as follows:

The nine items that comprise the Tendency to Foreclose Scale (TTFS) are as follows: Items #1, 2, 8, 9, 10, 15, 16, 22, 28

The nineteen items that comprise the Vocational Exploration and Commitment Scale (VECS) are as follows: Items # 3, 4, 5, 6, 7, 11, 12, 13, 14, 17, 18, 19, 20, 21, 23, 24, 25, 26, 27

Please note that six of the items are reversed scored. The reversed scored items are as follows: Items # 3, 6, 7, 15, 21, 24

I hope that this measure is useful to you. There is no fee for using the CCCS. However, if you elect to use the CCCS, I would simply request that you provide us with a summary of the scale's psychometric properties (reliability and validity) along with the results of the particular studies in which the scale is used. We would also need the relevant demographic data on your sample for our norming project. If you need any additional information on this measure, please do not hesitate to contact me. Best wishes with your research.

Sincerely,
David L. Blustein, Ph.D.
Professor
Director of Doctoral Training



oğu Teknik Üniversitesi East Technical University

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B.30.2.ODT.0.70.72.00/400

13.3.2008

SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜ'NE

İLGİ: 10.3.2008 tarih ve B.30.2.ODT.0.E1.00.00/2008/400-436-2675 sayılı yazınız.

Eğitim Bilimleri Anabilim Dalı Yüksek Lisans Programı öğrencilerinden Elif BALIN'ın, Mart 2008 - Nisan 2008 tarihleri arasında yüksek lisans tezi kapsamında "Algılanan Engellerin Üniversite Öğrencilerinin Kariyer Bağlılığındaki Rolü" başlıklı çalışmasına ilişkin olarak ODTÜ'nün bütün fakültelerinden, farklı sınıf düzeylerinden seçilen ve farklı bölümlerinde okuyan yaklaşık 400 öğrenciye uygulama yapma isteği Rektörlük Makamı tarafından uygun görülmüstür.

Gereğini bilgilerinize arz ederim.

Saygılarımla.

Dairesi Başkanı

APPENDIX F

GÖNÜLLÜ KATILIM FORMU

Bu çalışma, yüksek lisans öğrencisi Elif Balın tarafından yürütülen bir tez çalışmasıdır. Çalışmanın amacı, katılımcıların bir kariyer hedefine bağlılığını ve bu hedefe ulaşmalarına engel olabileceğini düşündükleri faktörleri, aralarındaki ilişkiye bakarak incelemektir. Çalışmaya katılım gönüllülük temelinde olmalıdır. Ankette, sizden kimlik belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız kesinlikle gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir; elde edilecek bilgiler bir yüksek lisans tezinde ve bilimsel yayımlarda kullanılacaktır.

Anket, genel olarak kişisel rahatsızlık verecek soruları içermemektedir. Ancak, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz cevaplama işini yarıda bırakıp çıkmakta serbestsiniz. Böyle bir durumda anketi uygulayan kişiye, anketi tamamlamadığınızı söylemek yeterli olacaktır. Anket sonunda, bu çalışmayla ilgili sorularınız cevaplanacaktır. Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için yüksek lisans öğrencisi Elif Balın (Tel: 0312-2664961-158; E-posta: elifbalin@gmail.com) ile iletişim kurabilirsiniz.

Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayımlarda kullanılmasını kabul ediyorum. (Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

İsim Soyadı	Tarih	İmza	Alınan
Ders			
	/		

APPENDIX G

KATILIM SONRASI BİLGİ FORMU

Bu çalışma daha önce de belirtildiği gibi ODTÜ Eğitim Bilimleri Bölümü yüksek lisans öğrencisi Elif Balın tarafından yürütülen bir tez çalışmasıdır. Çalışmanın amacı, katılımcıların bir kariyer hedefine bağlılığını ve bu hedefe ulaşmalarına engel olabileceğini düşündükleri faktörleri incelemektir.

Kariyer bağlılığı kavramı, belirli bir mesleki tercihe sahip olmanın ötesinde kişinin tercihine bağlılık düzeyini ifade etmektedir ve belirli bir meslek veya bölüm seçmiş olan üniversite öğrencilerinin bu seçimlerine bağlılığını ortaya koyacaktır. Literatüre göre, kariyer bağlılığı yüksek olan bir kişi, kendisiyle ve mesleklerle ilgili etkin bir araştırma sürecinden geçerek kararını vermiş; bu nedenle hem kararından emin hem de kararını değişen koşullara göre adapte edebilecek açıklığa ve esnekliğe sahiptir. Kariyer bağlılığı yüksek olanlar, geçtikleri etkin araştırma sürecinden ötürü aynı zamanda kendilerinden emin, olumlu ve iyimser bir mesleki gelecek duygusuna sahip, olası engellerin farkında ve belirli kariyer planları olan kişilerdir. Bilinçli ve etkili bir şekilde belirlenmiş eğitim ve kariyer hedefleri vardır. Ancak bir hedefin olmaması veya netlik kazanmaması kişinin kariyer bağlılığı olmadığını göstermez. Kariyer bağlılığı aynı zamanda mesleki araştırmadaki etkinlik ve ilerme anlamına da gelir. Kişinin değişik seçenekleri göz önüne alarak incelemeye ve araştırma yapmaya açık olması da bağlılık düzeyinin yüksek olduğunu gösterir. Bu anlamda kariyer bağlılığına etkin bir kariyer seçimi yapmaya bağlılık anlamında da bakılabilir.

Anketleri cevaplarken bu konuyla ilgili (kariyer hedefiniz, hedef belirleme, vb.) kararsızlık ve belirsizlik duyguları hisseder veya olumsuz beklenti ve fikirlerle (engeller, tereddütler,vb.) karşılaşıp bunları ortadan kaldırmak için uzman desteği almak isterseniz ODTÜ Kariyer Planlama Merkezi veya Psikolojik Danışma ve Rehberlik Merkezi ile iletişime geçebilirsiniz. Her iki merkez de sizi bu konudaki ihtiyaçlarınıza göre (kendini tanıma; çeşitli kariyer alternatifleriyle ilgili bilgi

edinme; akademik başarı, maddi zorluk veya ailevi sorunlar gibi engellerle baş etme, vb.) uzmanlara yönlendirerek size yardımcı olacaktır.

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Bu çalışmadan alınacak verilerin Haziran 2008 sonunda elde edilmesi maçlanmaktadır. Elde edilen bilgiler <u>sadece</u> tez ve bilimsel yazılarda kullanılacaktır. Çalışmanın sonuçlarını öğrenmek ya da bu araştırma hakkında daha fazla bilgi almak için aşağıdaki kisiye başvurabilirsiniz. Bu araştırmaya katıldığınız için tekrar çok teşekkür ederiz.

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