THE ROLE OF ADULT SIBLING RELATIONSHIP QUALITY ON CAREER
DECISION SELF-EFFICACY AMONG UNIVERSITY STUDENTS

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ABSTRACT

THE ROLE OF ADULT SIBLING RELATIONSHIP QUALITY ON CAREER DECISION SELF-EFFICACY AMONG UNIVERSITY STUDENTS

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The purpose of current study was to examine the role of adult sibling relationship quality (i.e., warmth, conflict and rivalry) in predicting career decision self-efficacy of university students after controlling for gender, age, birth order, sibling size, contact frequency, and physical distance between siblings. Participants were state university students whose ages between 18 and 25 in Ankara. Convenience sampling method was used, and the sample composed of 414 participants (257 female, 257 male). Adult Sibling Relationship Questionnaire (ASRQ) and Career Decision Self-Efficacy-Short Form (CDSE-SF) were used to collect data. The ASRQ was adapted into Turkish by the researcher. The results of multiple hierarchical regression analysis indicated that demographic and relationship characteristics did not significantly predict career decision self-efficacy. Among sibling relationship quality variables, warmth was the only significant predictor and uniquely explained almost 7% of the variation in career decision self- efficacy of college students.

Keywords: Career decision self-efficacy, sibling relationship quality, young adulthood

ÖZ

ÜNİVERSİTE ÖĞRENCİLERİNİN KARİYER KARAR VERME ÖZ YETERLİLİKLERİNDE YETİŞKİN KARDEŞ İLİŞKİ KALİTESİNİN ROLÜ

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Bu araştırmanın amacı, cinsiyet, yaş, doğum sırası, kardeş sayısı, kardeşlerin iletişim kurma sıklığı ve kardeşler arası fiziksel uzaklık gibi değişkenler kontrol edildikten sonra yetişkin kardeş ilişki kalitesinin (sıcaklık, çatışma ve rekabet) üniversite öğrencilerinin kariyer karar verme öz yeterliliklerini ne ölçüde yordadığını incelemektir. Katılımcılar, Ankara'daki bir devlet üniversitesindeki 18-25 yaşları arasındaki öğrencilerden oluşmaktadır. Kolay ulaşılabilir örnekleme yöntemi kullanılan çalışmada çalışma grubu 417 katılımcıdan (257 kadın, 257 erkek) oluşmuştur. Yetişkin Kardeş İlişkisi Kalitesi Ölçeği ve Kariyer Karar Verme Özyeterliliği-Kısa Formu veri toplama aracı olarak kullanılmıştır. Yetişkin Kardeş İlişkisi Kalitesi Ölçeği, araştırmacı tarafından Türkçe'ye uyarlanmıştır. Hiyerarşik çoklu regresyon analizi sonuçları, demografik ve ilişkisel değişkenlerin, kariyer karar verme özyeterliliğini anlamlı düzeyde yordamadığını göstermiştir. Kardeş ilişki kalitesi değişkenlerinden sadece sıcak ilişkinin, üniversite öğrencilerinin kariyer karar verme öz yeterliliğinin anlamlı yordayıcısı olduğu ve tek başına varyansın yaklaşık %7'sini açıkladığı görülmüştür.

Anahtar kelimeler: Kariyer karar verme öz yeterliliği, kardeş ilişkisi kalitesi, genç yetişkinlik dönemi

To my family…

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CHAPTER 1

INTRODUCTION

"Choose a job you love and you will never have to work a day in your life"

- Confucius

1.1 Background to the Study

According to the psychosocial development theory of Erikson (1968), finding an occupation and embarking on a career in adolescence and young adulthood is one of the most significant tasks for building an identity and becoming an adult. In order to make choices on such an important matter in the challenging world of work today, even in some cases for several times in a life time, people need to develop beliefs and judgments on themselves and their abilities on whether they are able to qualify for the requirements of a certain occupation. Betz and Voyten (1997) defined these self-beliefs as career decision self-efficacy, and constructed a scale to measure its levels.

Career Decision Self-efficacy Scale assesses people's self-efficacy on career related tasks within five categories; self-appraisal, gathering occupational information, goal selection, making plans for future, and problem solving. For an appropriate career decision-making, firstly, people need to gain insight about their own abilities, interests, strengths and weaknesses and that is called self- appraisal. After evaluating themselves, they should gather occupational information on the career path they want to choose and set short and long term goals to reach it. Then, they should be able to make plans on how to achieve the goals they set. People also should be prepared for the problems they may

encounter in this path and work on the solutions firmly. Self-efficacy on career decision is one of the key steps of gaining career exploration and decision making behaviors. Empirical findings have demonstrated that career decision efficacy is strongly related with career development outcomes such as vocational indecision, career aspirations, career exploratory behaviors, career choice persistence, career commitment, and coping strategies (Bandura et al., 2001; Büyükgöze-Kavas, 2011; Chung, 2002; Gianakos, 1999; Hackett & Betz, 1981; Luzzo, 1995; Paulsen & Betz, 2004; Sumari, 2006; Taylor & Popma, 1990). Without having a certain level of self-efficacy on career decision, it does not seem to be possible to take steps toward fulfilling a career.

Late adolescence and young adulthood are life periods that individuals encounter with the process of career decision for the first time and an appropriate decision-making may lead them to have a lifelong successful career. However, research findings showed that young adults are not very good at selecting the suitable vocation for themselves. By the late 2000, the number of American young adults who work in a job that does not match their educational preparation has increased, and over half of the college educated young people in their twenties reported on not getting a job in their desired fields. A high number of those, who managed to have a job they wanted, mentioned about discouraging experiences and disappointments (Berk, 2014). Although there is no nationwide empirical data on the number of college graduates who get a job matching with their education or get satisfaction from it in Turkey, it is common to encounter with those who work in an unmatching field or are unhappy about their current occupation. When career failures and Erikson's developmental stages, which stress out the importance of embarking on a career during young adulthood are taken into consideration, it is essential to find out the reasons for failures and establish ways for better vocational selection in young adulthood. Since career decision self-efficacy is influential on almost every career related task and skill, the factors and predictors of the concept needs further examination and explanation.

Career decision self-efficacy origins from Bandura's Social Cognitive Theory (1986), which emphasizes individuals' cognitive ability to orientate themselves through

appropriate choices and indicates the strong influence of relationships and environment on their self-thoughts and beliefs. According to the interest model of social cognitive career theory, when individuals think that they are qualified enough for the requirements of the vocation and believe that they would achieve, they become successful and long termed. Support system and significant individuals in people's lives are effectual components in the formation of positive outcome expectations and self-efficacy (Lent et.al, 2002). The family as the primary relationship circle and social environment has an exquisite role in shaping and understanding individuals' self-efficacies and esteem. Studies indicated that family interaction patterns (Whiston, 1996), family origin (Dodge, 2001), parental attachment styles (Nawaz & Gilani, 2011; Wolfe & Betz, 2004), family adaptability (Rush, 2002), perceived relationship quality between family members (Hargrove, Creagh & Burgess, 2002), family cohesion and functioning (Lee, 2003) are significant predictors and factors of career decision self-efficacy. Almost every dynamic of family interaction and environment creates a change in the level of self-efficacy in career decision. However, an important aspect of family relationship in career decision self-efficacy has been ignored; sibling relationship.

Siblinghood is the longest and undeniable relationship that a person may have. Siblings might compensate the role of friends, rivals, caregivers, mentors and even enemies, and maintain to be in the social cycle for years. As a family member and lifelong companion, they may take a strong part in the career decision-making process of individuals voluntarily or unconsciously. Based on research, it was found that during career decision process, siblings provide socio-emotional support, esteem support, and information support to each other (Schultheiss et al, 2002), and even the warmth and trust between them may lead them to choose the same career path (Spudich. 2014). With the recent increasing interest in sibling studies, findings indicated that socio-behavioral development, psycho-emotional well-being and psycho-cognitive structures of individuals are strongly influenced by the quality of sibling relationship (Brody, 1998; McDade, 2010; Milevsky, 2005; Sherman et al., 2006; Stern, 2011).

Certainly, quality, intensity and/or importance of sibling relationship change according

to age, developmental stages, and turning points in life. For example, in childhood, the quality of the relationship is very ambivalent. It changes according to daily events and recent happenings. Therefore, in childhood whether the relationships between the siblings have positive features like warmth, support, and emotional closeness or negative features such as aggressiveness, conflict and hostility, the relationships still show that siblings are involved with each other. Regardless of the nature of these involvements, they especially affect children's social competence and capability of sustaining healthy peer relationships. On the other hand, in adolescence, a positive or negative natured relationship with sibling becomes more prominent, feelings and concepts on siblinghood get to be more stable. The support of siblings in this stage of life is an advantage to build peer relationships, social behaviors, and self-thoughts. For instance, the perception of getting emotional support and acceptance from peers and school are related to the containment of warmth in the relationship between adolescent siblings. Moreover, older adolescents who are supported by their young siblings reported higher self-esteem, greater perceived social skill competence and abilities in comparison with their peers (Volling & Blandon, 2003).

Sibling relationship in young adulthood has a different nature than in childhood. It is primarily based on emotional support and willingness with a stable and egalitarian nature (Volling & Blandon, 2003). The quality of the relationship in young adulthood is shaped by childhood memories on family interactions, contact frequency, mutually shared values, interests and family traditions, family environment, parental attitudes, commitments to family members, and personal characteristics (Ross & Milgram, 1982; Stocker, Lanthier & Furman, 1997). The support or indifference of siblings toward each other in turning points of life such as completing education, getting a job and starting a career are also strong predictors of the relationship's nature. Siblings who are supportive to each other in these terms of life tend to have more positive and closer relationships (Bedford, 1989).

Stocker, Lanthier and Furman (1997) categorized adult sibling relationship quality on three dimensions; warmth, conflict and rivalry. Warmth refers a close and positive

relationship based on similarity, intimacy, affection, acceptance and support. Conflict indicates negative feelings toward each other stemming from quarrelling, antagonism, competence and dominance. Rivalry characterizes a relationship that is under the shadows of maternal and paternal rivalry. Since it is known that perceived relationship quality between family members is related with career decision self-efficacy (Hargrove, Creagh & Burgess, 2002), the nature of the interaction between siblings might be a good predictor of career decision self-efficacy.

Stocker, Lanthier and Furman (1997) also indicated age, gender, sibling size, birth order, contact frequency and physical distance as influential individual characteristics that are related with the nature of sibling relationship. According to their study, participants with sisters had warmer relationships and those who contact more frequently had higher levels of warmth with their siblings. Participants with more siblings were more rivalrous and less affectionate with their siblings. The siblings with wider age gap and those with cross sex sibling reported less conflict. Therefore, in order to understand the correlations between adult sibling relationship quality and these individual characteristics in Turkish population, the associations between these variables and sibling relationship were examined, and their influence on career decision self-efficacy was controlled in the study.

In the current study, the role of the quality of sibling relationship in career decision self-efficacy of university students aged between 18 and 25 was addressed. In the light of the available literature, it was expected that warm and close relationships between siblings would be predictor of higher level of career decision self-efficacy. The second hypothesis was that conflict in relationship would be negatively correlated with career decision self-efficacy and predicts lower levels of career decision self-efficacy. The relationship between rivalry and self-efficacy in career decision was not hypothesized. Since there was no study on its part on career decision self-efficacy and the possibility of its correlation to both directions, there were no assumptions about the role of rivalry.

To sum up, according to empirical findings, it seems clear that career decision self-

efficacy is influential on almost every career related task and skill. It is important for individuals to develop reasonable beliefs on their own abilities and judgments in their career. Therefore, the factors that affect and predict self-efficacy in career decision should be examined and determined accordingly. Career decision self-efficacy derives from Bandura's Social Cognitive Theory which emphasizes the interactions among people, their behavior, and environments. People interact with individuals, and environments they live in also influence their personal beliefs, interests, goals, expectations and actions on career. In this research, the correlation between a particular interaction; the sibling relationship and career decision self- efficacy was examined.

1.2 Purpose of the Study

The current study aimed at examining the role of sibling relationship quality (warmth, conflict, rivalry) in predicting career decision self-efficacy of Turkish university students after controlling for demographic characteristics (i.e., gender, age, birth order, and sibling size), and relationship characteristics (physical distance and contact frequency between siblings).

1.3 Research Question

Based on the purpose of the current study, the main research question is presented as follow:

> How well does the perceived adult sibling relationship quality predict the career decision self-efficacy of university students, after controlling for gender, age, birth order, the sibling size, contact frequency and physical distance between siblings?

1.4 Significance of the Study

To the best knowledge of the researcher, this study is one of the first attempts to understand the role of sibling relationship quality in career decision self-efficacy in Turkey. For a century, how people choose or should choose their career has been an important topic for researchers. Rational thinking and independent matching between individuals and occupational characteristic have been the most commonly used approach in both research and counseling practices. However, in the past decades, individuals' self-beliefs in achieving career related tasks, career decision self-efficacy were found to be a critical psychological concept in career decision.

Furthermore, the role of social, cultural and relational contexts in career decision and its efficacy has been studied as well. Empirical evidence indicated that people get influenced by significant others rather than deciding with rational consideration only by themselves more than it is imagined. Moreover, in the available literature, studies were mostly focused on the impact of parents and family as a whole unit. Very few studies have been conducted on peer relationship quality and sibling relationship in career selection and decision-making (Nawaz & Gilawandi, 2011; Schulthesiss, 2002; Spucich 2014) Meanwhile, the spot of sibling relationship on career decision self-efficacy has not been inquired with large samples, and has been examined only with limited number of participants by using qualitative methods.

Moreover, according to the 2015 fertility report by Turkish Statistical Institute (TUIK), families have two children on average in Turkish population (TUIK Reports, 2015). However, the sibling relationship, its predictors and factors have not been studied broadly and there is no research on its quality during young adulthood period with a sample selected from Turkish population. There is a gap in knowledge about both sibling relationship quality in young adulthood and its role in career decision self-efficacy. Knowing the benefits, effects and consequences of the quality of sibling relationship may give counselors and educators the advantage of being proactive and educating children and parents on using this relationship dyad for the benefit of children,

adolescents and young adults.

According to the 2015 OECD report (OECD Reports, 2015), people in Turkey are working for 1855 hours on average in a year, which is a huge amount of time to allocate for a job that is not enjoyed and successfully managed. Moreover, it has been found that people show or gain various psychological and behavioral problems as consequences of job dissatisfaction (Henne & Locke, 2007). Therefore, it is essential to investigate factors and predictors of better career decision and build preventions and interventions for young adults who are about to embark on a career and provide guidance on choosing personally appropriate jobs.

Understanding the indicators and impacts of career decision self-efficacy would contribute to the process of determining career decision issues, solution creation and taking precautions before these problems emerge. Knowing the part of sibling relationship quality that takes in the development of career decision self-efficacy could be helpful information and tool in counseling for assisting people to acquire career related behaviors and skills. It may help counselors to understand the reasons for career related struggles and unrealistic thoughts and beliefs on vocational self-ability and assist their clients if such issues are related to sibling relationship. Furthermore, career counselors, school counselors and family counselors may take sibling relationship quality into consideration during the process of career decision making, solving issues related to career development, and understanding familial dynamics. School counselors, teachers and educators may make use of the study while they are building interventions and psycho-educational programs on career development.

1.5 Definition of Key Terms

Career decision self-efficacy is individual's degree of belief that he or she can successfully complete tasks necessary for making career decisions. The tasks that are required for vocational decision making are defined in five domains; accurate self-

appraisal, gathering occupational information, goal selection, making plans for the future, and problem solving. The level of self-confidence in fulfilling these functions indicates the degree of career decision self-efficacy (Betz & Voyten, 1997).

Sibling relationship quality is defined as the nature of the interaction between siblings. In this study, the nature of sibling relationship is defined in three dimensions; warmth, conflict and rivalry. Warmth is a positive characteristic that refers to possess similarity, affection, admiration, support, intimacy and acceptance. Conflict is a negative dimension, which indicates that siblings have quarrelling, antagonism, competence and dominance in their relationship. Rivalry evaluates the perceived partiality of mothers and fathers in families (Stocker, Lanthier, & Furman 1997).

CHAPTER 2

LITERATURE REVIEW

In this chapter, there are four sections. In the first section, some of the major career development theories are summarized. Then, the theoretical framework of the study, Social Cognitive Career Theory, is broadly represented. In the third section, major research findings on career decision self-efficacy and descriptive variables are discussed and in the final section, studies on sibling relationship in young adulthood and career decision are mentioned.

2.1 Major Theories of Career Choice and Development

In this section, some of the major career choice and development theories are briefly described. These perspectives are Holland's Career Typology, Super's Life-Span/ Life-Space Theory, Krumboltz's Learning Theory of Career Counseling, and Ecological Model of Career Development.

2.1.1 Holland's Career Typology

Holland's Career Typology has been the most intriguing and investigated career development theory in the field. Holland viewed career decision and adjustment as an extension of personality. Individuals explain and define themselves through their vocational choices, interests and experiences. According to the theory, people's attitudes and generalizations about jobs, referred as stereotypes, are usually accurate. Based on these stereotypes, Holland establishes six types of personality and work environments;

Realistic, Investigative, Artistic, Social, Enterprising and Conventional (Niles & Harris-Bowlsbey, 2005)

The within and between interactions among types of personality and working environments were graphically described around a hexagon. The placements of types around the hexagon were determined according to *congruence* between personality and environment, *difference* level within the types and *consistency* of the similarities and dissimilarities of the types (Sharf, 2006).

2.1.2 Super's Life-Span/ Life-Space Theory

The theory takes developmental stages and individuals' roles they play during these stages into consideration while investigating and explaining the career related behaviors. It includes basic assumptions of many theorists of psychology and creates a combination for career development through a life span (Super, 1990).

Self-concept, life space and life span are the main segments of the theory. Self-concept is the perception of individuals about themselves in their own situation. The concept has similarities with Betz's term of self-efficacy. Roles that individuals possess throughout the life are referred as life span in the theory. Super (1990) identified six significant roles, which are homemaker, worker, citizen, leisurite, student and child. Moreover, life span segment divides lifetime into five chronological developmental stages, which include some certain vocational behaviors. In addition to the segments, the theory emphasizes the influence of socio-economic, psychological and biological effects on career development. It is explained entirely with an archway diagram that illustrates all determinants of career path (Zunker, 2006).

2.1.3 Krumboltz's Social Learning Theory of Career Counseling

The theory explains the career decision-making process in the light of behavior (action) and cognition (knowing or thinking). In addition to explaining factors in career development, Krumboltz's theory also focuses on educating clients on career decision techniques and managing unpredictable events. While explaining factors and developing techniques, it takes both environmental and individualistic characteristics into consideration in career development (Krumboltz & Nichols, 1990).

The theory identifies genetic endowment (e.g. intelligence, sex, ability), environmental conditions and events (e.g. any social, political and cultural environment and events), learning experiences (e.g. instrumental and associative learning experiences) and task approach skills (e.g. work habits, problem solving behaviors etc.) as the four main influences in career decision process. As consequence of these influences, individuals develop career related beliefs and behaviors accordingly in three different ways. First one is self-observation generalization, which is self-beliefs about abilities based on prior life incidents and learning experiences. The second is task approach skills, which consist of cognitive and affective skills used for career decision-making and maintaining process. The third one is about taking action on career initiation behaviors like applying for a job and choosing a major (Krumboltz & Nichols, 1990).

2.1.4 Ecological Model of Career Development

Individuals live in various social environments, which are in interaction in many levels. The model investigates and explains human behaviors, as well as career related behaviors, as result of continuing interaction between environment and individuals. According to this approach, there are four subsystems of interaction; microsystem, mesosystem, exosystem and macrosystem. Microsystem refers to the interpersonal interaction with an environment such as school or home environment. Mesosystem combines two different microsystems and indicates the relationship between these systems. Exosystem consists of the interactions between subsystems that individuals do not actively participate and are partially or indirectly affected such as colleagues and

neighborhood. The macrosystem is the social, cultural, moral and ideological values and beliefs of the community individuals live in (Cook et al., 2002).

Career related behaviors are also determined by interrelations between subsystems. Investigating the relationship between systems and the mutual influence occurring between the environment and individuals sets a picture of the dynamics that shape career decision. Since the interaction patterns are peculiar for each person, even though people have the same race, sex or demographic features, they decide on their career uniquely (Gysbers et al., 2002).

2.2 Social Cognitive Career Theory

Social Cognitive Career Theory (SCCT) explains career development from social cognitive perspective, and emphasizes the importance of cognitive processes, interpersonal factors and both internal and external influences on career related behaviors. It combines the related concepts of career theories and builds links between variables that have been considered separately (Lent et al., 2002).

SCCT is primarily based on Krumboltz's social learning theory of career decision-making (Mitchell & Krumboltz, 1996) and the application of the self-efficacy construct on career development (Hackett & Betz, 1981), which branches are rooting from Bandura's Social Cognitive Theory. The theory is on the same grounds with Krumboltz's perspective on the influence of learning experiences, genetic factors, special abilities and environmental conditions on vocational interests, values, choices and decisions. However, it highlights the significance of cognitive abilities and skills beyond the main roots of learning and conditioning (Lent et. al., 2002). Furthermore, the theory acknowledges the influence of interests, abilities and values on career development as many trait factor career theories. On the other hand, it differs from them in terms of person-environment interaction assumption. It emphasizes the dynamic and

exclusive interaction between them and its unique reflection on self-system rather than establishing generalized and enduring attributes (Lent et al., 2002).

Another difference between the trait factor theories and SCCT is the direction of causality. Trait factor theories consider person and environment affecting each other mutually; however, they define behavior mostly as the result of person-environment interaction. SCCT establishes a fully bidirectional relationship between personal attributes, external environmental factors and overt behaviors. In this system, individuals are both creatures and also creators of their environment (Wood & Bandura, 1989).

SCCT is mainly established on three concepts of general social cognitive theory; self-efficacy, outcome expectation and personal goals. Bandura (1986) defined self-efficacy as people's own judgments or beliefs relative to their abilities on fulfilling certain tasks or specific behaviors. These beliefs are regulated by cognitive processes, which pertains an essential part in what people decide to do or not to do (Bandura, 1986). It is primarily shaped by four elements; personal performance accomplishments, vicarious learning, social persuasion, and physiological and affective states. Especially, self-attribution and experience of achievements incline to elevate the levels of self-efficacy (Lent et al., 2002).

Hackett and Betz (1981) were the pioneers of the application of the self-efficacy theory in career decision. The application of Bandura's (1977) self-efficacy theory to the study of educational and career behaviors has been defined as "one of the most heuristic and useful practices in career development" (Betz & Voyten, 1997, p. 197). According to the social cognitive career development theory, people differentiate in terms of their own perceptions and beliefs about their ability to define goals, deal with problems, collect information on vocations, make a realistic plan and appraise themselves when they encounter with the responsibility and challenge of selecting a career. The self-perceptions about these five specific career related behaviors are defined as career decision self-efficacy (Betz & Hackett, 2006).

Outcome expectations are personal beliefs and thoughts on the result of performing a particular task or behavior. Outcome expectations can be set according to several motivations such as extrinsic reinforcement (e.g. reward, payment), self-directed consequence (e.g. self-pride) and outcome that stems from the process of the task (e.g. flow experience). Learning experiences are also as influential as outcome expectations and self-efficacy. According to the theory, self-efficacy also affects the outcome expectations; especially in cases that outcome expectations are evaluated in terms of performance quality (Lent, 2005).

Goals are referred as persistent aims to perform certain behaviors or gain particular outcomes. Goals enable individuals to engage in, organize and maintain some behaviors without any external reinforcement. In SCCT, there is a three-way relationship between these three concepts. Self-efficacy might be influential on outcome expectation. Self-efficacy and outcome expectations are considered as two of the determinants of goal setting and also goals are indicated as significant factors in the development of self-efficacy and outcome expectation (Lent, 2005).

SCCT includes three interlocking models; interest development model, choice model and performance model. Interest development model emphasizes the importance of personal interests in career decision. Experiences and cognitive processes stimulate personal interests. Self-efficacy expectations, outcome expectations and sources of self-efficacy and outcome expectation promote or lower the interest level in a particular career. Aptitudes, values, other person and contextual influences and learning experiences are sources for self-efficacy and outcome expectation, which are highly effective in triggering or pursuing an interest. Therefore, having positive learning experiences, gaining required abilities and values, possessing necessary personal characteristics and supportive environment robust the outcome expectation and self-efficacy, and consequently the pursuit of a certain interest and career (Lent, 2005).

After an interest rises, people need to make choice goals in order to realize it. In choice model, choice process is separated into three steps; the expression of main aim or choice,

actions to pursue it and evaluating and determining the following behaviors. According to the theory, as some part of it is mentioned above, self-efficacy and outcome expectations boost the development of interests, interests becomes initiatives for establishing goals, and determined goals motivate to take action. The outcomes of the actions reshape the self-efficacy and outcome expectation and therefore, they guide and redirect the choices. Contextual influences such as background, gender role, financial and emotional support, socio-cultural barriers also play an important role in transforming their career interest to goals (Lent, 2005).

Model of performance is mainly focused on achievements and the perseverance of career related behavior. In accordance with the earlier models, performance attainment depends on performance goals that are influenced by self-efficacy and outcome expectation, which are affected by abilities and past experiences. The performance also resulted in success or failure modifies the self-efficacy and outcome expectations. As in other models, there is a triadic-reciprocal relationship pattern occurring between variables. Self-efficacy is the co-determinant of performance and its levels significantly change the quality of performance (Lent, 2005).

In sum, some of the major career development theories; Holland's Career Typology, Super's Life-Span/ Life-Space Theory, Krumboltz's Learning Theory of Career Counseling, Ecological Model of Career Development and Social Cognitive Career Theory, were briefly described. The main theory of the study is Social Cognitive Career Theory, which includes the concept of career decision self-efficacy, takes environmental and relational influences into consideration while assessing the career development. Thus, in current study, the predictive role of sibling relationship quality in career decision self-efficacy was explored based on social cognitive career theory.

2.3 Research on Career Decision Self-Efficacy

Career decision self-efficacy has been the most investigated concept of SCCT. Studies

showed that adolescents', young adults' and adults' perceptions about their career decision self-efficacy was a strong predictor of their career development and choice behavior (Ribandeneira, 2006).

Firstly, Hackett and Betz (1981) studied the application of the self-efficacy theory in career decision. The study conducted with 235 undergraduate students emphasized the role of personal attributes, external environmental factors, and behaviors in career development. According to the results, efficacy expectations of people were determinants of decision in initiating a certain behavior, amount of energy that was spent on the behavior and duration of persistence during challenging situations. Efficacy changed according to level, strength, and generality. Level involves the degree of difficulty of behaviors people believe they have the ability to achieve. Strength means sustainability in completing a certain task in the case of obstacles and undesired experiences. Generality refers to how much personal efficacy is effective in various behavioral domains. Briefly, when people have faith in their own capabilities to manage required tasks and expect that the outcome would be worthwhile, they will give their best to reach out their objectives. On the other hand, low self-efficacy in abilities cause people not to put appropriate effort in achieving their goals and tend to make when they encounter with a failure.

Career decision self-efficacy affects many career related behaviors, tasks and skills. One of them is career indecisiveness. In their study, Taylor and Betz (1983) searched for the relation between career decision self-efficacy and career indecisiveness within a sample of 247 college students. According to the results, students who had higher scores on Career Decision Self-efficacy Form were more decisive in selecting a certain career path and those who got lower scores were more indecisive. It indicates that higher career decision self-efficacy leads to decisiveness in career and lower self-efficacy in career decision significantly related to career indecisiveness.

Taylor and Popma (1990) conducted a study with 407 college students to investigate the relationships among career decision self-efficacy, vocational indecision, career salience,

and locus of control. In accordance with previous studies, subjects who were more confident about their abilities on career related behaviors were more determined and those who were less confident were less determined in their career choices. Furthermore, the locus of control had negative correlation with career decision self-efficacy. Especially, people with external locus of control tended to be more external and they had less faith in career decision-making skills.

Studies have also showed that career maturity is positively affected by career decision self-efficacy. Luzzo (1995) found that career decision self-efficacy was a strong predictor of career decision-making attitudes, skills and maturity in a sample of university students (N=401). Especially in determining career decision attitudes, self-efficacy is more influential than locus of control and career decision making skills. He strongly recommended career counselor to work on enhancing career decision self-efficacy of individuals in order to increase their career maturity.

Career commitment levels of individuals are also related to people's own perceptions and beliefs about their own capabilities. Chung (2002) conducted a study on the relationship between career decision self-efficacy and career commitment in a sample of 165 college students. Students who scored high on career decision self-efficacy had also higher scores on Career Commitment Scale. In particular, they were more skilled and confident in career planning and goal setting.

Moreover, career decision is strongly effective on academic confidence. In a study conducted with 627 college students, researchers (Paulsen & Betz, 2004) compared participants' career decision self-efficacy and their confidence in six basic academic dimension; Mathematics, Science, Using Technology, Writing, Leadership, and Cultural Sensitivity. Results showed that the confidence level in all academic dimensions have a significant and positive relationship with career decision self-efficacy.

To sum up, career decision self-efficacy has been found strongly correlated with almost all career related tasks and behaviors such as career indecisiveness, career salience, locus

of control, career maturity, commitment, and academic confidence. A higher level of career decision self- efficacy is a predictor of healthy career development. In the next section, the studies that explored career decision self-efficacy and the demographic variables (age, gender, birth order, and sibling size) were presented.

2.3.1 Demographic Variables and Career Decision Self-efficacy

The demographic variables of the current study are age, gender, birth order, and sibling size. Literature review demonstrated that career decision self-efficacy has been studied mostly with age, gender and birth order among these variables. Sibling size has not been studied in relation to the concept of career decision self- efficacy.

Studies on college students indicated that through the senior year, students become more confident in academic studies and develop more enhanced career decision-making attitudes (Whiston & Keller, 2004). However, studies conducted on the association between age and career decision self-efficacy found significant but weak relationship in a sample of 233 undergraduates (Luzzo, 1993), or no significant relation at all within a huge sample consisting of college students from three different universities (N=1832) (Betz et al., 2005). In the light of the suggestions of research on getting more mature career decisions throughout college years, the role of age in career decision self- efficacy was investigated in the current study.

Since career decision self-efficacy is a phenomenon under social cognitive theory, gender is one of the most frequently examined variables. In most of the studies, repeatedly no significant correlation between gender and career decision self-efficacy has been found (Browne, 2005; Kang, 2009; Weiss, 2000). For instance, in Turkey, Büyükgöze-Kavas (2011) (N=723) and Işık (2010) (N=32) conducted studies to explore CDSE among college students in Ankara and Adana. Both of the researchers reported that gender made no difference in career decision self-efficacy level. However, a study on 148 Taiwanese college students showed that women had lower career decision self-

efficacy level compared to men (Mau, 2000). On the contrary, Gianakos (2001) found that women had higher self-efficacy in career decision compared to men in the USA. Therefore, it was argued that the influence of gender is related to its interaction between cultures (Lindley, 2006).

According to Watkins (1984), the birth order of individuals creates a specific way of interaction and environment, which affects the self-understanding on being a worker, establishing interpersonal working style, and vocational habits. Many studies have been conducted to understand the influence of both chronological and psychological birth order on career related behaviors, self-thoughts, and feelings. They showed that there is a significant difference between the vocational preferences of firstborns, middle-borns and last-borns (Bradley, 1982; Han & Green, 2016; White et al., 1997). Firstborns had higher scores on self-esteem, optimism, ability to work with others, level of management, and academic career interest in a sample of 163 students (Bryant, 1987). Along with Bryant's research, a study investigating the role of birth order on career interest among 491 college students showed that firstborns were more interested in business and socially active careers since they had better interpersonal and management abilities. On the other hand, youngest children did not prefer to work in the field of science and technology because of feelings of helplessness and being weaker than others (White et al., 1997).

Furthermore, Bohmer and Sitton (2016) examined the influence of birth order on American women's career selection by analyzing the biographies of 442 women mentioned as notable American Women. According to the results, middle born women significantly tended to be scientists and last-borns preferred to be artists. Nonetheless, the only study exploring the link between career decision self-efficacy and birth order on 650 college students did not reveal a significant difference between the career decision self-efficacy levels of first, second, middle, youngest and only children (Herndon, 2011).

In conclusion, age and gender have been revealed to be in a slightly significant relationship with career decision self-efficacy or not at all. The concepts of gender and

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gender roles vary according to society and its norms. Therefore, the link between self-efficacy and age and gender were also examined in order to understand their role in a Turkish sample. According to the birth order studies, firstborns were supposed to have higher career decision self- efficacy levels because of their higher scores on self-esteem, optimism, ability to work with others, level of management, and academic career interest; though, Herndon (2011) did not find a significant relationship. In order to clear the ambiguity and analyze their relationship within a Turkish population, birth order was also taken into consideration as an important variable in the study. Sibling size was studied for the first time.

2.3.2 Familial Influences on Career Decision Self-efficacy

When we look at from the perspective of not only social cognitive career theory, but also from the perspectives of relational career and family counseling theories; family, its members, functions, quality of relationship, independence and dependence levels, and environmental dynamics have significant impact on the development of career decision self-efficacy.

Whiston (1996) examined the relationships between family interaction patterns, career indecision, and career decision-making self-efficacy with a sample of 214 freshmen. According to the results, 'intellectual-cultural orientation' was the only significant predictor of career decision-making self-efficacy. Students' confidence in their abilities to use occupational information was positively related to families with an emphasis on intellectual-cultural activities, and negatively related to families that stress independence and achievement orientation. Based on the findings, the researcher suggested that career counselors and school counselors may assist students by organizing exploration opportunities, like field trips to museums and libraries.

Dodge (2001) investigated the relationship between family of origin and career decision self-efficacy, career thoughts, and vocational identity by using Bowenian family system

framework. According to the findings, lower levels of career decision self-efficacy in relationship with conflict in the family of origin, lower level of differentiation and higher levels of dysfunctional career thoughts were positively and significantly correlated. Based on the results, he recommended that family system therapy, which includes the collaboration of all family, would be beneficial for the career development of children and young adults.

In a study conducted by Rush (2002) with 320 African American college freshmen, family environmental dynamics were significantly and positively related to career decision-making self-efficacy. Positive correlations were found between family adaptability scores and the domains of problem solving and occupational information in career decision-making self-efficacy. Family cohesion and the domains of problem solving, future planning, self-appraisal, and occupational information were also positively correlated. Overall, the results indicated that supportive family environment is very influential on successful and accurate career decision-making. This finding was consistent with the findings of another study (Lee, 2003) conducted with Korean high school girls which indicates that family functioning is associated with career decision self-efficacy.

In accordance with the previous research, studies showed that family interaction patterns, vocational identity development and career decision self-efficacy are correlated. Moreover, the quality of family relationships is strongly associated with career decision self-efficacy. Especially, the perceived quality of family relationships and family-supported goals have remarkable influence on college students' confidence, their abilities to engage in career planning activities, and to set stable and clear career goals. In a study with college students (N=210) who were able to express their thoughts and feelings, discuss their problematic issues at home, get support to be academically successful and be encouraged to engage in intellectual and cultural activities by their families had higher levels of career decision self-efficacy. On the other hand, students who were exposed to family conflict reported low self-efficacy scores (Hargrove, Creagh, & Burgess, 2002).

Furthermore, Wolfe and Betz (2004) investigated the relationships between attachment variables, fear of commitment, and career decision-making self-efficacy. According to the results, these variables were positively correlated with the quality of parental and peer attachments. People get attached in four attachment styles, which are dismissive, secure, fearful and preoccupied. Dismissive people get away from intimacy and want to be independent most of the time. People with secure style are comfortable with intimacy and also capable of providing personal space and autonomy in their lives. Individuals with fearful style are not comfortable with intimacy and usually try to keep away from the social environments. Preoccupied people are those who are overly concerned with relationships. It was reported that while fearful and dismissive people got lower scores on career decision self-efficacy, people with secure attachments scored significantly higher. Therefore, the quality of maternal, paternal and peer attachment seems to be influential on the development of career decision self-efficacy.

Relationships between the quality of parental and peer attachment and career decision self-efficacy was also examined in Pakistan with a sample of 550 college students. In the study, higher levels of positive parental and peer attachment were predictive of higher scores on career decision self-efficacy scale. Parental attachment had also stronger influence than peer attachment (Nawaz & Gilani, 2011).

In the light of research studies, the effect of familial relationships on career decision self-efficacy seems undeniable. The quality of relationships between family members, styles of attachment to parents, interaction patterns, family environment, and family of origin have strong impacts on individuals to develop self-efficacy in career decision. However, most of the aforementioned studies have focused on parents and the interaction between their daughters and sons. In this study, an important but neglected domain of the familial relations, the relationship between siblings and the quality of this interaction with career decision self -efficacy was explored.

2.4 Sibling Relationship in Young Adulthood and Career Decision

Since young adulthood contains the qualities of both youth and adulthood, it is a transition stage for individuals when they individuate and modify the family, peer or other significant relationships, including the sibling relationship. With the independency coming with adulthood, increased interest in peers and interactions established with people who are mostly outside of the family, thus, the nature of the sibling relationship alters to be voluntary rather than familial obligations or parental dictations (Stewart et al., 2001).

During this period, sibling relationship becomes primarily based on emotional support and intimacy. Despite decreasing daily interaction or involvement each other's lives, siblings might be a significant source for potential socio-emotional support and reliable advice (Scharf, Shulman, & Avigad-Spitz, 2005). Mileksky (2005) conducted a study on the compensatory effect of social support received from sibling during the adjustment period to early adulthood with a sample of 247 graduate and undergraduate students. According to the results, people with sibling support reported higher life satisfaction and self-esteem, and lower depression and loneliness levels. Social support from sibling is also strong compensatory for low peer and parental support. Another study conducted with 812 college students showed that they perceived siblinghood as a resource for closeness, comfort and security (Feeney & Humphreys, 1996).

The perceptions about sibling relationship quality in young adulthood and adulthood are categorized as conflict, rivalry and warmth by Lanthier, Stocker and Furman (1997). These thoughts and feelings on sibling relationship are affected and shaped by childhood experiences with the sibling, family environment, parental attitudes, personal characteristics and certain turning points in life (Stocker, Lanthier, & Furman 1997). A qualitative study was conducted with a sample of people between the ages of 22 and 93, on their perceptions of closeness, rivalry, and the role of significant incidents in life that affected the sibling relationship. In the light of the findings, the perceptions of closeness and rivalry were mostly rooted from childhood. Spending time with family, engaging in

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activities with group or a particular sibling, and having similar personal and familial values and sharing same environments like home or bedroom in childhood contributed to establish close relations with siblings in both childhood and adulthood. Moreover, keeping in touch, having mutually shared values, goals and interests, maintaining family traditions and having commitments to family members were significant factors to have close and warm relationship with siblings (Ross & Milgram, 1982).

In young adulthood, having an affectionate/warm relationship between siblings mostly depends on providing or getting emotional and psychological support from each other at turning points or developmental transitions of life such as leaving home, completing education, getting a job and starting a career, marriage, child bearing and in some cases taking care of aging parents. Siblings who were supportive during these times and during young adulthood reported to be closer and accepting towards their siblings in middle and late adulthood (Bedford, 1989). Specifically, older siblings become a role model for younger ones about how to manage these transitions successfully. Younger siblings learn from the positive and negative experiences of the older and get information about the nature of these transitions. If siblings decide to be in touch and collaborate with each other voluntarily at these turning points, it promotes affectionate feelings (Conger & Little, 2010). A study conducted on 378 young adults showed that siblings who contacted more frequently developed warmer relationships with their siblings. Moreover, they felt less rivalry toward them. The nature of the relationship did not change according to the physical distance between siblings (Stocker, Lanthier, & Furman 1997).

Conflict and rivalry between siblings, which also stem from childhood, are more apparent dimensions of adult sibling relationship. Concerns for parental favoritism and low family bonding in childhood usually persist in adulthood (Stocker, Lanthier, & Furman 1997). Specifically, the expression of verbal aggression has a significant negative effect on the closeness of siblings and leads to conflict and jealousy in young adulthood. According to the study conducted by Myers and Bryant (2008) within a sample of 148 young adults, the three most damaging types of verbal aggression were insults, unfair comparisons, and repudiating the relationship. These expressions are game

breakers and turning points in the relationship.

Rivalry in young adulthood, which derives from childhood, tends to decrease with the less appearance of parents and more voluntarily or limited contact. However, the memories of parental comparison and favoritism, ongoing competition and comparison on one's own qualities may still fire up that aspect of the relationship (Bedford, 1992). Furthermore, Ross and Milgram (1982) suggested that in young adulthood and adolescence, the gender role differences may also cause rivalry between siblings. In other words, assigned traditional duties and roles of daughters at home may create feelings of anger and rivalry towards male siblings and their privileges.

The quality of relationship is surely influenced by family environment, parental attitudes and also certain turning point comes with those ages such as leaving home, spending more time outside and with others, involving in romantic relationships or marriage, getting a job etc.. Other than these variables, birth order, gender and sibling size have also been cited as important factors, which determine the nature of the relationship, and were included as variables in the current study.

Birth order is a significant factor in relationship since childhood. With the born of younger siblings, older siblings get less physical and emotional care than they got earlier, and even most of the times, older ones may become alternative caregivers to the younger ones. This situation may result in positive and also negative outcomes. Because of reduced care, older siblings may feel anger and jealousy toward younger ones. This may cause rivalry and conflict in the relationship. However, by age, older siblings may play a prosocial role and provide the young ones with emotional, instrumental and social support, which makes them more influential on and essential for the younger ones; youngsters feel gratitude and try to maintain this highly valued connection and warmth (Yaktus, 1997).

On the other hand, since the older siblings leave home earlier than younger ones, they may have less connection compared to other siblings. Therefore, usually, they would be

less supportive ones or the ones who try harder to strengthen the relationship. In a study conducted by Newman (1991) among 275 college students who were living away from their home, it was found that elder siblings called their younger siblings more frequently than the younger ones did. In addition, middle children also called the younger ones more than they called their elder ones. Younger siblings seemed to be closer than elder ones. Moreover, in another study on a sample of 169 participants from Israel (Doron & Sharabi-Nov, 2016), researchers found that firstborn siblings perceived their relationship with their siblings more conflictual than middle born siblings. In contrast to this study, the research conducted on 794 Dutch adults who were between 18 and 79 found that firstborns bear more positive feelings about their sibling relationship compared to middle-borns and last-borns. In addition, they reported that they were more likely to prefer their most beloved sibling over a friend (Pollet & Nettle, 2009). Thus, in the current study, birth order data were also collected in order to examine and control its influence on sibling relationship quality and career related self-efficacy.

The gender of the sibling has also been cited as a strong predictive variable of the sibling relationship quality. For instance, in childhood, most rivalry and conflict were observed between same sex siblings. Studies showed that in young adulthood, rivalry between brothers is much more than sisters. Furthermore, brothers reported more negative feelings toward their brothers than sisters did for their sister (N=115) (Pulakos, 1989). However, a very recent study conducted in Israel among 89 women and 67 men resulted in sisters' having more conflict and less cohesion compared to brothers (Doron & Sharabi-Nov, 2016). Furthermore, a study (Cuff, 2006) conducted with 60 adults, aged between 20 and 30, on gender differences and relationships of adult siblings showed that same sex siblings had significantly more conflicted relationships compared to cross sex siblings. While sisters and cross sex siblings indicated to have warmer relationships, brothers had lower scores on warmth. On the rivalry subscale, women reported more rivalry regardless of the gender of their siblings.

About the sibling size and rivalry, Leung and Robson (1991) suggested that rivalry level in large families is higher than in small sized families; however, the intensity of it might

be less. Since the sense of being a group and sacrificing for the family is emphasized in family environment, the feelings of rivalry and conflict fades quickly. Nevertheless, the studies and observations on sibling size are contradicting. While some studies reported to have warmer relationships in big families with the sharing of responsibilities and more frequent human contact (Bland, Krogh, Winkelstein & Trevisan 1991), some indicated higher level of rivalry and conflict because of limited resources (Mackinnon, 1989), and some others suggested the difficulty of maintaining contact which may result in cutting off the ties (Bedford, 1992). In order to clear the ambiguity and explore the link between sibling size and relationship quality of college students in Turkey, sibling size was also considered as a variable in this study.

Studies on understanding the relationship between social interactions and career choice and planning started with Bradley in 1982. He examined the concepts of Holland (1973), Super (1963), and Roe (1956) on career development, and integrated them with the familial and other social relationships. He emphasized the importance of parents' behaviors, thoughts and expressions on shaping children's attitudes towards goal setting and working habits. He also suggested sibling dynamics as a significant and separate variable on career establishment and development. In his field and clinical studies, he found that competition and closeness levels, need for striving, roles identified among themselves and interaction qualities affect vocational choice and career planning such as whether to choose the same career, accept the given working role, and try to get a better career. Age, gender, age spacing between siblings and personal characteristics were also studied as variables in these studies (Bradley, 1984).

Schultheiss et al. (2002) conducted a qualitative study on 13 young adults in order to determine whether the most important sibling was influential on their career exploration and decision making process. At the end of the interviews, it was concluded that the most important sibling, who is considered as the closest one, had a significant effect on the individuals' career decision in terms of social support. The domain of social support included emotional support, social integration, esteem support, and information support dimensions which are represented under the 'Warmth" factor of Stocker and Lanthier's

(1995) adult sibling relationship quality categorization.

Furthermore, Spudich (2014) examined the influence of adult twin relationship on choosing the same career. He conducted semi-structured interviews with six pairs of twins. One of the research questions he was trying to answer was "What is the nature of twins' relationship with each other in terms of same careers?" According to the results, all of the twins stressed the feelings of support, trust and closeness toward their twin siblings. The quality of the relationship between twins who decided to follow the same career was warmth and closeness. Participants mentioned that the comforting and assuring nature of their relationship was also effective in leading to the same vocations.

In the current study, the role of the sibling relationship quality, which was categorized as warmth, conflict and rivalry, on career decision self-efficacy of university students was investigated. As aforementioned, some demographic and relationship characteristics such as gender, age, birth order, sibling size, contact frequency and physical distance between siblings were included to control their impact on sibling relationship quality and career decision self-efficacy of college students.

2.5 Summary of the Literature Review

Social Cognitive Career Theory (SCCT) which expresses both cognitive and social roots of career development emphasizes the importance of cognitive processes, interpersonal factors and both internal and external influences on career related behaviors. Career Decision Self-Efficacy (CDSE) is one of the most significant and frequently investigated concepts of the theory. CDSE is people's belief about their own capability to fulfill and maintain required tasks and behaviors for a certain career. The level of career decision self- efficacy is a strong determinant of interests, career goals, actions and performance levels.

According to empirical evidence, there are some contextual influences that predict

CDSE. Significant others and people around individuals are among those that affect the level of self-esteem and their career choices. Particularly, the relationship quality between family members, parental attitudes, attachment styles, family environment and function has a great role in career decision and its self-efficacy. On the other hand, besides parent-children relationship, there is another relationship dyad in the family; sibling relationship. It is the most enduring and long lasting relationship that a person may have, and the quality of it has been shaping their social and psychological well-being including self-esteem since childhood. With young adulthood, maintaining this relationship depends on individuals' wishes, and the quality of the relationship changes according to childhood memories, parental attitude, gender, birth order, contact frequency, share of common values and daily routines. In the current study, the role of sibling relationship quality on career decision self-efficacy in young adulthood, which is the time to make a start for a career path, was examined.

CHAPTER 3

METHOD

In this chapter, design of the study, sampling procedure, participants, data collection instruments and procedure, statistical analysis of data, and limitations are presented.

3.1 Design of the Study

The purpose of the study was to examine the role of sibling relationship quality (warmth, conflict, rivalry) in predicting career decision self-efficacy of Turkish university students after controlling for demographic characteristics (gender, age, birth order and sibling size), and relationship characteristics (physical distance and contact frequency between siblings). The design of the study was correlational (Fraenkel, Wallen, & Hyun, 2012).

In the current study, criterion variable was career decision self-efficacy scores and predictive variables were sibling relationship quality with the demographic information of gender, age, birth order, sibling size, and relationship variables; contact frequency and physical distance between siblings. The demographic information such as age, gender, sibling age and gender, birth order, sibling size, physical distance between siblings and the frequency of contact were collected through the Adult Sibling Relationship Questionnaire along with sibling relationship quality scores (ASRQ; Stocker, et al, 1997). Career decision self- efficacy scores were obtained by the Career Decision Self Decision/Efficacy Scale Short-Form (CDSE-SF; Taylor & Betz, 1996). Data were collected with paper-pencil surveys and instruments were filled out by 18-25 years old students of a state university in Ankara. Descriptive statistics and hierarchical multiple regression analysis were conducted in order to analyze data.

3.2 Population and Participants

The target population of the study was university students who were between the ages of 18-25 in Ankara. Participants were recruited conveniently among the students of a state university in Ankara. Data were collected by using paper-pencil surveys from 454 volunteering university students aged between 18 and 25, who were undergraduate or graduate students. During the data cleaning process, the surveys of 40 participants were eliminated due to missing items. The missing items were at the second page of the instrument which included the questions of ASRQ from number 33 to 81 (46% of the items). Four hundred fourteen participants' data were used for the current study.

3.2.1 Demographic Characteristics of the Participants

As it is represented in Table 3.1, gender distribution in the sample was equal. 207 of the participants (50%) were male while 207 (50%) of them were female. The mean age of the participants was 21.76 years (SD=1.67) between the range of 18 to 25 years. Almost one fourth of the participants were 21 (n=96; 23.2%) years old. Regarding birth order, 45.4% of the sample (n=188) were first born. 60.6% (n = 251) of the participants had one sibling. Furthermore, the majority of the participants (n=239; 57.7%) were living at least 160 km away from their siblings. In addition, the mean score of contact frequency between siblings was 13.86 (SD=3.19).

Table 3.1

Demographic Characteristics of the Study Participants (N=414)

Group		n	%
	Male	207	50
Gender	Female	207	50
	First born	188	45.4
Birth Order	Middle born	65	15.7
	Last Born	162	39.1

Table 3.1 (continued)

Group		n	%
Physical	Same city	168	40.58
Distance	Living away	239	57.7
	Have 1 sibling	251	60.6
Sibling Size	Have 2 siblings	138	33.3
	Have 3 and more	45	10.87

3.3 Data Collection Instruments

Data were collected by using Turkish version of the Career Decision Self-efficacy Scale-Short Form (Taylor & Betz, 1983; Büyükgöze-Kavas, 2010) and Adult Sibling Relationship Questionnaire (Stocker, et al., 1997).

3.3.1 Career Decision Self-efficacy Scale-Short Form (CDSES-SF)

Career Decision Self-efficacy Scale was developed by Taylor and Betz (1983) to measure an individual's degree of belief that someone can successfully complete tasks that are essential for making career decisions. It contains 50 items designed to measure five domains of career decision-making self-efficacy, which are accurate self-appraisal, gathering occupational information, goal selection, making plans for the future, and problem solving. Respondents are asked to rate their confidence about performing each task on a 10-point Likert-type scale ranging from 0 (no confidence) to 9 (complete confidence).

Due to the length of the original scale, in 1996, a short form of Career Decision Self-Efficacy Scale (CDSES-SF) that contains 25 items taken from the original CDSES was

developed based on Crites's model of career maturity. It is rated on a 5-point Likert-type scale ranging from 1 (no confidence) to 5 (complete confidence). Since the construct validity scores and item loadings did not support the categorization of five scales, it was suggested to be used as a generalized measurement for career decision self- efficacy. The total score varies between 25 and 125, and higher scores show higher level of self-efficacy on career decision. The internal consistency coefficients of the short form ranged from .73 (self-appraisal) to .83 (goal selection) for the subscales and .94 for the total score (Betz, et al, 1996).

The scale was adapted to Turkish by Büyükgöze-Kavas (2010). The internal consistency coefficient of the total scale was found as .92. The reliability of the subscales ranged from .61 (occupational information) to .81 (goal selection). Moreover, the test–retest reliability of the scale was calculated based on a 2-week interval. The reliability coefficient (stability coefficient) was .91 for the total score between these two administrations. The convergent validity of the Turkish CDSES-SF was tested with General Self-efficacy Scale and a significant positive correlation (.65) was found between the total score of CDSES-SF and total score of GSES (Büyükgöze-Kavas, 2014). In this study, Cronbach's alpha correlation coefficient score was calculated for total scale and found .93.

3.3.2 Adult Sibling Relationship Questionnaire (ASRQ)

Adult Sibling Relationship Questionnaire (ASRQ) was developed by Lanthier and Stocker in 1992. It assesses adults' perceptions of their own behaviors and feelings toward their sibling, as well as their perceptions of their sibling's behaviors and feelings toward them. It is a self-report 81-item, and 5 point Likert- type attitude test. ASRQ has 3 dimensions; warmth which is a positive feature about whether siblings are affectionate towards each other (e.g. "How much do you and your sibling have in common?"), rivalry which refers to power status, parental favoritism and rivalry feelings against each other (e.g. How much does this sibling act in superior ways to you?"), and conflict (e.g.

"How often does this sibling do things to make you mad?"). The questionnaire also has 14 dyadic relationship scales under three main dimensions; Intimacy, Affection, Knowledge, Acceptance, Similarity, Admiration, Emotional Support, Instrumental Support, Dominance, Competition, Antagonism, Quarrelling, Maternal Rivalry, and Paternal Rivalry. This study focused on only three main dimensions (warmth, conflict, rivalry).

For almost all ASRQ items (except rivalry items), participants rate how characteristic each item is of themselves and of their sibling. It is a self-report instrument with Likert scales ranging from *hardly at all* (1) to *extremely much* (5). However, maternal and paternal rivalry items (Items 11, 12, 23, 24, 38,39,50,51,65,66,77, and 78) are rated on a 5-point Likert scale (1 = participant is usually favored, 2 = participant is sometimes favored, 3 = neither participant nor sibling is favored, 4 = sibling is sometimes favored, 5 = sibling is usually favored). These items are recoded as absolute discrepancy scores (0 = neither child is favored, 1 = parents sometimes favor one child over the other, 2 = parents usually favor one child over the other).

In the original study (Stocker, et al, 1997), internal consistency estimates ranging between .59 and.96, 2-week test-retest reliabilities ranging between .75 and .93, and correlations between the scale scores and the social desirability measure ranging between -.16 and .60 for each of the ASRQ scales were obtained. High levels of internal consistency were observed for all of the scales ranging between .75 and .93, and there was adequate variability in the ratings on each of the scales. Two of the 14 scales (Competition and Dominance) were significantly correlated with social desirability despite the magnitude of these correlations was low (mean r= -.17). Participants' scores were found stable across the 2-week period, which showed the high test-retest reliability.

For factor analysis, the three factors were accounted for 70% of the variance. The first factor "Warmth" included intimacy, admiration, affection, acceptance, similarity, knowledge of the sibling, and support scales. The second factor "Conflict" included quarrelling, dominance, antagonism, and competition. Lastly, maternal and paternal

rivalry was included on the third factor "Rivalry". Factor scores were minimally correlated: Warmth and Conflict, r = -.19; Warmth and Rivalry, r = -.17; and Conflict and Rivalry, r = .23.

Convergent correlations of ASRQ were found .60 for Warmth, .54 for Conflict, and .33 for Rivalry. The discriminant validity for average six discriminant correlations was .14 (Stocker, et al, 1997).

3.3.2.1 Translation and Adaptation of Adult Sibling Relationship Questionnaire (ASRQ)

In the current study, 81 items of ASRQ were translated into Turkish by three English Teaching instructors who had adequate knowledge in both languages. The translations were compared and the most congruent translations of the items were selected by the researcher and her supervisor. Then, the selected Turkish version of questionnaire was back translated to English by a certified translator. No discrepancy was found between the Turkish version and the back-translated form.

In the next step, the grammatical construct of the Turkish version of ASRQ was examined by a Turkish language teacher. It was approved and no revision was recommended. Moreover, the approved Turkish version was also sent to a group of 12 university students who were between the ages of 18-25 via e-mail. They read and completed the survey and sent feedbacks regarding the understandability and fluency of the items. The focus group commented on the items and stated that questionnaire was clear, understandable, yet time consuming. No changes were offered; therefore, Turkish version of the ASRQ was formed for the pilot study.

3.3.2.2 Pilot Study for Adult Sibling Relationship Questionnaire (ASRQ)

The data for pilot study was collected from 438 undergraduate students of a state university in Ankara during the summer semester of 2015-2016 academic year. Due to

the missing items, 27 participants were excluded during data cleaning process and remaining data from 411 participants were used in the analysis. Of the participants, 217 (52.8%) were male and 193 of them (47.2%) were female. The ages of the participants ranged between 18 and 25 years. The mean age was 22.03 years (SD=1.66).

47.7% (n=196) of the participants were first born and 281 of them had one sibling (68.37%). The majority of the participants (n = 252, 61.3%) were living at least 160 km away from their siblings.

The pilot data set was not included in the main study. It was used to examine construct validity with confirmatory and exploratory factor analyses and to compute internal consistency of the measures. Furthermore, the convergent validity of the Turkish ASRQ was assessed via computing correlations between its subscales' and Self Esteem Scale (SES; Rosenberg, 1965; Çuhadaroğlu, 1986) and Basic Empathy Scale (BES; Joliffe & Farrington, 2006; Topçu, Erdur-Baker, & Çapa-Aydın, 2010) scores.

3.3.2.2.1 Confirmatory Factor Analysis for Turkish ASRQ

In order to test the three-factor structure of ASRQ, confirmatory factor analysis (CFA) was conducted. Analysis of Moment Structures AMOS 24 (Arbuckle, 2009) program was used for the analysis. Before conducting the CFA, assumption of normality, sample size, linearity, absence of outliers and missing data were checked as Tabachnick and Fidell (2013) recommended. According to Hair et al. (2010), sample size with 5:1 is appropriate for the analysis. Therefore, data of 411 participants, which did not contain any missing items, were sufficient enough to meet the sample size assumption. Assumption about the absence of outliers was checked based on standardized item scores and values greater than 132 were taken as outliers; thus, data of 40 participants were excluded (Tabachnick & Fidell, 2013).

In order to check normality assumption, Kolmogorov- Smirnov and Shapiro-Wilk tests were run, skewness and kurtosis values, histograms and Q-Q plots were examined.

Skewness and kurtosis values were between 3.00 and -3.00, the highest skewness and kurtosis value was 1.01. Histograms and Q-Q plots were normally distributed and linear. Although Kolmorov-Smirnov and Shapiro-Wilk tests results were found significant, these values are known to be very sensitive to the sample size.

After completing assumption checks, CFA was performed with Maximum Likelihood (MA) Model and Direct Oblimin Rotation methods. Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), Tucker Lewis Index (TLI) and Standardized Root Mean Square Residual (SRMR) values were used. According to the results, chi-square values were non-significant and acceptable with the value of 3.71. (χ2 = 3.71, df = 251, p = .00). However, SRMR value was .09, RMSEA was .86, TLI was .55 and CFI was .56. A moderate model is supposed to have CFI and TLI values greater than .90 (Hu & Bentler, 1999), and SRMR and RMSEA values less than .08. (Browne & Cudeck, 1993); therefore, the first attempt of CFA concluded with poor and unacceptable model fit.

3.3.2.2.2 Exploratory Factor Analysis for ASRQ

Since the model did not fit into the pilot data, exploratory factor analysis was conducted to analyze the construct validity. The absence of outliers, multivariate normality, metric variables, correlations above .30, Kaiser-Meyer Olkin (KMO) and Barlett's Test of Sphericity were tested for EFA assumptions (Hair et al. 2010). Items with standardized values greater than 132 were considered as outliers and excluded from the data.

Univariate normality assumption was controlled with Kolmogorov-Smirnov and Shapiro-Wilk tests, Skewness and Kurtosis values, histograms and Q-Q plots were checked. All Skewness Kurtosis values were between 3.00 and -3.00, and the highest Skewness and Kurtosis value was 1.01. Histograms and Q-Q plots were normally distributed and linear. Although Kolmorov-Smirnov and Shapiro-Wilk tests results were found significant, these values are known to be very sensitive to sample size. Multivariate normality assumption was tested with Mardia's Test and the result was

significant (b2p = 7218.43, p< .001). Thus, multivariate normality was violated.

Metric variables of ASRQ, warmth, conflict and rivalry, were continuous and calculated with 5 points scales. KMO value was .89 and Barlett's Test of Sphericity was significant ($\chi2$ (3240) = 21122.70, p < .05), which indicates the significant difference between correlation matrix and identity matrix. Furthermore, there was no item correlated above .30.

After the assumption check, EFA was conducted by using Principal Axis Factoring, Direct Oblimin Rotation method. Since the multivariate assumption was violated, this method was the most suitable one. Seventeen factors were loaded with Eigenvalues higher than 1 and explained 61.19% of the variance. However, scree plot indicated three breaking points and when the factor number was reduced to three, it explained 38.3 % of the total variance.

Analysis was run again with three- factor solution, and 14 items were found to be poorly or dual loaded in pattern matrix. Fourteen items, which were loaded on two or more factors and/or lower than .40, were deleted. Eight of these deleted items (9, 10, 21, 22, 36, 37, 44, 45) were under "warmth", 4 of them (19, 20, 69, 70) belonged to "conflict" and 2 of them (50, 51) were the questions of "rivalry" scale. All other items were loaded under the factors consistent with the model. As shown in Table 3.2, factor loadings changed between .41 and .79 and total variance was explained with 41.73% by three factor solution.

Table 3.2

Factor Loadings of the Turkish Adult Sibling Relationship Questionnaire (N = 371)

Item number	Factor loading
Warmth	
Item33-Closeness	.77
Item28-Discussing feelings	.76
Item32-Closeness	.76

Table 3.2 (continued)

Item number	Factor loadings
Warmth	
Item25-Knowledge about sibling	.76
Item80-Knowing ideas	.75
Item2-Talking about issues	.75
Item5-Friendship	.74
Item3-Talking about issues	.73
Item29-Discussing feelings	.72
Item67-Discussing decisions	.72
Item40-Support	.71
Item68- Discussing decisions	.71
Item56-Understanding	.71
Item79-Knowing ideas	.70
Item6-Friendship	.68
Item53-Knowing other relations	.68
Item52-Knowing other relations	.67
Item13-Cheering up	.67
Item41-Support	.64
Item54-Thinking alike	.63
Item14-Cheering up	.63
Item55-Understanding	.62
Item75-Accepting ideas	.60
Item26-Knowing about sibling	.60
Item60-Caring	.59
Item1-Commonality	.59
Item63- Feeling proud of	.58
Item18-Helping	.57
Item81-Lifestyle similarity	.56
Item59-Caring	.55
Item27-Personality similarity	.51

Table 3.2 (continued)

Item number	Factor loadings	
Warmth		
Item17-Helping	.51	
Item76-Accepting ideas	.51	
Item64- Feeling proud of	.49	
Item71-Financial support	.46	
Item48-Accepting lifestyle	.45	
Item49-Accepting lifestyle	.43	
Item72-Financial Assistance	.41	
Conflict		
Item58-Being disagree		.77
Item34-Making mad		.75
Item7-Irrirating		.74
Item57-Being disagree		.74
Item8-Irritating		.73
Item4-Arguing		.72
Item35- Making mad		.70
Item74-Acting superior		.64
Item31-Criticize		.64
Item61-Putting down		.61
Item30-Criticize		.61
Item62-Putting down		.60
Item73-Acting superior		.56
Item47-Being bossy		.53
Item46-Being bossy		.51
Item16-Competition		.46
Item42-Jealousy		.44
Item15-Competititon		.44
Item43-Jealousy		.43

Table 3.2 (continued)

Item number	Factor loadings
Rivalry	
Item66-Mother closeness	.75
Item65-Mother closeness	.67
Item77-Father closeness	.64
Item78-Father closeness	.64
Item23- Father favoritism	.63
Item39-Mother support	.62
Item11- Mother favoritism	.61
Item38-Mother support	.60
Item24-Father favoritism	.54
Item12- Mother favoritism	.45
Eigenvalues	25.82
Factor 1 (Warmth)	25.01
Factor 2 (Conflict)	11.44
Factor 3 (Rivalry)	5.27
% of variance	41.72

The correlations between subscales of ASRQ were also calculated. Pearson correlation coefficient value between warmth and conflict was $r = -.19$, $p < .01$; warmth and rivalry was $r = -.15$, $p < .01$, and conflict and rivalry was $r = .21$, $p < .01$.

3.3.2.2.3 Convergent Validity Evidence

The convergent validity of ASRQ was obtained by examining the correlations between each subscale of ASRQ and Basic Empathy Scale (BES), and Self-Esteem Scale (SES). The data collection instruments and correlation results were briefly described in the following parts.

Basic Empathy Scale (BES): The scale was developed by Joliffe and Farrington (2006) and adapted into Turkish by Topçu, Erdur-Baker and Çapa-Aydın (2010). It is a 20 item,

5 point Likert type scale, from 1 (Strongly Disagree) to 5 (Strongly Agree). Higher scores mean higher level of empathy.

BES has two subscales; emotional empathy and cognitive empathy. The internal consistency coefficients of the Turkish adaptation were ranging from .76 to .80. The scale was used to test convergent validity of ASRQ. It was assumed that the total score of BES would be correlated positively with "warmth" and negatively with "conflict" and "rivalry".

Self-Esteem Scale (SES): The scale was developed by Rosenberg (1965) and adapted into Turkish by Çuhadaroğlu (1986). It is a 10 item, 4 point Likert type self-report inventory on general level of self- esteem. The Cronbach Alpha coefficients of Turkish adaptation were reported as .71, and test-retest reliability was found as .89. Since lower scores on SES indicate higher level of self-esteem, in convergent validity analysis of ASRQ, it was expected that self-esteem scores would be negatively related with "warmth" and positively related with "conflict".

Results of Correlation Analysis

As it was expected, SES scores were positively correlated with conflict ($r = .11$, $p < .05$); however, no significant correlation was found between SES and warmth ($r = .08$, $p < .01$) subscale scores.

The correlation between BES scores and conflict were significant and negative ($r = -.16$, $p < .01$). However, there was no significant relationship between total BES and warmth ($r = .04$, $p < .01$) and rivalry ($r = .03$, $p < .01$) subscale scores.

3.3.2.3 Reliability Evidence

In order to examine the internal consistency of Turkish ASRQ, Cronbach's Alpha coefficients for each subscale (i.e. warmth, conflict and rivalry) were calculated both in

the pilot and main study. Cronbach Alpha scores were found strong for all three subscales as it was demonstrated in Table 3.3. Values were also close to the original ASRQ.

Table 3.3

Cronbach Alpha Values of ASRQ with Pilot Sample (N=371) and ASRQ with Main Study Sample (N=377)

Factors	Stocker et al., 1997	Pilot Study Data α	Main Study Data α
Warmth	.97	.96	.97
Conflict	.93	.92	.92
Rivalry	.88	.86	.86

3.4 Data Collection Procedure

In the current study, data was collected from undergraduate and graduate students of a state university in Ankara during 2015-2016 academic year summer semester. In order to get permission to administer surveys at the university, firstly, the researcher applied to the Human Subjects Ethic Committee of Middle East Technical University. After getting permission, measures were administered in classrooms of several faculties of the university. Before administering surveys, the purpose of the research and the criteria to take part in the study (having sibling/s and between 18 and 25 years old) were explained to the students. After obtaining signed consent forms, measures were distributed to the students who volunteered to participate in the study. Participants filled out the Adult Sibling Relationship Questionnaire (ASRQ) and Career Decision Self-Efficacy Scale-Short Form (CDSES-SF) in 15 minutes. No incentives were offered to the participants.

3.5 Description of Variables

Age is a continuous variable and changing between 18 and 25 years.

Gender is a dichotomous variable with two levels; male and female.

Birth Order is a categorical variable that indicates the order of the participants among their siblings. It was dummy coded as firstborns, middle-borns and last-borns for hierarchical multiple regression analysis. Middle-borns were the reference group.

Distance is a 6 level categorical variable about how far away the siblings live from the participants.

Contact Frequency is a continuous variable and refers to the frequency of how much siblings see and phone each other. The contact frequency between siblings was measured with a 4 item, 5-scale Likert type questionnaire that was a part of the ASRQ. The highest score was 20 and the lowest was 4. Higher score indicated higher frequency of contact and lower scores meant less frequency.

Sibling size is a numerical variable which refers to the sibling size in the family.

Adult Sibling Relationship Quality contains warmth, conflict and rivalry scale scores which are continuous variables. Warmth has 38 items and the maximum score a participant can obtain is 190 while the minimum score is 38. Conflict has 19 items with scores ranging between 19 and 90. Rivalry has 10 items. Maximum 20 and minimum 0 rivalry score can be obtained.

Career Decision Self-Efficacy which is a continuous variable indicates the degree of self-belief that someone can successfully complete tasks that are essential for making career decisions. The maximum score for career decision self-efficacy is 125 and minimum is 25.

3.6 Data Analysis

For the analysis of main data of the study, both inferential and descriptive statistics were used. Firstly, data were explored for missing cases and assumptions were checked. Then, the descriptive statistics of demographic and relationship characteristics of the participants; age, gender, birth order, sibling size, contact frequency, and distance between siblings were calculated and summarized.

Finally, hierarchical multiple regression analysis was conducted to investigate the role of sibling relationship quality in predicting career decision self-efficacy after controlling for demographic and relationship variables (i.e. age, gender, birth order, sibling size, contact frequency, physical distance). All analyses were made through IBM Statistical Packages of Social Sciences 22 (SPSS) (Field, 2009) and alpha level for statistical significance was set as .05.

3.7 Limitations of the Study

There are some limitations of the study related to the design and sampling. Firstly, the participants were selected via convenient sampling, and only among the students of one state university in Ankara. Therefore, the sample was not represent all university students and the results cannot be generalized to all Turkish university students.

Secondly, information regarding departments and grade levels of the students were not obtained in the data collection process. These variables might have been related to career decision self-efficacy levels of the sample.

Thirdly, the questionnaires are self-report instruments and participants can be biased on reflecting reality. Participants may not be absolutely honest about reflecting their own thoughts, feelings and behaviors. Moreover, in ASRQ, the questions were answered by only one sibling and the thoughts of the other sibling were not known. Thus, the

relationship was examined only through the eyes of one sibling.

Moreover, almost half of the participant in the present study were firstborn. The influence of younger sibling on career decision of elder sibling is not very possible since most of the younger siblings do not have any experience on career selection.

Finally, the relationship between the participants and non-preferred siblings questionnaire were ignored.

CHAPTER 4

RESULTS

This chapter presents the results obtained from the analysis of the main data and the research question. Firstly, preliminary analyses regarding missing data and multiple regression analysis assumption checks were reported. Secondly, the descriptive statistics of criterion and predictor variables were reported. In the following section, the results of the hierarchical multiple regression analysis were represented and finally, a summary of the results was given.

4.1 Preliminary Analysis of the Study

In order to eliminate the missing data, the 454 questionnaires obtained from the sample were examined and the ones with missing values were determined. Moreover, frequencies, minimum and maximum values of the data were also controlled to avoid possible mistakes while entering the data. The data with missing value more than 20%, data of 40 participants, were excluded and the analysis was conducted with the remaining 414 cases.

4.1.1 Assumption Check of Hierarchical Multiple Regression Analysis

Before conducting hierarchical multiple regression analysis, the assumption check on the normality of residuals, multivariate outliers, linearity, homoscedasticity, independence of errors and absence of multicollinearity were completed (Field, 2009).

The types of variables in the study are either continuous or categorical as they were supposed to. The descriptive variables on birth order, physical distance and sibling size were categorical and dummy coded. Other predictor and criterion variables on contact

frequency, age, career decision self-efficacy, sibling relationship quality, its subscales; warmth, conflict and rivalry were continuous and quantitative.

It was assumed that the residuals were normally distributed. In order to check *normality of residuals assumption,* histogram and normal P-P plot of regression standardized residual were controlled. As demonstrated in Figure 4.1 and Figure 4.2, the distribution was normal and no violation was observed.
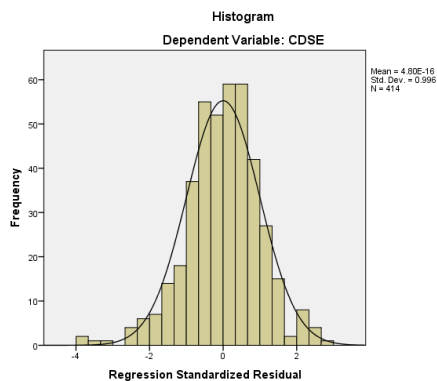
Figure 4.1 Histogram showing distribution
of standardized residuals
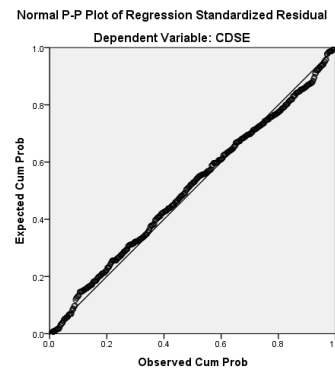
Figure 4.2 Normal P-P plot
showing normality of residuals

The *homoscedasticity assumption* was tested by examining scatter plots of regression standardized predicted values. In order to avoid model violation, the pattern or shape of the scatter plot should not be systematic and individuals should not be clustered. According to Figure 4.3, there was no violation of homoscedasticity assumption.
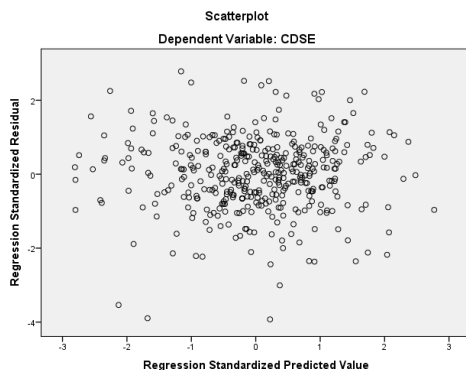
Figure 4.3 Distribution of the homoscedasticity of residuals

The *Assumption of independence of errors* was checked by examining Durbin-Watson values. Durbin-Watson coefficient should be between 1.50 and 2.50 in order to avoid violation (Tabachnik & Fidell, 2013). In the current study, the coefficient was 2.23, which is acceptable.

In order to test *multicollinearity assumption*, variance influence factor (VIF), correlations of predictor variables, and tolerance values were controlled. The VIF value is supposed to be less than 4, the correlations of predictor variables should be less than .90, and the tolerance value must be more than .20 (Fidel, 2009; Menard, 2002). In this study, the highest VIF value was 1.11, the correlations of predictors were not higher than .21, and all tolerance values were higher than .20.

The *assumption of influential observations* was examined by using Mahalanobis distance, Cook's distance and Centered leverage statistics. For the absence of violation, distance and standardized DFBETA Intercept values should be lower than 1 (Fidel, 2009). In the current study, all these values were lower than 1. The formulation to calculate Centered Leverage value is 3(k+1)/n (k indicates number of predictors, n indicates number of participants) (Stevens, 2009). The result of this formulation was .28 and 6 participants were detected as outliers. Mahalonobis Distance test was also calculated and some outliers were detected in that test too. Despite the existence of outliers in these tests, Highest Cook's distance and standardized DFBETA Intercept values were confirmed for the assumption of multivariate outliers.

4.2 Descriptive Statistics and Variables

Frequencies and percentages of age, gender, birth order, contact frequency, physical distance and sibling size variables were presented in the methodology part of the study.

In Table 4.1, means and standard deviations of the only quantitative predictor and criterion variables are shown.

Table 4.1

Means and Standard Deviations of the Quantitative Predictor and Criterion Variables (N = 414)

Descriptive Statistics	M	SD	Potential Rage	Actual Range
Criterion Variables				
Career Decision Self-efficacy	87.29	14.97	25-125	25-125
Predictor Variables				
Warmth	129.76	26.04	44-190	44-190
Conflict	46.20	12.90	19-87	19-87
Rivalry	4.59	3.88	0-20	0-20
Age	21.76	1.67	18-25	18-25
Contact Frequency	13.86	3.19	4-20	4-20

According to the mean score of sibling relationship quality, participants had higher scores on warmth subscale (M=129.76, SD=26.04). They reported moderate level of conflict (M=46.20, SD=12.90) and lower level of rivalry (M=4.59, SD=3.88). The mean score of career decision self-efficacy was 87.29 (SD=14.97) and mean of contact frequency scores was 13.87 (SD=3.19).

4.3 Bivariate Correlations Between Variables

In order to understand the relationship between predictor and criterion variables, Pearson Product Moment Coefficients were calculated. Being a firstborn was significantly and negatively correlated with career decision self-efficacy ($r = -.12$, $p < .05$). When the correlation between CDSE and the subscales of ASRQ was examined, it was seen that

warmth has a significant and positive relation (r = .17, p < .01), conflict and rivalry was negatively and significantly correlated (r = -.10, p < .05, r = -.10, p < .05).

The correlations between ASRQ subscales and other predictive variables were also examined. Warmth was positively and significantly correlated with contact frequency (r = .63, p < .01). Conflict was related with contact frequency negatively and significantly (r = -.16, p < .01). When the gender aspect was examined, it was found that being male was negatively correlated with warmth (r = -.16, p < .01), conflict (r = -.18, p < .01) and contact frequency (r = -.14, p < .01). The bivariate correlations between predictor and criterion variables are shown in Table 4.2.

Table 4.2

Bivariate Correlations Between Predictor and Criterion Variables (N=414)

	1	2	3	4	5	6	7	8	9	10	11
1.Warmth	-										
2.Conflict	-.18**	-									
3.Rivalry	-.22**	.26**	-								
4.CDSE	.17**	-.10*	-.10*	-							
5.First Born	-.06	.05	.03	-.12*	-						
6.Contact Frequency	.63**	-.02	-.16**	.01	-.03	-					
7. Gender	.14**	.18**	.03	-.07	.17	.14**	-				
8. Last Born	.02	-.05	-.04	.08	-.72**	.01	.07	-			
9. Age	.03	-.06	.01	.00	.07	.09*	.20	-.06	-		
10. Physical Distance	-.04	-.07	-.03	-.05	-.09*	-.16*	.08	.04	.06	-	
11. Sibling Size	.03	-.02	-.03	.01	-15**	-.03	.01	-.16**	.11**	.17**	-

Note. CDSE = Career Decision Self-efficacy; *p* < .05, **p* < .01

4.4 Results of Hierarchical Multiple Regression Analysis

The Hierarchical Multiple Regression Analysis was conducted to find out whether the sibling relationship quality predicted career decision self-efficacy of university students, after controlling for gender, age, birth order, sibling size, contact frequency and physical distance.

In the first model, demographic and relationship characteristics were entered. As it is shown in Table 4.3, age, gender, birth order, contact frequency, physical distance and sibling size did not significantly contribute to the model ($R^2 = .02$, Finc $(7, 399) = .02$, $p = .01$).

In the second model, sibling relationship quality variables; warmth, conflict and rivalry were entered. The three variables explained an additional almost 6% of the variation in career decision self-efficacy and this ΔR^2 was significant ($R^2 = .081$, Finc $(3, 396) = 000$, $p = .01$). Nevertheless, neither conflict nor rivalry in sibling relationship quality were significant predictors of career decision self-efficacy. Warmth was the only significant predictor and individually explained almost 7% of the variation in career decision self- efficacy. There was a significant and positive relation between warmth and career decision self-efficacy ($\beta = .28$, $p < .001$).

Table 4.3

Summary of Hierarchical Regression Analysis for Variables Predicting Career Decision Self-efficacy (N=414)

Variables	B	SE	β	R^2	ΔR^2	Adjusted R^2
Model 1				.024	.024	.007
Sibling Size	.099	.911	.006			
Age	.004	.472	.000			
Gender	-2.340	1.553	-.078			
First Born	-3.771	2.372	-.125			
Last Born	-.273	2.414	-.009			
Physical Distance	-.652	.243	-.001			
Contact Frequency	.003	.244	.001			
Model 2				.081**	.057	.058
Warmth	.159	.038	.275**			
Conflict	-.038	.060	-.032			
Rivalry	-.24	.198	-.062			

Note. *$p< .05$, **$p< .001$

CHAPTER 5

DISCUSSION AND CONCLUSIONS

In this chapter, the results of the study are explained and compared with the previous findings in the literature. Subsequently, the implications for theory and practice, and recommendations for further studies are discussed.

5.1 Conclusions

This study aimed at examining the role of sibling relationship quality (warmth, conflict, rivalry) in predicting career decision self-efficacy of Turkish university students after controlling for demographic characteristics (i.e., gender, age, birth order, and sibling size), and relationship characteristics (physical distance and contact frequency between siblings). In accordance with the research question, hierarchical multiple regression analysis was conducted and the results revealed that demographic and relationship variables; age, gender, birth order, sibling size, contact frequency and physical distance between siblings explained only 2% of the variance of career decision self-efficacy in total and their contribution to career decision self- efficacy was not significant. In accordance with the studies of Betz et al. (2005), Browne (2005), Kang (2009), Herndon (2011), age, birth order and gender were not significant predictors. Sibling size, contact frequency and physical distance between siblings also did not meaningfully explained variance in career decision self-efficacy levels. These variables were indicated as influential variables on the adult sibling relationship quality by the developers of ASRQ (Lanthier, Stocker, & Furman, 1997). Although the literature did not point out a meaningful relationship between self-efficacy and these variables; both their correlation with sibling relationship quality and level of prediction on career decision self-efficacy were examined and controlled since they were items in ASRQ. Moreover, gender and birth order are phenomena that are related to the society and its norms. In order to

understand their influence and significance on career decision self-efficacy with a sample of Turkish students, these variables were controlled.

When sibling relationship quality variables were included in the analysis, the model significantly explained 8% of the variance of career decision self-efficacy of university students. Warmth in the sibling relationship was the only significant predictor of career decision self-efficacy. In the light of the literature, it is known that family environment and the quality of family relationships are very influential on self-efficacy and making career decision. Individuals, who have supportive, communicative, guiding and close family members, are more successful in making better career choices. The family environment and functions which enable and support career related tasks and activities increase chances of developing appropriate sense of confidence and evaluation for career decision making process (Hargrove, Creagh & Burgess, 2002; Lee, 2003). Moreover, siblings who are supportive towards each other at the turning points of life such as leaving home, embarking on a career or marriage have warmer and closer relationship (Bedford, 1989). Therefore, siblings who are in warm relationship contribute to each other during career decision-making process and career decision self-efficacy, and this contribution strengthens their relationship. The bivariate correlation results of the current study also seem to support this finding. In the present study, it was found that warmth was positively associated with contact frequency between siblings. As it was also mentioned in the previous studies, being in touch and maintaining family traditions like joining family gatherings and celebrations were significant factors of warm and close relationship between siblings and other family members (Conger & Little, 2010; Ross & Milgram, 1982).

In line with the previous research (Schultheiss et al., 2002; Spudich, 2014), the results of current study demonstrated that sibling relationship quality, as the other neglected but important part of familial relationship, was also related to and predictive of career decision self-efficacy. Establishing warm sibling relationship in family may contribute to enhancing the career decision self-efficacy in adolescence and young adulthood. Nevertheless, it explains only a small percentage of variance in career decision self-

efficacy. This result might stem from other potential variables that may influence and interact with the career decision self- efficacy process. For instance, in the literature, personal characteristics, educational opportunities, family environment, and parental attitudes have been cited as strong predictors of career decision self-efficacy. Moreover, from the relational perspective, studies indicated that parents, their attitudes, attachment styles and the family atmosphere they created are significantly related to self-efficacy in career decision. Parental attachment had stronger influence than any other kind of peer attachment (Nawaz & Gilani, 2011). Therefore, focusing on sibling relationship along with parental relationship variables could have provided more opportunity in understanding career decision self-efficacy.

In an earlier study, conflict in family was found to be a significant predictor of lower career decision self-efficacy and dysfunctional career thoughts (Dodge, 2001). However, in the present study, conflict in sibling relationship did not make a significant contribution to career decision self-efficacy. One possible explanation is that participants reported lower levels of conflict with their siblings (M=46.20, SD=12.90). In other words, most of the participants did not report to have a conflictual relationship with their siblings. Another possible explanation for lower scores and non-significant association that by the aging, via independence and limited contact, feelings of conflict and rivalry might fade away and siblings might establish warmer relationships or loose contact (Bedford, 1992). The findings of the current study were also in accordance with the literature on decreased level of conflict and rivalry between siblings in young adulthood.

Furthermore, findings of the study did not indicate rivalry as a significant predictor of career decision self-efficacy. Because there has been no empirical study on the role of sibling rivalry in career development, the researcher could not compare this finding with the previous studies. As aforementioned, along with conflict scores, the rivalry scores of the participants were very low (M=4.9, SD=3.88) and most of them did not report any rivalry between their siblings. One possible explanation might be related to what Bedford (1992) suggested that rivalry, which usually roots from childhood memories and parental favoritism, tends to decrease with voluntary or limited contact. In a Turkish

sample, the participants, who were communicating more with their siblings voluntarily, rather than limiting interaction, were less competitive with their siblings. Thus, higher level of correspondence might be related to greater degree of warmth in the relationship and negatively related to rivalry.

5.2 Implications for Practice

According to the results, there were several implications to consider. First of all, Adult Sibling Relationship Questionnaire (Lanthier & Stocker, 1992) was adapted into Turkish by the researcher in the present study. This scale is the first instrument, which assesses the quality of adult sibling relationship in Turkey. The questionnaire may provide a quantitative evaluation material for family counselors who need to work on the nature of sibling relationship of their clients.

Based on the results, it was determined that the warmth between siblings was a significant predictor of career decision self-efficacy. University students who reported more closeness in siblinghood indicated higher level of career decision self-efficacy. This conclusion can be useful for family counselors, career counselors, school counselors and counselors working at university psychological counseling centers while they are assisting clients and students in dealing with career selection and building interventions on vocational self-efficacy. They may take the sibling dynamic into consideration while assisting on struggles about vocational self-ability and increase clients' level of self-awareness on the influence of sibling relationship quality on them. They may also take the assistance of siblings during the interventions and therapeutic homework or investigate its role of in the individuals' psychological process of career choice.

In schools, siblings with careers may be invited to be a part of career introduction programs as mentors or presenters. Since the parental attitude and memories, which are observed and acquired in childhood, alter the nature of the sibling relationship, parents

with more than one children can be informed about their influence on their children's connection, and the importance of sibling relationship in career development may be explained as a preventive and proactive counseling intervention.

5.3 Implications for Future Studies

Both career decision self- efficacy and sibling relationship are recent research interests in Turkey. Based on the results of the study and the gap in the literature, some recommendations can be made.

Firstly, as the most essential dynamic of family, the role of perceived parent-child relationship quality in career decision self-efficacy of Turkish university students may also be investigated along with the sibling relationship.

Secondly, with the onset of adolescence, peer relationships also become a vital social support and interaction in individuals' lives. In order to fully understand the role of social interactions in career decision self-efficacy, in addition to family interactions, peer attachment and the nature of peer relationship can be examined.

Thirdly, the study was conducted with a sample of college students who have already chosen a certain major. The future studies may involve high school graduates who do not decide on their majors and have freedom to select from a wide range of occupations. Furthermore, the sample was selected only from one of the state universities in Ankara with convenience sampling. A wider range of participants from different cities and socio-economic classes may be preferred for the following research studies.

Fourthly, individuals with no sibling were not included in the current study. Collecting and comparing career decision self-efficacy scores of both only children and the ones with siblings may also contribute to the knowledge on siblinghood and career decision self- efficacy. Moreover, information of grade level and department of the students can

be collected and examined to understand their influence on career decision self-efficacy in future studies.

Finally, the Adult Sibling Relationship Questionnaire original factorial structure did not adequately fit to the Turkish sample. The questionnaire might be tested in a new and more representative sample. Or the dynamics and the nature of the sibling relationship of Turkish university students may be determined and a new instrument can be constructed.

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APPENDICES

A. Sample Items from Career Decision Self-Efficacy Questionnaire-Short Form

Aşağıdaki her bir ifadeyi, lütfen dikkatle okuyunuz ve bu ifadelerdeki işlerin her birini başabileceğinize ilişkin kendinize ne derece güvendiğinizi, verilen dercelerndirme sistemine göre işaretleyerek belirtiniz.

Hiç Güvenmiyorum : 1, Çok Az Güveniyorum : 2, Biraz Güveniyorum : 3, Çok Güveniyorum : 4, Tamamen Güveniyorum : 5

1) İlgilendiğiniz meslek hakkında bilgi edinmek için interneti kullanma
2) Düşündüğünüz olası kariyer alanlarıdan birini seçme
3) Gelecek beş yıl için hedeflerinizin bir planını yapma
4) Girdiğiniz bölümde akademik bir sorun yaşadığınızda, atacağınız adımları belirleme
5) Yeteneklerinizi doğru değerlendirme

APPENDIX B. Sample Items from Adult Sibling Relationship Questionnaire

3) Kardeşiniz kendisi için önemli olan meselelerle ilgili olarak sizinle ne kadar konuşur?

[ ] 1 Neredeyse Hiç [ ] 2 Oldukça Az [ ] 3 Biraz [ ] 4 Oldukça Fazla [ ] 5 Çok Çok Fazla

4) Kardeşinizle ne kadar tartışırsınız?

[ ] 1 Neredeyse Hiç [ ] 2 Oldukça Az [ ] 3 Biraz [ ] 4 Oldukça Fazla [ ] 5 Çok Çok Fazla

5) Kardeşiniz sizi ne ölçüde kendisinin iyi bir arkadaşı olarak görür?

[ ] 1 Neredeyse Hiç [ ] 2 Oldukça Az [ ] 3 Biraz [ ] 4 Oldukça Fazla [ ] 5 Çok Çok Fazla

 6) Siz kardeşinizi ne ölçüde iyi bir arkadaş olarak görürsünüz?

[ ] 1 Neredeyse Hiç [ ] 2 Oldukça Az [ ] 3 Biraz [ ] 4 Oldukça Fazla [ ] 5 Çok Çok Fazla

APPENDIX C. Approval Letter from Middle East Technical University Human

Subjects Ethics Committee

UYGULAMALI ETİK ARAŞTIRMA MERKEZİ
APPLIED ETHICS RESEARCH CENTER

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09 MAYIS 2016

Gönderilen: Doç.Dr. Zeynep HATİPOĞLU SÜMER

Eğitim Bilimleri

Gönderen: Prof. Dr. Canan SÜMER

İnsan Araştırmaları Etik Kurulu Başkanı

İlgi: Etik Onayı

Sayın Doç. Dr. Zeynep HATİPOĞLU SÜMER in danışmanlığını yaptığı yüksek lisans öğrencisi Zeynep Büşra SANİÇ' in "Kardeş İlişki Kalitesinin Kariyer Karar Verme Öz yeterliliğindeki Rolü" başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülerek gerekli onay **2016-EGT-047** protokol numarası ile **20.04.2016-20.07.2016** tarihleri arasında geçerli olmak üzere verilmiştir.

Bilgilerinize saygılarımla sunarım.

Prof. Dr. Canan SÜMER

İnsan Araştırmaları Etik Kurulu Başkanı

Prof. Dr. Meliha ALTUNIŞIK

İAEK Üyesi

Prof. Dr. Ayhan SOL

İAEK Üyesi

Prof. Dr. Mehmet UTKU

İAEK Üyesi

Prof. Dr. Ayhan Gürbüz DEMİR

İAEK Üyesi

Yrd .Doç .Dr. Pınar KAYGAN

İAEK Üyesi

Yrd. Doç. Dr. Emre SELÇUK

İAEK Üyesi

APPENDIX D. Turkish Summary/Türkçe Özet

1.GİRİŞ

Erikson'un (1968) psiko-sosyal gelişim aşamalarına göre, iş bulmak ve bir kariyere başlamak ergenlik ve genç yetişkinlik döneminde kimlik oluşumu ve yetişkinliğe geçiş için en önemli görevlerden biridir. Günümüzün zorlu çalışma dünyasında, hatta bazı durumlarda bir ömür boyunca birkaç kez, böyle önemli bir konuda seçimler yapabilmek için insanlar, belirli bir mesleğin gerekliliklerinin hakkını verip veremeyecekleri hususunda kendilerine ve yeteneklerine dair inanç ve yargılar geliştirmek zorundadırlar. Betz ve Voyten (1997) bu kendine inancı kariyer karar verme öz yeterliliği olarak tanımlamış ve öz yeterlilik düzeylerini ölçmek için bir ölçek geliştirmiştir. Ölçek, beş kategoride insanların kariyerle ilgili görevlere dair öz yeterliliklerini değerlendirmektedir. Bu kategoriler; öz değerlendirme, mesleki bilgi toplama, hedef seçimi, gelecek için plan yapma ve problem çözmedir. Bilimsel bulgular, kariyer karar verme yeterliliğinin mesleğe karar verememe, kariyer amaçları, kariyer keşfetme davranışları, kariyer seçiminde kararlılık, kariyer bağlılığı ve baş etme stratejileri gibi kariyer gelişimi sonuçları ile güçlü bir ilişkisi olduğunu göstermiştir (Bandura et al., 2001; Büyükgoze-Kavas, 2011; Chung, 2002; Gianakos, 1999; Hackett & Betz, 1981; Luzzo, 1995; Paulsen & Betz, 2004; Sumari, 2006; Taylor & Popma, 1990). Kariyer karar vermeye ilişkin belirli bir düzeyde öz yeterlilik olmaksızın, bir kariyeri gerçekleştirmeye yönelik adımlar atmak mümkün görünmemektedir.

Ergenliğin sonları ve yetişkinlik döneminin başları, bireylerin kariyerlerine karar verme süreci ile ilk kez karşılaştıkları dönemlerdir ve doğru bir karar alma süreci, yaşam boyu süren başarılı bir kariyere sahip olma için kendilerine yol gösterebilir. Ancak ABD'deki araştırma bulguları (Berk, 2014) genç yetişkinlerin kendileri için uygun meslek seçiminde çok iyi olmadığını göstermiştir. Türkiye'de eğitimlerine uygun bir iş bulan ya

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da o işten doyum alan üniversite mezunlarının sayısına ilişkin ulusal çapta veri bulunmamakla birlikte, kendilerine uygun olmayan alanlarda çalışan ya da mevcut mesleklerinden memnun olmayan kişilere yaygın olarak rastlanmaktadır. Kariyer başarısızlıkları ve genç yetişkinlik dönemi boyunca bir kariyere başlamanın önemini vurgulayan Erikson'un gelişim aşamaları dikkate alındığında, başarısızlık nedenlerini bulmak ve yetişkinlik döneminde daha iyi meslek seçimine yönelik yöntemler belirlemek esastır. Kariyer karar verme öz yeterliliği kariyerle ilgili neredeyse her iş ve beceride etkili olduğu için, ona etki eden ve yordayan değişkenlerin incelenmesi ve belirlenmesi gerekmektedir.

Kariyer karar verme öz yeterliliğinin kaynağı, kendilerini uygun seçimlere yönlendirme konusundaki bireylerin bilişsel yeteneklerine vurgu yapan, ayrıca ilişkilerin ve çevrenin kendileriyle ilgili düşünce ve inançlar üzerindeki güçlü etkisini gösteren Bandura'nın Sosyal Bilişsel Kuramıdır. Sosyal bilişsel kariyer kuramına dayalı ilgi modeline göre ise bireyler, mesleğin gereklilikleri için yeterli olduklarını düşünüp başarılı olacaklarına inandıkları zaman başarılı olurlar. Bireylerin hayatlarındaki destek sistemi ve önemli kişiler, olumlu sonuç içeren beklentiler ile öz yeterliliğin oluşmasında etkili bir bileşendir (Lent et.al, 2002). Başlıca ilişki çemberi olarak aile ve sosyal çevre, bireylerin öz yeterliliklerinin ve öz saygılarının şekillenmesinde ve anlaşılmasında çok büyük rol oynamaktadır. Yapılan çalışmalar aile etkileşim biçimleri (Whiston, 1996), aile kökeni (Dodge, 2001), ebeveyn bağlanma stilleri (Wolfe & Betz, 2004; Nawaz & Gilani, 2011), aile uyumluluğu (Rush, 2002), aile üyeleri arasında algılanan ilişki kalitesi (Hargrove, Creagh & Burgess, 2002), aile dayanışması ve işleyişinin (Lee, 2003) kariyer karar verme öz yeterliliğinin önemli yordayıcıları olduğunu göstermiştir. Ailedeki etkileşim ve çevredeki neredeyse her dinamik, kariyer karar vermeye dair öz yeterlilik düzeyinde değişikliğe yol açmaktadır. Ancak bugüne kadar kariyer karar verme öz yeterliliğinde aile ilişkisinin önemli bir boyutu göz ardı edilmiştir; kardeş ilişkisi.

Kardeşlik, bir kişinin sahip olabileceği en uzun ve inkâr edilemez bir ilişki biçimidir. Kardeşler arkadaş, rakip, bakıcı, mentör ve hatta düşman rolünü üstlenebilirler. Son yıllarda kardeş ilişkisine yönelik artan ilgi ile pek çok çalışma yapılmış ve görülmüştür

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ki bireylerin sosyal ve davranışsal gelişimi, psikolojik ve duygusal duygusal iyi oluşu ve kişinin kendisi ile ilgili bilişsel yapılanmalarında kardeş ilişkisinin önemli bir etkisi bulunabilmektedir (Brody, 1998; McDade, 2010; Milevsky, 2005; Sherman et al., 2006; Stern, 2011). Kardeşler aynı zamanda aile üyesi ve yaşam boyu yoldaş olarak, gönüllü olarak veya bilmeden bireylerin kariyer karar verme sürecinde güçlü bir şekilde yer alabilirler. Araştırmalara dayanarak, kariyer karar verme sürecinde kardeşlerin birbirlerine sosyal ve duygusal destek, güven ve takdir desteği ve bilgi desteği sağladığı (Schultheiss et al, 2002) ve hatta aralarındaki sıcaklık ve güvenin aynı kariyer yolunu seçmelerine yol açtığı bulunmuştur (Spudich, 2014).

Kardeş ilişkisinin kalitesi, doğası, derinliği ve önemi yaşa, gelişimsel dönemlere ve hayatın önemli dönemeçlerine göre farklılık gösterir. Çocuklukta kardeşe duyulan hisler ve ilişkinin doğası değişkendir; günlük yaşantılara ve anlık duygulara göre değişebilir. İster sıcaklık, ister rekabet, isterse çatışma olsun, yaşananlar bir ilişkinin olduğu anlamına gelir ve çocukların sosyal gelişimlerine ve akran ilişkisi kurmalarına destek olur. Ergenlik döneminde ilişkinin olumlu veya olumsuz doğası daha kalıcı bir hal almaya ve kardeş ile ilgili duygular netleşmeye başlar. Bu gelişimsel dönemdeki destekleyici ve sıcak bir kardeş ilişkisi; sosyal becerilerin gelişiminde, başarılı akran ilişkisi kurmada ve kişinin kendisi ile ilgili olumlu düşüncelerinin oluşumunda önemli bir avantaj oluşturur. Örneğin, kendilerinden küçük kardeşleri ile destekleyici olumlu ilişki içerisinde olan ergenlerin öz güven, sosyal becerileri ve yeterlilik seviyelerinin akranlarına göre daha yüksek olduğu saptanmıştır (Volling & Blandon, 2003).

Genç yetişkinlikte kardeş ilişkisi, çocukluğa ve ergenliğe göre farklılaşır. İlişki esas olarak istikrarlı ve eşitlikçi bir niteliği olan duygusal destek ve gönüllüğe dayanır (Volling & Blandon, 2003). Genç yetişkinlikte ilişkinin niteliği ailedeki etkileşimler, temas ve iletişim sıklığı, karşılıklı paylaşılan değerler, ilgiler ve aile gelenekleri, aile ortamı, ebeveyn tutumları, aile üyelerine bağlılık ve kişisel özellikler ile ilgili çocukluk anıları ile şekillenmektedir (Ross & Milgram, 1982; Stocker, Lanthier & Furman, 1997). Okulu bitirme, iş bulma ve bir kariyere başlama gibi yaşamın önemli dönüm noktalarında kardeşlerin birbirlerine karşı gösterdiği destek ya da ilgisizlik de ilişkinin

doğasına dair güçlü göstergelerdir. Yaşamın bu dönemlerinde birbirini destekleyen kardeşler, daha olumlu ve yakın ilişkilere sahip olma eğilimindedir (Bedford, 1989).

Stocker, Lanthier ve Furman (1997), yetişkin kardeş ilişkisinin niteliğini üç boyutta sınıflandırmıştır: sıcaklık, çatışma ve rekabet. Sıcaklık, benzerlik, yakınlık, sevgi, kabullenme ve desteğe dayalı yakın ve olumlu bir ilişkiye işaret etmektedir. Çatışma, tartışma, karşıtlık, yetkinlik ve baskınlıktan kaynaklı olarak birbirine karşı hissedilen olumsuz duyguları göstermektedir. Rekabet ise anne ve baba için rekabetin gölgesinde bir ilişkiyi nitelemektedir. Aile üyeleri arasında algılanan ilişkinin niteliğinin kariyer karar verme öz yeterliliği ile ilişkili olduğu (Hargrove, Creagh & Burgess, 2002) bilindiği için, kardeşler arasındaki etkileşimin doğası kariyer karar verme öz yeterliliğinin iyi bir göstergesi olabilir.

Bu çalışmada kardeş ilişki kalitesinin 18-25 yaşları arasındaki üniversite öğrencilerinin kariyer karar verme öz yeterliliklerinde oynadığı rol ele alınmıştır. Mevcut alanyazın ışığında, kardeşler arasındaki sıcak ve yakın ilişkilerin, kariyer karar verme öz yeterliliği ile olumlu, ilişkide çatışma olmasının ise kariyer karar verme öz yeterliliği ile olumsuz yönde ilişkili olacağı beklenmiştir. Kariyer karar vermede rekabet ve öz yeterlilik arasındaki ilişki hakkında mevcut bir çalışma olmadığı için bir varsayımda bulunulmamıştır.

1.1.Çalışmanın Amacı

Bu çalışmanın amacı, cinsiyet, yaş, kardeş sayısı, doğum sırası, kardeşler arası iletişim kurma sıklığı ile fiziksel uzaklık değişkenleri kontrol edilerek, kardeş ilişki kalitesinin üniversite öğrencilerinin kariyer karar verme öz yeterliliğini ne ölçüde yordadığını belirlemektir.

1.2 Çalışmanın Önemi

Bu çalışma, Türkiye'de kariyer karar verme öz yeterliliğinin yordanmasında kardeş ilişki kalitesine ilişkin değişkenlerin yer aldığı ilk çalışmadır. Kariyer danışmanlığında, kariyere karar aşamasında akılcı düşünme ve bağımsız eşleştirme en çok kulanılan tekniklerdendir. Fakat son yıllardaki çalışmalar, bireylerin kendileri ile ilgili inançlarının ve düşüncelerinin kariyer karar vermede ve kariyer ile ilgili pek çok davranışta etkili olduğunu saptamışlardır. Kişilerin sosyal çevrelerindeki önemli ve yakın gördükleri insanların, bu inanç ve yeterliliklere ilişkin düşüncelerin oluşumunda etkili olduğu bilimsel araştırmalar ile görülmektedir (Nawaz & Gilawandi, 2011; Schulthesiss, 2002). Bu çalışma, kişilerin ömür boyu sosyal çevrelerinin bir parçası olabilecek olan kardeşleri ile olan ilişkilerinin kalitesinin, kariyer ile ilgili neredeyse tüm davranışları etkileyen bir psikolojik kavram olan karar verme öz yeterliliği düzeyinin yordanmasındaki rolünü ilk defa araştırmıştır.

OECD 2015 raporlarına göre Türkiye'de insanlar ortalama 1855 saat çalışmaktadırlar (OECD Raporları, 2015). 1855 saat sevilmeyen ve başarılı olunamayan bir işte harcamak için oldukça uzun bir zaman dilimidir. Tatmin etmeyen bir iş yaşamının, çeşitli psikolojik ve davranışsal problemlere yol açtığı, bilimsel çalışmalarla saptanmıştır (Henne & Locke, 2007). Bu sebeple, kariyer karar verme ile ilgili tüm yordayıcılar ve etmenler iyi araştırılmalı ve kariyerine başlayacak olan genç bireylere, kendilerine en uygun mesleği seçmeleri için psikolojik ve eğitsel destekler sağlanmalıdır. Bu çalışma bu yönde destek sağlama amacıyla atılan adımlardan biridir.

Bunun yanında, Türk İstatistik Kurumu'nun (TUIK) 2015 raporlarına göre, Türkiye'de aileler ortalama olarak iki çocuğa sahiptir (TUIK Raporları, 2015). Türkiye'de sık rastlanan bir ilişki olmasına rağmen kardeş ilişkisi çok az çalışılmıştır. Bu ilişkinin özelliklerini, etkilerini ve yordayıcılarını bilmek danışmanlara ve eğitimcilere, bu ilişki aracılığı ile çocuklara, gençlere ve yetişkin bireylere fayda sağlayabilecek uygulamalar geliştirmede ve potansiyel problemleri yaşanmadan önlemede katkı sağlayabilir.

Çalışmanın diğer önemli katkılarından biri de, bu çalışma kapsamında Türkçe uyarlaması yapılan Yetişkin Kardeş İlişkisi Kalitesi Ölçeği'nin (ASRQ; Stocker, Lanthier & Furman, 1997), Türkiye'de aile danışmanları için kuşaklararası ilişkilere yönelik yapıların değerlendirilmesinde kullanılabilecek bir ölçek olmasıdır.

2. YÖNTEM

Bu araştırmada değişkenler arasında anlamlı bir ilişki olup olmadığını inceleyen, nicel ve ilişkisel araştırma yöntemi kullanılmıştır (Fraenkel, Wallen, & Hyun, 2012). Bu çalışmanın bağımlı değişkeni kariyer karar verme öz yeterliliği, yordayıcı değişkenleri ise yetişkin kardeş ilişki kalitesi, demografik ve ilişkisel değişkenlerdir.

2.1 Araştırma Sorusu

Bu çalışmada şu temel sorunun yanıtı araştırılmıştır: Cinsiyet, yaş, doğum sırası, kardeş sayısı, kardeşler arası iletişim kurma sıklığı ve fiziksel mesafe kontrol edildiğinde kardeş ilişkisi kalitesi üniversite öğrencilerinin kariyer karar verme öz yeterliliğini ne ölçüde yordamaktadır?

2.2 Örneklem

Çalışmanın örneklemi, Ankara'daki bir devlet üniversitesinde lisans ve lisansüstü eğitimi alan, 18-25 yaş arasındaki, 414 üniversite öğrencisinden oluşmaktadır.

2.2.1 Katılımcıların Demografik Özellikleri

Çalışmaya, 414 üniversite öğrencisi katılmıştır. Örneklemin cinsiyet dağılımı eşit olup, 257 (50%) kadın ve 257 (50%) erkek katılımcıdan oluşmuştur. Yaş aralığı 18 ile 25 arasında değişkenlik göstermiştir. Katılımcıların yaş ortalaması 21.76, standart sapması ise 1.67 olarak bulunmuştur. Örneklemin 45.4%'ü ilk çocuk (n=188) ve 60.6%'ının sadece bir kardeşi vardır (n = 251). Katılımcıların çoğu (n=239; 57.7%) kardeşlerinden

en az 160 km uzakta yaşamakta ve iletişim sıklığı puan ortamaları 20 üzerinden 13.86'dır (SS=3.19).

2.3 Veri Toplama Araçları

Çalışmada, veri toplama araçları olarak Türkçe uyarlaması araştırmacı tarafından yapılan, Yetişkin Kardeş İlişkisi Kalitesi Ölçeği (ASRQ; Stocker, Lanthier & Furman, 1997) ve Kariyer Karar Verme Öz Yeterliliği-Kısa Formu (CDSE-SF; Büyükgöze-Kavas, 2014) kullanılmıştır. Yetişkin Kardeş İlişkisi Kalitesi Ölçeği'nin pilot uygulama çalışmalarında ölçeğin geçerliliğinin test edilmesi amacıyla Temel Empati Ölçeği (BES; Topçu, Erdur-Baker & Çapa-Aydın, 2010) ve Rosenberg Benlik Saygısı Ölçeği (SES; Çuhadaroğlu,1986) kullanılmıştır.

2.4 Veri Toplama Süreci

Mevcut çalışmanın verileri 2016 yılı yaz döneminde Ankara'daki bir devlet üniversitesinde, ilgili ölçekler uygulanarak toplanmıştır. Üniversitenin etik kurulundan gerekli izinler alındıktan sonra uygulamaya geçilmiştir. Öncesinde dersin öğretim elemanlarından izin alınarak sınıflarda ve anfilerde uygulamalar yapılmış ve katılımcılar çalışmanın amacı, gönüllülük, istedikleri zaman çalışmayı bırakabilecekleri ve gizlilik gibi konular hakkında bilgilendirilmiştir. Ölçekler sadece kardeşi olan öğrencilere dağıtılmıştır. Anket uygulaması yaklaşık 20 dakika sürmüştür.

2.5 Veri Analizi

Çalışmada IBM Statistical Packages of Social Sciences 22 (SPSS) programı kullanılarak açıklayıcı ve çıkarsamalı istatiksel yöntemlere başvurulmuştur. Çalışmanın bağımlı değişkeni kesintisiz, bağımsız değişkenleri ise ikiden fazla olduğu için çoklu hiyerarşik regresyon analiz yöntemi kullanılmıştır. Cinsiyet ve doğum sırası değişkenleri için boş kodlama yöntemi kullanılmıştır.

2.6 Çalışmanın Sınırlılıkları

Bu çalışmanın en önemli sınırlılıkları örneklem seçme yöntemi olarak kolayda örneklem yönteminin seçilmesi ve öz-bildirim tekniğinin kullanılmış olmasıdır. Ayrıca, kardeşler arasındaki ilişki sadece katılımcıların gözünden değerlendirilmiş ve ilişkinin değerlendirildiği kardeşten bilgi alınmamıştır. Bunun yanında ölçek için seçilmeyen kardeşler ile katılımcının arasındaki ilişkilere çalışmada değinilmemiştir. Katılımcıların sınıf seviyelerine ve eğitim aldıkları bölime dair very toplanmamıştır.

3. BULGULAR

Çalışmada incelenen değişkenler için yapılan aşamalı regresyon analizi sonuçlarına göre ilk adımda demografik ve ilişkisel değişkenler; cinsiyet, yaş, doğum sırası, kardeş sayısı, kardeşler arası iletişim kurma sıklığı ile fiziksel uzaklık modele alınmış ve bu model istatistiksel olarak anlamlı bulunmamıştır.

İkinci adımda ise, kardeş ilişki kalitesi değişkenleri modele dahil edilmiş ve sadece sıcak kardeş ilişkisinin (warmth) üniversite öğrencilerinin kariyer karar verme öz yeterliliğinin anlamlı yordayıcısı olduğu gözlemlenmiştir. Bu değişken tek başına varyansın yaklaşık %7'sini açıklamıştır. Ne kardeş ilişkisinde çatışma ne de rekabet, kariyer karar verme öz yeterliliğinin anlamlı yordayıcıları olarak bulunmamıştır.

4. TARTIŞMA

Elde edilen bulgulara göre; yaş, cinsiyet, doğum sırası, kardeş sayısı, iletişim sıklığı ve fiziksel uzaklık gibi demografik ve ilişkisel değişkenlerin kariyer karar verme öz yeterliliğini çok düşük varyansla açıkladığı ve ilk modeldeki bu değişkenlerin istatistiksel olarak anlamlı katkı sağlamadığı bulunmuştur. Betz et al. (2005), Browne (2005); Kang (2009) ve Herndon'un (2011) çalışmalarıyla uyumlu olarak; bu çalışmada da yaş, doğum sırası ve cinsiyet istatistiksel olarak anlamlı yordayıcılar olarak bulunmamıştır. Kardeş sayısı, iletişim sıklığı ve kardeşler arasındaki fiziksel uzaklık da, kariyer karar verme öz yeterliliği düzeyindeki değişiklikleri anlamlı bir şekilde

açıklamamıştır. Bu değişkenler Yetişkin Kardeş İlişkisi Kalitesi Ölçeği'ni geliştirenler tarafından, yetişkin kardeş ilişki kalitesini etkileyen faktörler olarak belirtilmiştir (Lanthier, Stocker, a& Furman, 1997). Alanyazının kariyer karar verme öz yeterliliği ve bu değişkenler arasında anlamlı bir ilişkiye dikkat çekmemesine rağmen; Yetişkin Kardeş İlişkisi Kalitesi Ölçeği'nin maddeleri olması nedeniyle, hem kardeş ilişki kalitesi ile ilişkileri hem de kariyer karar verme öz yeterliliği üzerindeki yordayıcılıkları kontrol edilmiştir. Bununla birlikte, cinsiyet ve doğum sırası, toplum ve toplumun verdiği değer ile anlamlandırılan ve değişebilen fenomenlerdir. Bu değişkenler, Türk örnekleminde kariyer karar verme öz yeterliliğindeki rollerini ve önemini anlamak için kontrol edilmiştir.

Kardeş ilişki kalite değişkenleri (sıcaklık, çatışma ve rekabet) modele dahil edildiğinde, üniversite öğrencilerinin kariyer karar verme öz yeterliliğindeki toplam varyansın %8'i açıklanmıştır. Kardeş ilişkisindeki sıcaklığın, kariyer karar verme öz yeterliliğinde tek önemli gösterge olduğu gözlenmiştir.

Alanyazın ışığında, aile çevresinin ve aile ilişki kalitesinin öz yeterlilik ve kariyer karar vermede çok etkili olduğu bilinmektedir. Destekleyici, yol gösterici, yakın ve iletişimin yüksek olduğu aile üyelerine sahip olan bireylerin kariyerlerinde ve kariyer seçimlerinde daha başarılı oldukları görülmüştür. Aile çevresi ve kariyerle ilgili görev ve aktivitelere olanak sağlayıcı ve destekleyici faaliyetler, kariyer karar verme sürecinde güven duygusunu ve değerlendirme becerisini geliştirerek, doğru kariyer seçimi olasılığını artırır (Hargrove, Creagh & Burgess, 2002; Lee, 2003). Ayrıca, evden ayrılma, kariyer hayatına başlama ve evlilik gibi hayatın dönüm noktalarında birbirini destekleyen kardeşler daha sıcak ve yakın ilişkilere sahip olmaktadır (Bedford, 1989). Bu nedenle, sıcak ilişkiye sahip kardeşler kariyer karar verme sürecinde ve kariyer karar verme öz yeterliliğinde birbirlerini desteklemektedir ve bu durum kardeşlerin ilişkisini güçlendirmektedir. Bu çalışmanın değişkenleri arasındaki korelasyon katsayılarına ilişkin bulgularının da bu sonucu desteklediği görülmektedir. Mevcut çalışmada, sıcak ilişkinin kardeşler arasındaki iletişim sıklığı ile ilgili olduğu da görülmüştür. Temas halinde olmak, aile toplantıları ve kutlamaları gibi aile geleneklerine katılmayı

sürdürmek, kardeşler ve diğer aile üyeleri arasındaki yakın ve sıcak ilişkilerin kurulmasındaki önemli faktörlerdendir (Conger & Little, 2010; Ross & Milgram, 1982).

Önceki çalışmalara paralel olarak (Schultheiss et al., 2002; Spudich, 2014), mevcut çalışmanın bulguları, *ihmal edilen fakat ailevi ilişkinin önemli tarafı* olan, kardeş ilişki kalitesinin sıcaklık boyutunun kariyer karar verme öz yeterliliğinde yordayıcı faktör olduğunu göstermiştir. Aile içinde sıcak kardeş ilişkisi kurmak, ergenlik ve genç yetişkinlik dönemlerinde kariyer karar verme öz yeterliliği seviyesinin artırılmasına katkıda bulunmaktadır. Buna rağmen, kardeş ilişki kalitesi kariyer karar verme öz yeterliliğinin sadece küçük bir kısmını açıklamaktadır. Kişisel özellikler, eğitim fırsatları, aile çevresi ve ebeveyn tutumu kariyer karar verme öz yeterliliğinin en güçlü yordayıcıları olarak alanyazında ifade edilmektedir. İlişki perspektifinden bakıldığında, ebeveynler, onların tavırları, bağlanma tarzları ve oluşturdukları aile iklimi, kariyer karar verme öz yeterliliği ile önemli ölçüde bağlantılıdır. Ebeveyn bağlanması tarzı ise diğer bütün akran bağlanmalarından daha güçlü bir etkiye sahiptir (Nawaz & Gilani, 2011). Dolayısıyla, kardeş ilişkisine odaklanılırken diğer aile ilişki değişkenlerinin de ele alınması kariyer karar verme öz yeterliliğini daha iyi anlamak için fırsat sunabilir.

Alanyazında, aile içerisindeki çatışmalı ilişki, daha düşük kariyer karar verme öz yeterliliğinin ve işlevsiz kariyer düşüncelerinin yordayıcısı olarak belirtilmektedir (Dodge, 2001). Fakat, bu çalışmada, kardeşler arasındaki çatışma, kariyer karar verme öz yeterliliğinin anlamlı bir yordayıcısı olarak bulunmamıştır. Olası açıklamalardan biri, katılımcıların kardeşleri ile az çatışma yaşadığını belirtmesi olabilir (M=46.20, SS=12.90). Diğer bir ifadeyle, katılımcıların çoğu kardeşleriyle çatışmalı bir ilişkiye sahip olmadıklarını belirtmişlerdir. Diğer olası bir açıklama ise, çatışma ve rekabet duygularının yaşın ilerlemesiyle, bağımsızlığın kazanılmasıyla ve sınırlı ilişki kurulmasıyla zayıflamaya başlaması ve kardeşlerin daha sıcak veya zayıf ilişki kurabilmesi olabilir (Bedford, 1992).

Bulgular, rekabeti, kariyer karar verme öz yeterliliğinin anlamlı bir yordayıcısı olarak göstermemiştir. Kariyer gelişiminde kardeşler arasındaki rekabetin rolüne yönelik olarak

herhangi bir araştırma bulunmadığından   çalışmanın bu bulgusunu karşılaştırmak mümkün değildir. Daha önce çatışmalı ilişki için bahsedildiği gibi, katılımcıların rekabet puanları oldukça düşüktür (M=4.9, SD=3.88) ve örneklemdeki bireylerin birçoğu kardeşler arasında yüksek düzeyde rekabet belirtmemiştir.   Olası açıklamalardan biri Bedford'un (1992) önerdiği gibi genellikle çocukluk hatıralarından ve ebeveynlerin iltimasından kaynaklı olan rekabet, iradi veya sınırlı iletişim kurma ile azalma eğilimine girebilir. Kardeşleriyle ilişkilerini sınırlamak yerine daha fazla iletişim kuran katılımcılarda, daha az sıklıkta iletişim kuranlara göre rekabet seviyesinin daha düşük olduğu, iletişim kurma sıklığı ile sıcak ilişkinin olumlu, rekabet ile olumsuz ilişki içerisinde olduğu gözlemlenmiştir.

4.1 Uygulamaya Yönelik Öneriler

Öncelikle, çalışma kapsamında, Yetişkin Kardeş İlişkisi Ölçeği'nin (ASRQ) Türkçe'ye uyarlaması yapılmıştır. Envanter Türkiye'de kardeş ilişkisi kalitesini ölçen ilk ölçektir ve kardeş ilişkisinin içeriğini incelemek isteyen aile danışmanları tarafından ölçme ve değerlendirme materyali olarak kullanılabilir.

Çalışmanın sonuçlarına göre, kardeşler arasındaki sıcak ilişki, kariyer karar verme öz yeterliliğinin anlamlı yordayıcısıdır. Bu bulgu, danışanları ile kariyer seçme ve karar verme sürecine destek olan aile danışmanları, kariyer danışmanları, okul psikolojik danışmanları, üniversitelerin öğrenci gelişim merkezlerinde ve psikolojik danışma birimlerinde görev yapan psikolojik danışmanlar tarafından değerlendirilebilir ve uygulamalarında kullanılabilir. Kardeş ilişkisi, danışanların kariyer karar verme becerilerinin ve yeterliliklerinin arttırılmasında dikkate alınabilir. Danışanın kardeşi ile olan ilişki kalitesinin kariyer karar verme öz yeterliliği üzerindeki etkisi hakkında öz farkındalığı artırılabilir.

 Kardeşler kariyer karar verme sürecine veya okullardaki kariyer tanıtım programlarına davet edilebilir. Aileler, kardeş ilişki kalitesinin kariyer karar verme öz yeterliliği ile

ilişkileri konusunda   bilgilendirilerek önleyici rehberlik ve danışmanlık hizmetleri sağlanabilir.

4.2 Gelecek Çalışmalar için Öneriler

Çalışma bulguları, kardeş ilişki kalitesinin kariyer karar verme öz yeterliliğini düşük varyansla açıkladığını ortaya koymuştur. Kariyer karar verme öz yeterliliğine etkisi olabilecek ebevey çocuk ilişkisi de kardeş ilişkisiyle birlikte araştırılabilir. Aile ilişkilerinin yanı sıra, akran ilişkilerinin kalitesi ve yordayıcılığı da sosyal çevrenin belirleyiciliğinin ölçülmesi açısından çalışmalara dahil edilebilir.

Ayrıca, bu araştırmanın katılımcıları, meslek alanını seçmiş ve kariyerleri adına en önemli adımlardan biri olan üniversite eğitimine başlamış ve devam eden bireylerdir. Gelecekte yapılacak araştırmalarda henüz kariyer adımı atmamış lise öğrencileri örneklemine odaklanılabilir. Farklı şehir, okul ve sosyoekonomik düzeyleri temsil eden katılımcılardan oluşturulan bir örneklemle aynı değişkenler araştırılabilir.

Bunun yanı sıra, bu araştırmada, kardeşi olmayan bireyler örnekleme dahil edilmemiştir. Tek çocukların kariyer karar verme öz yeterliliklerinin kardeşi olanlarla karşılaştırıldığı çalışmaların da yürütülmesi, kardeş ilişkisinin kariyer karar verme öz yeterliliğine etkisinin incelenmesi açısından faydalı olabilir.

Ayrıca çalışmada örneklemin sınıf seviyesi ve eğitim aldıkları bölümler ile ilgili demografik bilgi toplanmamıştır. İlerleyen çalışmalarda bu değişkenlerle ilgili de bşlgi toplanabilir ve kariyer karar verme öz yeterliliği üzerindeki yordayıcılıkları ve etkileri araştırılabilir.

Son olarak, Yetişkin Kardeş İlişkisi Kalitesi Ölçeği'nin orijinal faktör yapısı, bu araştırma örnekleminde doğrulanamamıştır. Ölçeğin psikometrik özellikleri, yeni ve daha kapsamlı bir örneklem ile tekrar test edilebilir veya Türk üniversite öğrencisi genç

yetişkinlerinin kardeş ilişkilerinin doğasına daha uygun bir ölçek geliştirme çalışması yürütülebilir.

Appendix E: Tez Fotokopisi İzin Formu

ENSTİTÜ

Fen Bilimleri Enstitüsü ☐

Sosyal Bilimler Enstitüsü ■

Uygulamalı Matematik Enstitüsü ☐

Enformatik Enstitüsü ☐

Deniz Bilimleri Enstitüsü ☐

YAZARIN

Soyadı :   cj kp
Adı   : \ g{pgr 'DÃ tc
Bölümü :Eğitim'Dk"o rgtk Bölümü

TEZİN ADI """" : VJ G'TQNG'QH'CF WNV'UKNNKP I "TGNCVKQP UJ KR"
S WCNKV['QP 'ECTGGT 'F GEKUKQP 'UGNH/GHHKECE['CO QP I "WP KX GT UKV["UVWF GP VU

TEZİN TÜRÜ : Yüksek Lisans ■   Doktora ☐

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir. ☐

2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir. ☐

3. Tezimden bir bir (1) yıl süreyle fotokopi alınamaz. ■

TEZİN KÜTÜPHANEYE TESLİM TARİHİ: _____