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**INVESTIGATION OF THE CURIOSITY AND EXPLORATION
CHARACTERISTICS OF UNDERGRADUATE STUDENTS IN TERMS OF
SOME VARIABLES**

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Yüksek lisans tezi olarak sunduğum, bu çalışmayı, bilimsel ahlak ve geleneklere aykırı düşecek bir yol ve yardıma başvurmaksızın yazdığımı, yararlandığım eserlerin kaynakçada gösterilenlerden oluştuğunu ve bu eserleri her kullanışında alıntı yaparak yararlandığımı belirtir; bunu onurumla doğrularım.

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Ad Soyad

ABSTRACT

The main objective of this thesis, which is a descriptive study, is to investigate the curiosity and exploration perceptions of university students studying a second foreign language. Examining the correspondence between students' activities and learning situations in the second foreign language and their perception of curiosity and exploration is important for the development of education programs in this field.

The study group of the research consists of students (N = 228) studying at a private university in the province of Istanbul. "Demographic Information Form" and "Curiosity and Exploration Scale" were used to collect data in the study. The Data Collection Form consists of questions about demographic features, features for learning a second foreign language, and the Curiosity and Exploration Scale. "The Data Collection Form consists of questions about demographic features, features for learning a second foreign language, and the Curiosity and Exploration Scale. In the data analysis, descriptive statistics involving mean, percentage, standard deviation, frequency, t-test, and ANOVA test are employed.

According to the findings of the research, the correspondence between the students' total scores of Curiosity and Exploration and the sub-scales of Stretching and Embracing Uncertainty was examined in terms of gender, age, faculty, the high school program of graduation, the category of the school from which they graduated, housing, socio-economic status, and an elective second foreign language. Accordingly, students' perceptions of curiosity and exploration and Stretching and Embracing Uncertainty did not differ according to the variables listed above. However, the correspondence between the curiosity and exploration total scores of the students who have a second

foreign language at the B1.2 level and the sub-scales of Stretching and Embracing Uncertainty were examined in terms of two or three foreign languages, and these students' total scores of Curiosity and Exploration and their Embracing Uncertainty scores were compared to the others. It was found to be higher. Students who take a second foreign language have a higher perception of Stretching towards curiosity and exploration. Students who take a second foreign language are more curious and more open to exploration than students who do not have a second foreign language. According to this result, we can state that the correspondence between the second foreign language and the first foreign language is very strong, and the correspondence between the mother tongue and the first foreign language is not very strong. The reason for this can be seen that the first foreign language originated from the native language. While learning the second foreign language, it can be said that the experiences gained in the learning process of the first foreign language make it easier for individuals who have learned two foreign languages to learn the second foreign language. In this context, it can be said that while learning grammar, the first and second foreign languages lay the groundwork for each other and the fact that the first and second foreign languages belong to the same language family also has an effect.

Key words: *Curiosity, Exploration, Second Foreign Language, University Students*

ÖZET

Betimsel bir çalışma olan bu çalışmanın amacı ikinci yabancı dil öğrenimi gören üniversite öğrencilerinin merak ve keşfetme algılarının incelenmesidir. Öğrencilerin ikinci yabancı dilde etkinlikleri ve öğrenme durumları ile merak ve keşfetme algıları arasında ilişkinin incelenmesi, bu alanda eğitim programlarının geliştirilmesi açısından önemlidir.

Araştırmanın çalışma grubunu, İstanbul İli'nde bulunan özel bir üniversitede öğrenim görmekte olan öğrenciler (N=228) oluşturmaktadır. Araştırmada verilerin toplanmasında “Demografik Bilgi Formu” ve “Merak ve Keşfetme Ölçeği” kullanılmıştır. Veri Toplama Formu demografik özelliklere yönelik sorulardan, ikinci yabancı dil öğrenme durumuna yönelik özelliklerden ve Merak ve Keşfetme Ölçeği'nden oluşmaktadır. Verilerin analiz edilmesinde frekans, yüzde, ortalama, standart sapma gibi tanımlayıcı istatistiklerden, t testi ve ANOVA testinden faydalanılmıştır.

Araştırma bulgularına göre, öğrencilerin merak ve keşif toplam puanları ile esneklik ve belirsizliği kabul etme alt boyutları arasındaki ilişki cinsiyet, yaş, fakülte, mezun olunan lise programı, mezun olunan okulun kategorisi, barınma, sosyo-ekonomik durum, yurt dışı deneyim ve seçmeli ikinci yabancı dil açısından incelenmiştir. Buna göre öğrencilerin merak ve keşfetme ile esneklik ve belirsizliği kabul etme algıları yukarıda sıralanan değişkenlere göre farklılık göstermemiştir. Bununla birlikte B1.2 düzeyinde ikinci bir yabancı dile sahip olan öğrencilerin merak ve keşif toplam puanları ile esneklik ve belirsizliği kabul etme alt boyutları arasındaki ilişki iki veya üç yabancı dil açısından incelenmiş ve bu öğrencilerin merak ve keşif toplam puanları ve belirsizliği kabul etme puanları diğerlerine göre daha yüksek olduğu tespit edilmiştir. İkinci yabancı dil alan öğrencilerin merak ve keşfetmeye yönelik

olarak esneklik algıları daha yüksektir. İkinci yabancı dil alan öğrenciler, ikinci yabancı dil almayan öğrencilere göre daha meraklı ve keşfetmeye daha açıktırlar. Bu sonuca göre, ikinci yabancı dil ile birinci yabancı dil arasındaki ilişkinin oldukça güçlü olduğu, anadil ile birinci yabancı dil arasındaki ilişkinin çok güçlü olmadığını belirtebiliriz. Bunun nedeni, ilk yabancı dilin kaynağını ana dilden almış olması gösterilebilir. İkinci yabancı dili öğrenirken, birinci yabancı dilin öğrenme sürecinde edinilen deneyimlerin, iki yabancı dil öğrenmiş bireylerde ikinci yabancı dili öğrenmeyi kolaylaştırdığı söylenebilir. Bu bağlamda, gramer konularını öğrenirken, birinci ve ikinci yabancı dillerin birbirleri için zemin hazırladığı ve birinci ve ikinci yabancı dillerin aynı dil ailesine ait olmasının da bir etkisi olduğu söylenebilir.

Anahtar Sözcükler: *Merak, Keşfetme, İkinci Yabancı Dil, Üniversite Öğrencisi.*

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LIST OF ABBREVIATIONS

CFA : Confirmatory Factor Analysis

SPSS : Statistical Package for the Social Sciences

Std. : Standard

L1 : Mother Tongue

L2 : 1st Foreign Language

L3 : 2nd Foreign Language

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1. INTRODUCTION

1.1. Theoretical Background

1.1.1. Learner Characteristics and Curricula

Learner characteristics are always in the research focus of educational sciences. The success of curriculum is related to the suitability of the learner characteristics. At the heart of the concept of “curriculum development” has the meaning of “variability of learner characteristics”. If the learner characteristics are well known, a suitable curriculum could be developed. From past to present, different definitions have been made by many educators regarding the concept of curriculum development. These definitions comprise different focal points on the subject. For instance, curriculum development is considered as a tool for achieving the goals of a country, education system and school as Vidler (1975) defines as “all of the coordinated efforts both inside and outside the school for developing the contents and activities organized to achieve the goals of the National Education and the school with proper methods and techniques, both” (p.115). According to Ertürk (2013), curriculum development involves studies of identification of targeted behaviors; selection, organization, acquisition as well as the efficiency of the learning experiences and measurement and evaluation that will reveal to what extent the targets have been achieved in addition to of giving feedback and correction to all elements of the curriculum. On the other hand, Oğuzkan (1993) considers curriculum development as the studies conducted according to the changing goals and objectives in line with the developments in the society. He defines it as “the task of correction, renewal and generalization of the proposed changes after a trial in line with the social developments regarding the general and specific objectives, lesson subjects, learning methods and evaluation techniques of the curriculum based on research” (p.123). Another point that transcends in the definitions of the curriculum

development is the discussion of the relations between the elements of the program. According to Demirel (2014), who is among those who define curriculum development in this manner, curriculum development is “the sum of dynamic relationships between the elements of objective, content, learning-teaching process and assessment of the educational program” (p.5). Similarly, İşman and Eskicumalı (2006) define curriculum development as the dynamic relationships between objectives/behaviors, content, learning-teaching experiences, and test situations which are four essential elements of the education program. In some definitions, curriculum development is considered as technical studies conducted in order to prepare a qualified curriculum and to meet the desired standards by evaluating the existing curriculum that are being implemented. While mentioning these points, Küçükahmet (2002) also defines curriculum development as all the activities done in order to continuously improve the existing program through research in practice and to make it more effective.

Another important point emphasized in the curriculum development definitions is the necessity of stakeholder participation. Accordingly, Marsh and Willis (2007) explain program development as a progressive process apropos effectively changing and improving the education program with the gathering of relevant people. According to Oliver (1965; told by Yüksel, 2000), in order for this process to be effective, all groups affected by the curriculum should be included in the curriculum development activities.

In addition to all these definitions, it is also emphasized in the literature that the curriculum development is a systematic and dynamic process. For instance, according to Carl (1995), program development is an ongoing process in which the curriculum is handled systematically from planning to evaluation. In the definition made by Stenhouse (1975), the concept of “process” is considered as the focal point that clarifies

curriculum development. Erden (1998) defines program development as "the process of designing, implementing, evaluating and reorganizing of education programs according to data obtained from the evaluation " (p.3). Considering curriculum development as a systematic process, Oliva (1997) states that program development studies are carried out under three basic phases as program planning (designing), application (trial) and evaluation of the curriculum

First phase is the planning phase in which preparations regarding the curriculum development take place. In program planning phase, elements of the education program are pointed out. Creation of curriculum development working groups, preparation of the work plan and studies of needs analysis take place at this phase (Demirel, 2010). The transfer of the program from planning phase to teaching phase takes place during the application phase in program development (Oliva, 2009). This phase includes testing the prepared draft curriculum and collecting data on the draft curriculum during the trial process as well (Akpınar, 2013). The final stage of curriculum development studies is the evaluation phase. This phase comprises the determination of the related results regarding the success of both students and curriculum as well as the process of decision making regarding the effectiveness of the curriculum (Görge, 2014). When all theoretical opinions about curriculum development are examined, common features emphasized by all educators can be summarized as follows:

- curriculum development is a continuous dynamic process.
- It is planned in order to meet education needs.
- Its development is a progressive process.
- In curriculum development activities, participation is essential for all the stakeholders affected by the program.

- curriculum development is a process based on scientific research.

The definitions and arguments made regarding the concept of curriculum are synthesized and discussed by Marsh (2004) in a theoretical framework. According to Marsh (2004), the curriculum includes the basic information from the past to the present as well as new subjects needed in contemporary life. However, it is also the planning of learning experiences that enable students to reach knowledge and skills under the responsibility of the school.

On the other hand, Demirel (2014) defines the curriculum as “The learning experience mechanism provided to the learner through planned activities at school and outside of school” (p.6). While Küçükahmet (1998) describes the curriculum as a process that includes all activities aimed at the realization of the aims of national education and the institution, Gözütok (2003) describes the goals, the content to be selected and organized to achieve these goals, the methods to be applied, the supporting tools. According to Isman and Eskicumalı (2006), the curriculum consists of the evaluation processes of determining goals, transforming goals into student behaviors, determining educational situations that will realize behavior change, and organizing the learning experiences.

Akpınar (2013) states that the diversity in the definitions of the curriculum arises from the differences in the fundamental philosophy, the understanding of education, the point of view about knowledge, and the assumptions that takes people whether as the subject or the object of education. Ornstein and Hunkins (2012) says: the syllabus is defined in different ways in line with the curriculum approaches that asserts the perspective on curriculum development and design as a holistic structure that

Ornstein and Hunkins (2012) classifies curriculum definitions in five different perspectives. The one they classified as technical/scientific consists of Behavioral Approach, Managerial Approach and System Approach while the one they classified as non-technical/scientific consists of the Academic Approach, Humanistic Approach, and the Reconceptualization Approach. While technical/scientific approaches reflect the positivist perspective, non-technical/scientific approaches reflect the post-positivist perspective (Bay, Gündoğdu, Ozan, Dilekçi, & Özdemir, 2012). Ornstein and Hunkins (2012) explained their approach on curriculum approaches under these main headings:

Behavioral approach: In the curriculums prepared according to the behavioral approach which is based on a logical and prescriptive understanding, goals should be clearly stated, content and events should be listed in a method that corresponds to goals, learning outcomes should be evaluated in line with goals and objectives (Ornstein & Hunkins, 2012).

Managerial approach: Educators who adopt this approach plans the curriculums within the framework of schedules, venues, resources, equipment, and staff. In addition to this, in this approach, which is an extension of the behavioral approach, there is a tendency to focus on the counseling and managerial aspects of the curriculum in which the experts work in line with the logical stages (Ornstein & Hunkins, 2012).

System approach: Program experts who adopt the system approach evaluate the school together with all its parts as a system and discuss the program in terms of the correspondence of these parts to each other. In this approach, the program is considered as the main component and the teacher, learning, counseling, and other related fields are seen as subsystems in the implementation of the curriculum (Ornstein & Hunkins, 2012).

Academic approach: This approach, which was favored between 1930 and 1950, is based on the work of John Dewey, Henry Morrison and Boyd Bode (Ornstein & Hunkins, 2012). The priority of the curriculum in the academic program approach, which lost its effect after the 1950s, is the development of the learners' intellectual and logical thinking as well as the research skills on specific subjects (Cheung & Wong, 2002).

Academic approach according to Tanner and Tanner (1995; as cited in Bay et al., 2012) places more emphasis on traditional academic studies than the contemporary needs of the individual and society.

Humanistic approach: Curriculum development experts who adopt this method which is created on the progressive movement find the plans prepared with a scientific and technical-based approach to be highly mechanical and think that the personal and social aspects of the programs are neglected (Ornstein & Hunkins, 2012). This approach, which emphasized the importance of artistic and social activities, attaches importance to the methods and techniques that support individual learning as well as activities based on collaboration and group interaction, and puts students at the center of learning (Ornstein & Hunkins, 2012). However, competitive classroom environments where the teacher is at the center and a learning environment with large groups are opposed in humanistic approach (Ornstein & Hunkins, 2012). According to this approach, meaningful experiences should be provided for students to realize themselves and it should be focused on their emotional development (Ng & Cheung, 2002).

Reconceptualization: Reconceptualization is a trend that emerged in the USA in the 1970s. This trend pioneered by William F. Pinar, opposes the Tyler approach and

techniques arguing that it has a narrow scope in curriculum development, and they oppose the understanding of curriculum development in traditional education. Reconceptualists have adopted many perspectives of progressive philosophy (Bümen & Aktan, 2014). According to the reconceptualists, although education professors had a great influence on education with their large-scale curriculum development projects in the first half of the 19th century, today politicians, parents and socio-economic forces (intense immigration or economic crisis etc.) have a stronger influence on schools. For this reason, curriculum should also be considered as a political document (Bümen & Aktan, 2014).

Another basic element of the curriculum is the answers to the question of "content" or "what shall we teach?". Curriculum is the outline of the concepts to be taught to the students to help them in meeting the standards of the content and it is a tool to achieve goals (Demirel, 2014). The content element, which is expressed as "muhteva - content" by Variş (1978), is defined as a resource used for the achievement of educational objectives. In the definition made by Sönmez (2012; p.130) content is defined as "...organizing units and topics in a way to achieve target behaviors" and that "Content is a tool for target behaviors...". According to the literature, there are many models suggested for curriculum development. These models should be evaluated with learner characteristics. Curiosity concept is one of the most discussed characteristics of learners in recent years. Before applying a curriculum model, it should be examined that what affects the curiosity characteristics of learners. As Dann (2013) questioning that "we are propelled into a new era of curriculum reform, specific questions need to be posed. What does curiosity, or being curious, mean? How may we encourage pupils (and teachers) to be curious?" Ruth Dann (2013).

In 2018, Jirout and Zumbunn explored the questions "*What would curiosity-promoting educational practice look like, and how does this differ from what happens more typically in classrooms?*" They discussed how curiosity might be encouraged or suppressed in educational settings based on a former examination, how curiosity in classrooms might resemble, and how a study on curiosity can be implemented to educational perspectives, following a concise discussion of why curiosity should be a priority in education. They concentrated on qualitatively examining educational practice and combining the uncertainty. They argued for the necessity to analyze curiosity in classrooms and naturalistic learning environments and the challenge in achieving this if curiosity is recognized and considered a unitary, independent construct. Finally, they concluded with possible future trends to connect and expand investigation on curiosity for educational utilization.

They proposed the following two avenues for promoting curious behaviors and general curiosity in classrooms:

1. "Create learning experiences most likely to spark curiosity by creating optimal levels of uncertainty," and
2. "Help students to become more curious by increasing preference for and comfort with greater levels of uncertainty".

The investigation endeavored at recognizing curiosity is growing to become more interdisciplinary. This fact presents an extraordinary occasion to enhance education and utilize what has been discovered by stimulating curiosity. The analysis is being conducted to integrate investigation on employing language to promote uncertainty-solving behavior, comfort, and recognition to further curiosity in classrooms that hold complex systems. Among the several factors that contribute to children's behavior,

there is an interaction besides curiosity. So, it is essential to incorporate that complexity into later curiosity work. To encourage the practical application of research, it is necessary to invite others to involve educational researchers in the studies that relay later applying occasions while doing fundamental analysis, including estimating potential interaction factors of the environment and the students. Further investigation should be performed about the employment of curiosity research in educational contexts. Subsequently, as fostering curiosity has a possibility to remain inconsistent besides the educational priorities at hand, later studies should endeavor to manifest the significance it engages in improving the varieties of learners needed for today's innovation request.

1.1.2. The Concept of Curiosity

Curiosity is interpreted so a temperament to ask about, research or look for after information (Gurning & Siregar, 2017). This is clearly to mood in which you went to discover more about something it also delivers the basis of core incentive that includes the institution of culture. Berlyne (1998) stated that curiosity is defined as a need, thirst or desire for knowledge. The study to identify the following problems in their work: (1) the issues moving the inherent incentive of university students in Hong Kong; and (2) femininity changes in the insight of inherent incentive in Hong Kong higher education situation. The issues of curiosity and exterior rule with inherent incentive are taken into search in this study, because these issues and inherent incentive of the native university students have rarely been inspected. In research accepting a review of 162 tested students, was led in a native university in 2011. Results presented that students with curiosity could principal to their higher inherent incentive, but outside rule was not

create to be connected to inherent incentive. This is calculation, there are no femininity changes on the equal of inherent incentive.

Curiosity has also been investigated in the Turkish context. Exploring the tertiary level students' curiosity levels, Demirel and Coşkun (2009) aimed to find out whether there was a correspondence between levels of curiosity and such factors as gender, faculty, university entrance scores and achievement perception. The results of the curiosity scale showed that while achievement of success was not a factor affecting the participants' curiosity levels, the other three factors had a positive correspondence with curiosity. Centering on secondary school students' achievement levels in science course, Ceylan, et al. (2016) searched whether the level of motivation, curiosity and attitudes were factors influencing the participants' achievement levels. Results of the data collected through questionnaire showed that while motivation did not have a significant connection with achievement, attitude and curiosity had direct effects on science achievement. Placing emphasis on the epistemological curiosity of 557 high school students towards mathematics lessons, Eren and Coşkun (2016) investigated the correspondence among variables of boredom, strategies to cope with boredom and epistemic curiosity. The results pointed at the significant correspondence among the variables. In other words, epistemic curiosity was shown to decrease boredom while promoting the boredom-coping strategies.

Tulgar (2018) reported that the concept of curiosity has been examined within the context of young learners. Working with 30 first-grader children, Ciampa (2016) explored the correspondence between curiosity promoted through mobile e-books and reading motivation. Findings revealed that curiosity was a stimulating factor increasing the participants' incentive for understanding activities. In 2012 Lin et al, investigated

the understanding incentive and knowledge of 104 Chinese bilingual fifth- graders learning English as a foreign language. The results of the questionnaire exposed that curiosity besides self-efficacy and involvement was effecting the participants' reading motivation and comprehension in both languages, L1 in particular.

The relevant literature also presents some studies which had a direct focus on the notion of curiosity. Chang, Tseng, Liang and Yan (2013) centered their study on curiosity and continuance intention variables into account. The fallouts exposed that curiosity was a sturdy factor impacting the participants' purpose to continue learning through the applied system.

Besides the studies with young learner profile, there are also examples of research conducted with adult language learners. Working with six learners of French who had a short-term study abroad experience, Allen (2010) investigated the sources of motivation for the participants to continue their French education. The researchers reported that linguistic curiosity and career motives were the factors affecting the participants' willingness to continue their learning process. Graham and Helen (2011) centered on the effectiveness of information gap designs as a tool to enhance academic curiosity in second language learning. The researchers reported that information gap designs formed the basis for inquiry-based learning and promoted academic curiosity. Designing a two-step action research, Houghton (2014) studied the indications of curiosity in a study abroad case regarding the design of teaching materials to stimulate curiosity in terms of inter national communicative competence in an English course. The results showed that the information-gap design promoted curiosity in the participants regarding the cultural-communicative aspects of the target language.

Curiosity can be defined as the experience that motivates exploratory behaviors regarding will to know, to see, to experience and acquiring new knowledge (Litman and Spielberg, 2003, Litman, 2005). Broadly, curiosity appears to arouse as a result of uncertainty, suspicion, misperception, illogicality, mental battle, innovation, difficulty, vagueness, change and contingencies (Harty and Beall, 1984).

According to McReynolds et al. People, who act as active participants during adaptation to life, try to know new objects, meet new persons and travel new objects (1961). There are different aspects of curiosity which is seen as a motivation to know when learning and progressing.

Individuals try to explore their surroundings from the moment they came to life and live their first learning experiences thanks to motives of curiosity and exploration the embody instinctively. This motive of curiosity helps them to renew and improve themselves throughout their lives on different matters. Developments almost on all subjects from science to technology, from art to education emerged thanks to never-ending curiosity of the mankind. Moreover, curiosity has a profound effect on the set of values that creates the culture of a society. Significant scientific discoveries and advancement of civilizations in history happened due to curiosity that people naturally inhabit (Demirel and Coşkun, 2009). Nevertheless, curiosity, which is thought to be an important subject due to these attributions, is a concept that is not well studied in Turkey (Acun, Kapıkıran and Kabasakal, 2013).

Conceptually, curiosity is an emotional and motivational state all creatures naturally have (Gerber, 2009; Kashdan and Silvia, 2009). Since humans are rational beings as part of their nature, they have a structure that question, criticize and analyze what's going around them. Therefore, they are curious about and wants to learn about

many things. Curiosity is in fact the powerful feeling of desire to learn about a situation. In literature, scholars define curiosity as eagerness and desire of a person to have more knowledge of himself/herself and his/her surroundings; as addressing new, different and mysterious incidents and occurrences; as desire to explore them and as being eager and persistent to explore and to experience them (Demirel and Coşkun, 2009).

Berlyne (1954) divides curiosity into two categories as perceptual and epistemic curiosity. He defines perceptual curiosity as the acts that principals to augmented sensibility of perception of incentives and acts that are performed to have a knowledge about the unknown and complex objects. On the other hand, he defines epistemic curiosity as the impulse to know. Furthermore, he explains epistemic curiosity as the strong want to obtain information and to drive a person to act about conceptual ambiguity, complex thoughts and intricate problems. Litman and Jimerson (2004) argue that curiosity of knowledge can be explained not only with deprivation but also with attention. Besides, it is argued that significant factors such as success and motivation in education has the potential of being related to curiosity of knowledge as well (Eren, 2009).

As a personality characteristic, curiosity is abstract and lasts throughout the lifetime (Silvia and Kashdan, 2009); shows frequency and intensity of state experience and can transform the state curiosity. While in the short run, curiosity serves to learn, explore and engage more; in the long run it serves to ensure knowledge and competence. Considering all these definitions, in general terms, curiosity can be distinct so “the recognition, exposure and desire to explore new, challenging and ambiguous events and potential to handle a situation” (Silvia and Kashdan, 2009).

Curiosity is an affective characteristic that emerges with birth and provokes learning. If a student is motivated with curiosity, that is a potential sign of permanent learning. Curiosity is the trigger of desire to do research and learn (Gözün-Kahraman, Ceylan and Ülker, 2015).

Curiosity is about new and unfamiliar objects, perplexity and ambiguity as well as an important factor in cognitive development and learning. It leads to exploring the unknown and desire to know. However, in some studies it is presented that students who participate activities less, show signs of boredom and incuriosity. On the contrary, students who fulfill their needs of competency in a social context thinks more positively about their capabilities (Sun and Chen, 2010; Jirout and Klahr, 2012).

It is acknowledged that curiosity is a felling that leads to acquire new knowledge and to explore as well as a sensory experience that stimulates the behavior performed for this objective (Litman and Spielberg, 2003). Since frequency and intensity of these experiences varies from person to person, it can provoke a change in curiosity (Silvia, 2008). This concept which changes depending on the environment a person endows with and has right now, on his/her personal characteristics and on his/her experiences motivates that person. Curiosity, while provokes acquiring more knowledge, exploration, and concentration in the short run, it leads to active and permanent learning and gaining competence about curiosity in the long run.

Curiosity that is usually distinct as the necessity to know or the want to actualize this need, is a characteristic that people who is not afraid to experience new things and who needs to know more about themselves and their environment have (Coşkun and Demirel, 2012). It is thought that for a person who has this characteristic, to provoke the motive of curiosity facilitates learning and teaching processes. In this context,

feelings of curiosity and exploration has a motivating effect on the entire education process. Demirel and Coşkun, when referring to the effects of curiosity on learning processes, define curiosity as the most important driving force that affects lifelong learning processes and assert that if this motive is provoked in educational environment, learning will take place spontaneously. In conclusion, curiosity as the result of its positive effects on learning, has become a characteristic that needs to be used in every aspect of people's lives notably in terms of education, work and family in this era which concept of lifelong learning and idea of an individual who learn throughout the lifespan has gained more importance.

The inspection is a teaching road where by persons lteach how to resort to a device or an administration just by playing with that. There is no lecturer nor certification. The only style to recognize the method is to intermingle with it, and the irreplaceable opinion occurs from the interface. Indecidedly spots, searching is so-called "free" whereas it is called "channeled" when one avail from some outward succor. The individualities of the pioneer and of the purpose to be realized have to be well expressed because of their prospective validity on the effect of searching. Initiates may be guileless or experienced in the purview the technique goes to (*e.g.*, computer science); they may be totally unused with the procedure or previously recognizable with evident segments of it. Procedures have diverse levels of density and can be immobile or forceful allowing to their faculty to advance by its.

The inspection has various leads. It is a teaching by doing means (Anzal and Simon, 1979) where initiates are functional and greatly convoluted in acquiring. It admits them to be in control set their goals and self-initiative problem explaining. Experimental environments (*e.g.*, computer games) can be agreeable. Thought-

provoking, mind-blowing, and interesting. They alleviate initiates from construing user manuals that are not interactive and often capacious, incomprehensive and testing (Carroll, 1984).

1.1.3. Concept of Mother Tongue

Mother tongue is the ability people advance through influencing by means of their environment beginning from their birth. People are part of the society they live in. In this respect, they learn the language of the environment they have born into and they live in. This ability is called mother tongue. Mother tongue is usually learnt from parents and from people in the immediate surroundings. Later it starts to advance along the correspondence established with the society (Barin, 2004; Hengirmen, 1999). In literature, mother tongue is addressed as “L1”. It is convenient to say that social environment and family have important contributions on the development of L1. With this respect, mother tongue is the first language ever used and learned before any education. It is learnt from parents, other family members, immediate surroundings, social environment and from the society they live in, in the years following their birth, during their childhood and during the period where communication has first started. It is the language which people think in and talk with, have a comprehensive knowledge of and express themselves best in (Durmuş, 2018; Oruç, 2016).

It is stated that since children speak the language they first hear from their mothers, it is called mother tongue (Jimenez, 2009a). In another definition, mother tongue is the language which people express their thoughts and emotions in the best way to others (Özbay, 2006).

1.1.4. Concept of First Foreign Language

In literature, first foreign language is addressed as “L2”. It is asserted that if a student has the ability and competency of learning L1, he/she also has the ability and competency of learning L2. It is stated that children who has L2 have more flexible cognitive structures, creative intelligence, critical thinking and more creativity than those who do not have L2 (Arslangilay and Özdemir, 2016).

It is called bilingualism if a child can use two language in one or more skills (reading, writing, listening, speaking) (Jimenez, 2009b). In this context, children whose parents speak different languages or children of minorities are usually simultaneous bilinguals. If the second language is learnt after the age of three where acquisition of the first language is at a certain point, it is called sequential bilingualism. Children who emigrate to another country because of their parents’ jobs where a different language is spoken after the age of three can be an example of sequential bilingualism (Martinez, 1996). it is said that first foreign language education has a significance on the second language education (Castellotti, 2001). The reason for this can be seen that the first foreign language originated from the native language. While learning the second foreign language, it can be said that the experiences gained in the learning process of the first foreign language make it easier for individuals who have learned two foreign languages to learn the second foreign language. In this context, it can be said that while learning grammar, the first and second foreign languages lay the groundwork for each other and the fact that the first and second foreign languages belong to the same language family also has an effect.

In the simplest terms, if a child uses another language along with his/her mother tongue, it is bilingualism (Jimenez, 2009b). In addition, some studies suggest that

children whose parents speak different languages learn a foreign language more advantageously besides their mother tongue (Murphy, 2003).

In all probability, English is the only language in the history of natural languages that has been extensively studied in its use by so-called non-native users (more commonly referred to as non-native speakers, or NNS). The very use of English by unprecedented numbers of NNS has given rise to a series of reinterpretations of the term “native speaker” and its significance together with a reappraisal of concepts that play a definitive role in the teaching of English as a foreign language, such as “standard English”.

1.1.5. Concept of Second Foreign Language

Besides there is a lot of reasons for learning a second foreign language, it is argued that there are important factors such as linguistic skill, objectives and age group (Cook, 1997; Uslu and Özek, 2004). In literature, second foreign language is addressed as “L3”. Second foreign language, L3, is the language one learns except L1 and L2. Structurally learning a second foreign language is assessed as the first step of cultural diversity (Cook, 1997; Uslu and Özek, 2004).

Uslu and Özek (2004) emphasize that the approaches, manners and standpoints of prospective foreign language teachers, who are the practitioners of the methods, to after L2 language education are the determinants of success in L3 education. It is necessary to employ similar features of the mother tongue and/or the first foreign languages previously learnt before, in teaching L2. Hereby, thanks to these similar features that students have acquired when they learn their mother tongues and first foreign languages, they won't have difficulty when they learn a second foreign language; and with similar vocabulary and grammar structures, they will be able to

benefit from the learning strategies and other knowledge, ability and experiences that has been developed during the process of learning the previous language (Brewster, Ellis and Girard, 2002).

1.1.6. Relationship Between Mother Tongue, First and Second Foreign Languages

Within the scope of cognitive constructivism studies, it is argued that the correspondence between the second foreign language and the first foreign language is rather strong while the correspondence between the mother tongue and first foreign language is not so strong (Tzur-Bar, 2000). The reason for this is that the first foreign language takes its source from the mother tongue. The relationship between mother tongue, first and second foreign languages is shown in the Figure 1 below.

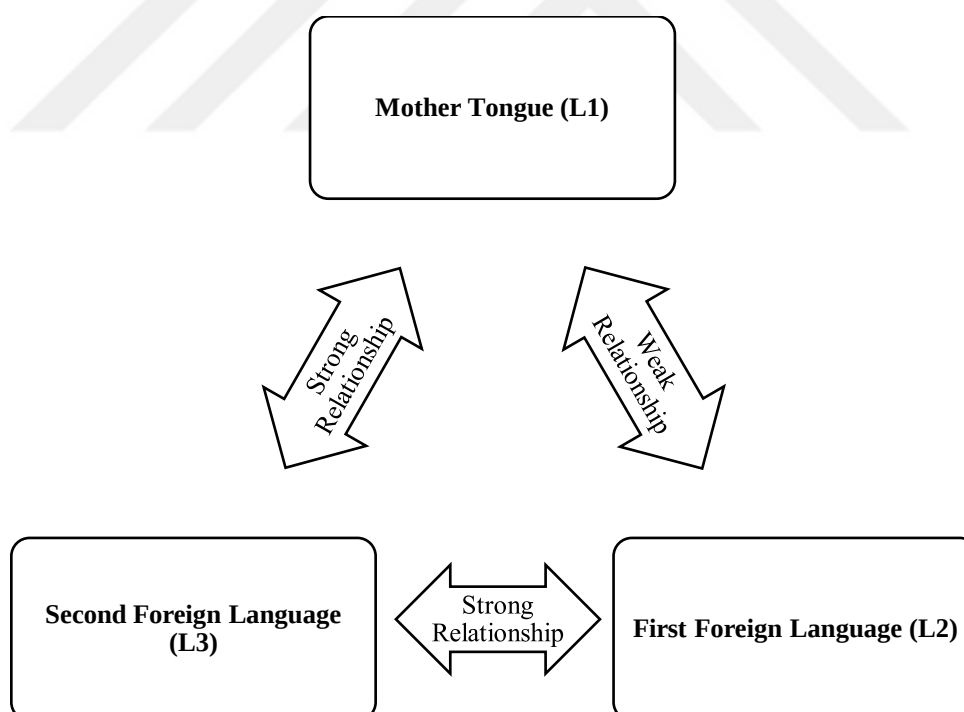


Figure 1. The Relationship Between Mother Tongue, First and Second Foreign Languages.

Source: Tzur-Bar, *Interpreting for Foreign Language Courses*, 2000.

It is stated that when learning the 2nd foreign language, the experiences acquired during the learning process of the first foreign language make it easier to learn the second foreign language in individuals who have learnt two foreign languages. In this regard, a study on this subject shows that when learning grammar topics, first and second foreign languages do groundwork for each other; bilingualism is more advantageous than monolingualism, moreover, belonging of the first and second foreign languages to the same language family has a profound effect (Neuner et al., 2009).

There are also arguments that assert that there is an important correspondence between the mother tongue and the first foreign language. Study of Lee and Schallert (1997) analyzes contributions of reading abilities in the mother tongue on reading comprehension in the first foreign language. There is a lower correlation between the reading abilities in mother tongue and in first foreign language of the groups with a lower mother tongue proficiency. Lee and Schallert (1997) concluded that the transfer of reading abilities in mother tongue to first foreign language is less likely. This situation might stem from the fact that mother tongue proficiency does not allow this transference or reading ability in the mother tongue is not advanced adequately. Social interaction may increase the cultural interest and curiosity of the participants. The participants' curiosity raised by the interactions through the social environment created in the second language learning context. The sense of curiosity increased when the participants observed different cultures; therefore, they felt the need to develop their target language knowledge and skills as it was the common means of communication with the other members of the community. In addition, the participants also needed to develop their target language proficiency at the desired level in order to present their cultural values to other people in the global community. Therefore, since the target

language was the common language in this setting, the curiosity to better understand others and introduce their unique characteristics to other interlocutors can be considered to have stimulated their language development.

On the other hand, it is highly likely that a student from the group who has higher first foreign language proficiency gets similar grades from mother tongue and first foreign language reading comprehension tests. Likewise, Neuner et al (2009), emphasize that multilingualism plays an important role in language transfer. It argues that therefore, learners can build a positive transfer bridge not only from L1 but also from L2 to L3 using the similarities between them.

1.1.7. Foreign Language Education

In structural terms, foreign language is the language that is spoken in other countries where one is not born in and comprise of the languages that don't include the mother tongue. Foreign languages make it possible to understand languages outside one's own country and region and communicate with other communities as well. Main point regarding the foreign language education is the internalization of the language by learning the rules and the system of it. It should not be viewed solely as a case of two societies understanding each other. In addition to learning a foreign language; historical development, culture and views of that society is learnt as well (Gömlöksiz and Elaldı, 2011).

Foreign language learning is a process of learning about different cultures other than one's own, to communicate with and get to know people from that culture.

Within this process, there are certain principles and fundamentals for an individual to acquire listening, reading and writing skills. For foreign language learning process to be successful, foreign language education must be planned and implemented

accomplishedly. Planning and implementation of foreign language education bases on certain principles and fundamentals. These principles can be listed under 10 items below (Demirel, 1993):

1. Advancing four basic skills (listening, reading, speaking, writing),
2. Planning language education,
3. Teaching from complex, tangible to abstract,
4. Benefitting from visual and auditory instruments,
5. Using mother tongue only if necessary,
6. Presenting only one structure at a time,
7. Implementation of given knowledge and examples to everyday life,
8. Making students active during lectures,
9. Paying attention to individual differences,
10. Motivating and encouraging students.

1.1.8. Principles of Language Teaching After the First Foreign Language

A new era has begun in foreign language teaching with the need to know more than one foreign language and the teaching of other languages as a second foreign language after English. The teaching of the first foreign language is different from the teaching of the second foreign language and subsequent languages. This also applies to language learning after the first foreign language. Learners and their characteristics have changed. Learners' foreign language learning goals have changed. The features of the newly learned language are different. The teaching of new languages and the tools used for this purpose vary. For these and similar reasons, language teaching after the first foreign language differs from the first foreign language teaching.

Neuner (2005: 28-32) listed and defined the principles of language teaching after the first foreign language as follows;

1. Cognitive Learning
2. Developing Understanding
3. Content Editing
4. Text Editing
5. Economical Use of the Learning Process

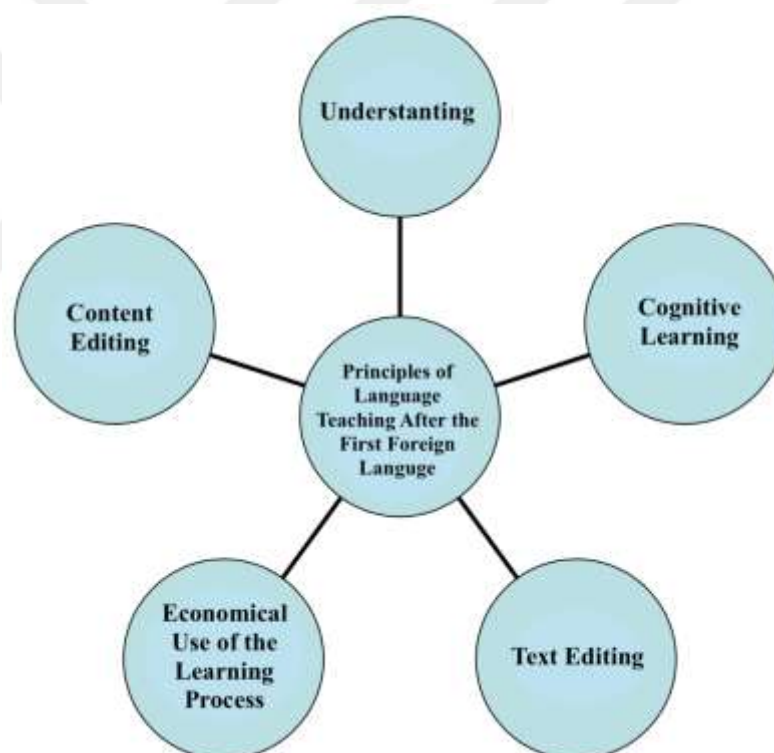


Figure 2. Principles of Language Teaching After the First Foreign Language

1.1.8.1. Cognitive Learning

Cognitive learning and teaching can be explained in two areas. The first is vocabulary, grammar, pronunciation, spelling, etc. It is to activate the common

language potential of mother tongue, first foreign language and post-first foreign languages. Hufeisen (2000: 7), stating that language learning after the first foreign language becomes easier with the comparison of known languages; It defines conscious learning through the discovery of similarities between languages, exploiting these similarities and learning the differences.

The second important point in cognitive learning is to activate the learning potential obtained while learning the first foreign language. In the second foreign language lessons, conscious relationships should be established between the language structure of the first foreign language, language use and the socio culture of the mother tongue, and conscious language comparison should be aimed in the lessons. Because this situation will positively affect the language teaching process after the first foreign language. The student now knows "how to learn a foreign language". He has an idea of what type of learner he is. During her first foreign language learning, she learned that she had a more successful foreign language education, whether by hearing, seeing or applying.

1.1.8.2. Developing Understanding

It is necessary to create texts to improve the learner's understanding. The learner will get to know the new language and the culture of that language through the texts. It is inconvenient to give a new topic to the student with a text that is completely unknown to words and structures. The lesson may not achieve its purpose. Because the thought of "I cannot do this" waking up when the student sees the text will increase even more with foreign words and foreign grammar structures, and will break the student's motivation from the beginning. Original texts should be found or prepared in order to be used in the first lessons, with a lot of common words and easy to understand in terms of structure (poster, advertisement).

1.1.8.3. Content Editing

Foreign language reaches people through texts. The contents of the texts are very important for students. It is also true that those who learn second or later languages are older than those who learn the first foreign language. In this case, their interests and expectations are different. If the texts selected are the same as the texts used in teaching the first foreign language; texts both create boredom for the learner and not be motivating for the new language. If the texts consist of information about the learner's own world and the foreign world he is interested in; If it can give a new perspective to the learner with this information, if it enables them to reflect on the differences and improve themselves; If he can provide an environment to work alone, then the student will love the new language more, and will gain this language more easily by being more motivated. New textbooks are prepared to meet these expectations of students. The sample selected from the latest study of Krenn and Puchta (2008: 26-27) gives an idea of how ordinary subjects can be handled in a different and interesting way.

Homework and projects to be given to students by the teacher should be homework and projects that students will enjoy researching, preparing and presenting. The student is surprised by the size of the common vocabulary of the three languages, which he realizes with a simple dictionary study in the German as a second foreign language, which he started with a little fear and a little anxiety, on the other hand, he is happy and relaxed. Because, through this homework, he realizes that he does not start the new language from scratch.

These activities that can be done when starting a second foreign language are activities aimed at motivating the learner to the learning of the new language and involving the individual in the process. In the future, studies should get harder; There should be studies that fit the age, capacity and expectations of the individual. The

principle of content arrangement, one of the first post-foreign language teaching principles, is a principle that will enable the individual to improve their grammar with the presented studies, provide the opportunity to work on their own, and aim to teach by using new communication technologies.

1.1.8.4. Text Editing

Since the foreign world appears in texts in foreign language lessons, text study has an important place in the first foreign language lessons. The principle of text editing is in close relationship with the principle of understanding and content organization (Neuner, 2005: 31). The student, no matter how the text comes across, must first understand it. He will do this by using the learning strategies he has acquired from the native language or the foreign language he has learned before. If the text - especially in the first lessons - is similar to what the student has studied previously (concert poster, advertisement), it will work with it much easier.

The lesson will be more colorful for both the teacher and the students when interesting contents are presented to the student as a listening text other than reading or via pictures, videos, and the internet. In text studies, studies such as summary, evaluation, interpretation, explanation and continuation of the text that the teacher will give have a special importance in working with the text.

Neuner / Kursisa (2006: 7) states that "a special textual teaching should be developed for languages after the first foreign language, which includes studies different from the first foreign language".

1.1.8.5. Economical Use of the Learning Process

The principle of economizing the learning process combines many features of teaching languages after the first foreign language. As the name suggests; The aim of

the principle is to make the learning process economical. Economicization can take different forms:

- Students' awareness of their personal foreign language learning process should be developed. To be able to obtain the level in the first foreign language in the second foreign language in a short time; It depends not only on the aggregation of information, but also on the general knowledge of languages and on the individual's awareness and knowledge of the foreign language learning process (Serindağ, 2003: 121).
- The student's process of learning the new language will be shortened if texts full of content that may be of interest to the student are presented and information on how to work with them.
- If the parallels between languages can be given well; The student can adapt the foreign language learning methods and techniques he / she met while learning the first foreign language to the next languages. Conscious comparison of languages is an important element of the principle of economization.
- Another reason that shortens the process in language teaching after the first foreign language is the opportunity to work alone with appropriate homework and projects.
- In terms of economization in learning, it is also very important that the student is well motivated to new languages. Here, the teacher factor comes into play. Mönch (1995: 116) states that in order to start a successful learning process, a trust relationship must develop between the student and the teacher.
- It will be beneficial to prepare international joint language projects that will support post-first foreign language teaching especially for adults. The European Union has been supporting the project called EuroCom (Prehension) for several

years. This project is about people who have learned a language or have already learned it, to be able to understand related languages economically. (Krumm 2007: 60-61).

The different dimensions of the principle of economizing the learning process listed above show that; It is imperative to develop time-saving learning and teaching methods for language teaching after the first foreign language. (Neuner, 2005: 31).

1.2. The Objective and Significance of the Research

The aim of this research is to study curiosity and exploration perceptions of university students studying a second foreign language. It is important to control the correspondence between students' activities and learning situations in the 2nd. foreign language and their perception of curiosity and exploration for the development of education programs in this field.

1.3.. Problem Statement

Problem statement of the research is stated below as:

What are the curiosity and exploration characteristics of university undergraduate students whose language of instruction is English and learning a second foreign language?

Sub-problems

These are the sub-problems of the research:

1. What are undergraduate students' perceived levels of curiosity and exploration?
2. What are their perceived levels on the acceptance dimension of curiosity and the uncertainty dimension of exploration?

3. Do undergraduate students' perceived levels of curiosity and exploration differ significantly depending on their enrollment in a second foreign language course?
4. Do perceived levels of curiosity and exploration show difference in terms of variables like gender, age, faculty, graduated high school programs, housing, socio-economic status, abroad experience age?

1.4. Assumptions

Assumptions of the research is stated below:

- It has been assumed that students who take part in the research has given sincere answers to questions in the questionnaire and in accordance with their real thoughts.

1.5. Operational Definitions

Curiosity and exploration perception: It is defined as for an individual to have a part as an active participant in orientation to life and being open to meeting new people and learning new things (Kashdan et al., 2009).

2. METHOD

Here, the methods of the study will be given in detail in this section.

2.1. Research Model

This study, an evaluation was made regarding the curiosity and exploration perceptions of the students who received and did not receive a second foreign language education. The research model is constructed as follows.

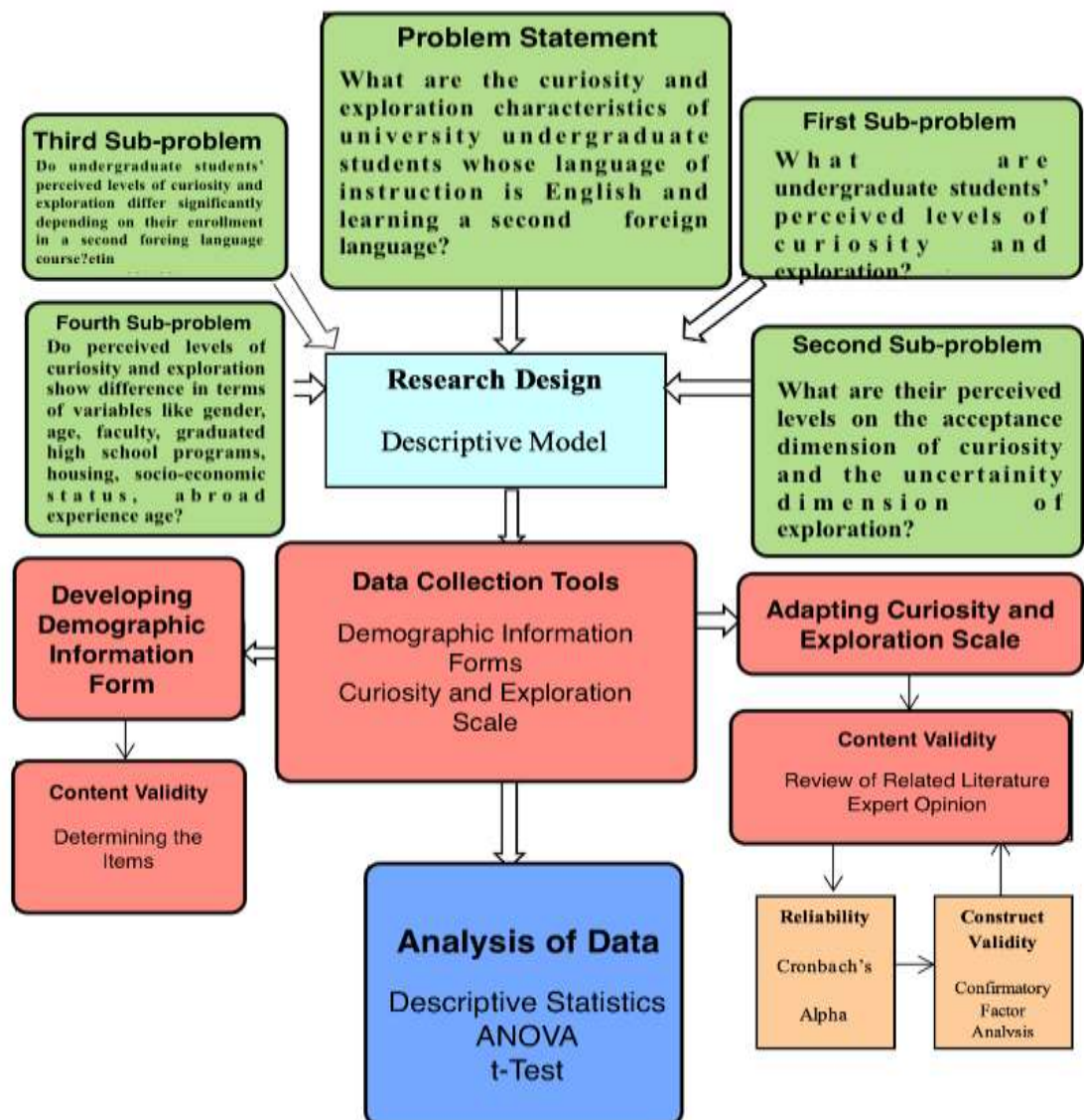


Figure 3. Outline of the research

2.2. Study Group

The study was conducted within the context of a foundation university in İstanbul. 1049 students at preparatory school and 6720 undergraduate students with different majors, and 895 graduate students. Hence, the study involved data from six faculties, three graduate schools, and two vocational schools.

In the study, 228 students (N=228) were reached using the convenience sampling method. Informed consent of the participants were taken prior to the data collection. The participants were ensured that their responses would be used only for the purpose of the study and kept confidential. Study group age and gender information as presented below.

Table 1. Study Group age and gender

	Frequency	%
Gender		
Female	118	51,8
Male	110	48,2
Total	228	100,0
Age		
18-22"	181	79,4
23-27	45	19,7
28-32	1	,4
33-37	1	,4
Total	228	100,0

As presented Table 1 51,8% of the participants are female and 48,2 male and 79,4% of the participants are between 18-22 years old.

Table 2. Study group educational status

	Frequency	%
Faculty		

Engineering	72	31,6
Business Administration	48	21,1
Law	14	6,1
Architecture and Design	53	23,2
Social Sciences	25	11,0
College of Civil Aviation	5	2,2
College of Applied Sciences	11	4,8
Total	228	100,0
Graduated High School Programs		
Regular H. School	33	14,5
Anatolian H. School	167	73,2
Vocational H. School	4	1,8
Science H. School	22	9,6
Religious Voc. H. School	2	,9
Total	228	100,0
Category of Graduated School		
Private	136	59,6
State	92	40,4
Total	228	100,0

As presented in Table 2; 31,6% of the participants study at the engineering department 73,2% have graduated from Anatolian High School and 59,6% have graduated from a private school.

Table 3. Study Group Housing, Economic Conditions, Duration of Abroad Experience

	Frequency	%
Housing		
With family	109	47,8
With multiple flatmates	13	5,7
By myself	17	7,5
University dormitory	86	37,7
Other	3	1,3
Total	228	100,0
Socio-Economic Status		
Low	5	2,2
Medium	149	65,4
High	62	27,2
Don't Know	12	5,3
Total	228	100,0

Abroad Experience		
0	74	32,5
1-3 years	83	36,4
5-7 years and more	71	31,1
Total	228	100,0

As presented in Table 3; 47,8% of the students live with their family and 65,4% of the students have medium-level socio-economic status. 36,4% of the students have 1-3 years abroad experience.

Table 4. Study group condition to speak a second foreign language

	Frequency	%
Yes	131	57,5
No	97	42,5
Total	228	100,0

As presented in Table 4; 57,5% of the participant students have expressed that they speak a second foreign language. The Table 5 show the the proportion of foreign languages stated to be spoken by students.

Table 5. Foreign languages stated to be spoken by students

	Frequency	%
Elective Second Foreign Language (n=131)		
German	72	55,0
Spanish	13	9,9
French	27	20,6
Italian	9	6,9
Chinese	4	3,1
Russian	2	1,5
Arabic	4	3,1
Total	131	100,0
Level of the Second Foreign Language (n=131)		
A1.1	24	18,3
A1 .2	23	17,6
A2.1	26	19,8
A2.2	19	14,5

B1.1	10	7,6
B1.2	6	4,6
B2 and higher	23	17,6
Total	131	100,0
Number of the Second Foreign Languages at A2 Level (n=131)		
1	104	79,4
2	22	16,8
3	5	3,8
Total	131	100,0

Table 6. Second foreign language learning process of the students participating in the study group

Time of Decision to Learn a Second Foreign Language (n=131)		
Primary School	25	19,1
Secondary School	28	21,4
High School	43	32,8
University	35	26,7
Total	131	100,0
Factors that Lead to Learn a Second Foreign Language (n=131)		
Personal characteristics (My interest to learn languages, my motivation etc.)	52	39,7
Guidance of the instructor (Ability of effective teaching, transfer of language skills, encouraging behaviors etc.)	6	4,6
Social environment (School, relatives, friends, positive effect of friend circles)	46	35,1
Cultural means (Travel, cultural curiosity, movies, music, internet etc. / teaching instruments)	27	20,6
Total	131	100,0
Condition of Enjoyment of a Second Foreign Language (n=131)		
Yes	128	97,7
No	3	2,3
Total	131	100,0
Influence of Previously Learned Language on Second Foreign Language Learning (n=131)		
Yes	110	84,0
No	21	16,0
Total	131	100,0
Reason to Learn Second Foreign Language (n=131) (Participants could select multiple options)		
To study a master's degree abroad	48	36,6
Work abroad	42	32,1
Because I am interested	62	47,3
Because it is compulsory	25	19,1

Credence that Second Foreign Language Learning Influences Career Development (n=131)		
Yes	115	87,8
No	1	,8
Not Sure	15	11,5
Total	131	100,0

As in Table 6; 55% of the students chose German as their second foreign language and their foreign language. 19.8% of the students have a second foreign language at A2.1 level and 18.3% at A1.1 level. In general, 79.4% of the students are at the A2 level. 32.8% of the students started learning a second foreign language during their high school years. 39.7% of the students chose to learn a second foreign language because of their interest and motivation towards language learning. On the other hand, 35.1% preferred it because of their social environment and 20.6% chose it because of a cultural opportunity.

97,7% of the students enjoy learning a second foreign language. 84% of them expressed that previously learned language influences second foreign language learning. Considering reasons to learn a second foreign language, 47,3% of the students have expressed that they have chosen to learn it because they are interested, while %36,6 of the participants said that it is in order to study a master's degree abroad. %87,8 of the students believes that learning a second foreign language influence career development.

2.3. Data Collection Tools

It is comprised of questions regarding demographic characteristics, characteristics regarding second foreign language and A Curiosity And Exploration Scale.

A curiosity and exploration perception scale is used in the research. This scale which is developed by Kashdan et al (2009) is comprised of 10 items with 2 sub-dimensions (stretching or exploring and embracing the uncertainty). Confirmatory Factor Analysis (CFA) results suggested that there is a strong correspondence between these two sub-dimensions ($r = .85$). In the first three studies related to the scale, many psychological traits (for example, Big Five personality traits, adaptation and depression) as well as convergent and discriminant validity is analyzed. In the fourth study item response discriminant was analyzed. Some items (1,2,3,6, and 8) were resulted in medium-level discriminating, two (9 and 10) were resulted highly discriminating and the three items (4,5, and 7) were found to be extremely discriminating. In three studies, Cronbach's Alpha coefficient was between .75 and .86. Thus, getting high score in the sum of scale items signifies high level of curiosity. There are not inverse-scored items. Some of the items include: "I actively seek as much information as I can in new situations" and "I am the type of person who really enjoys the uncertainty of everyday life." (Acun et al., 2013).

Validity and Reliability

In order to analyze validity and reliability, factor analysis and Cronbach's Alpha test was applied to the study and obtained Cronbach's Alpha coefficient is .81. Validity and reliability study is in the table below:

Table 7. Factor Analysis and Cronbach's Alpha

	Stretching	Embracing uncertainty
M1	,755	
M2		,639
M3	,719	
M4	,717	
M5	,764	
M6		,675
M7	,524	
M8		,800
M9	,669	
M10		,521
Cronbach's Alpha	,815	0,716
KMO: 0,845		
Barlett's Test p:0,000		

In the scale industrialized by Kashdan et al (2009), a two-factor structure was discovered. In the original scale, single items (5 items) were the first 1st. factor, while double items (5 items) were the 2nd. factor. In the study of Acun et al (2013), six items were collected in the first factor while four items were collected in the 2nd. factor. Only the fourth item ("Everywhere I go, I am out looking for new things or experiences") was placed in the 1st. factor while it is supposed to be in the second factor. In this study too, similarly to the study of Acun et al (2013), the fourth item was placed in the first factor (Acun et al., 2013). Kashdan et al. (2009), the scale consists of 10 items. The scale has a two-factor structure. The Stretching subscale (6 items) includes the drive for looking for information and new knowledge; the Embracing uncertainty subscale (4 materials) replicates the want to discover the inexact and random. When the Curiosity and Exploration Scale (N=228) were reviewed that the minimum score was 0, while the maximum was 50.

2.4. Data Analysis

Data analysis in the research was conducted with SPSS 22.0 program. In the data analysis, descriptive statistics such as frequency, percentage, mean, standard deviation as well as T-test and also ANOVA test was used. In order to understand the relation of the data, test of normality of the variables was examined before T-test and ANOVA test. Assured that skewness and kurtosis is between 1,96 and -1,96, test of normality is verified and the parametric tests of T-test and ANOVA test was applied.

2.5. Normality test

Test of normality of the scale used in the study is given this section data set (N=237) is normal ore not. The mean (3,1217), the standard deviation (SD=,632) were obtained. The Q-Q plot for the data set suggest normality (Figure 3 and figure 4).

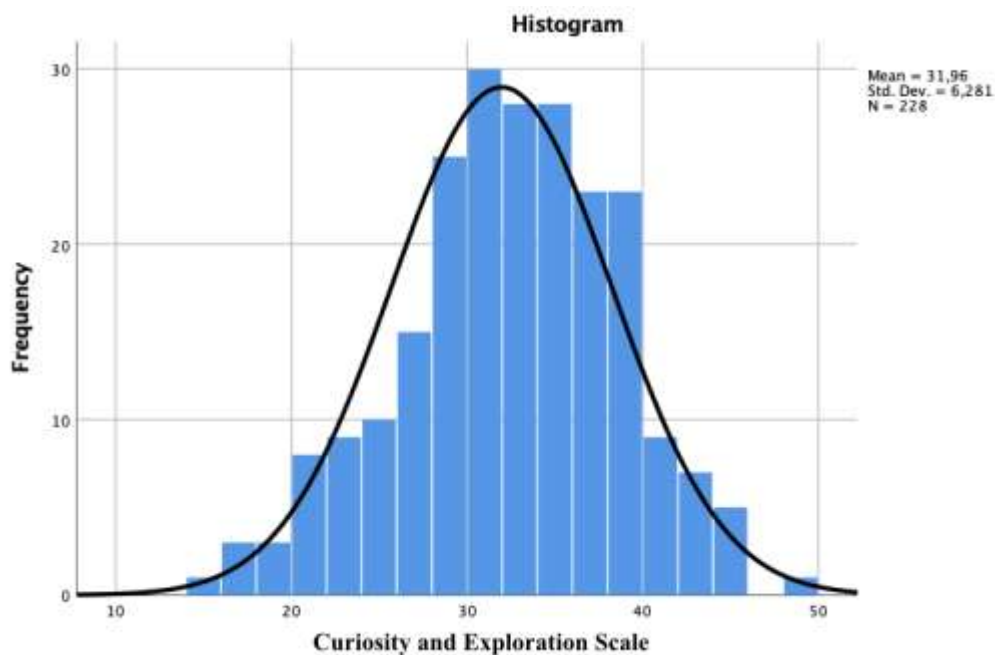


Figure 4. Histogram for Curiosity and Exploration scale's data set

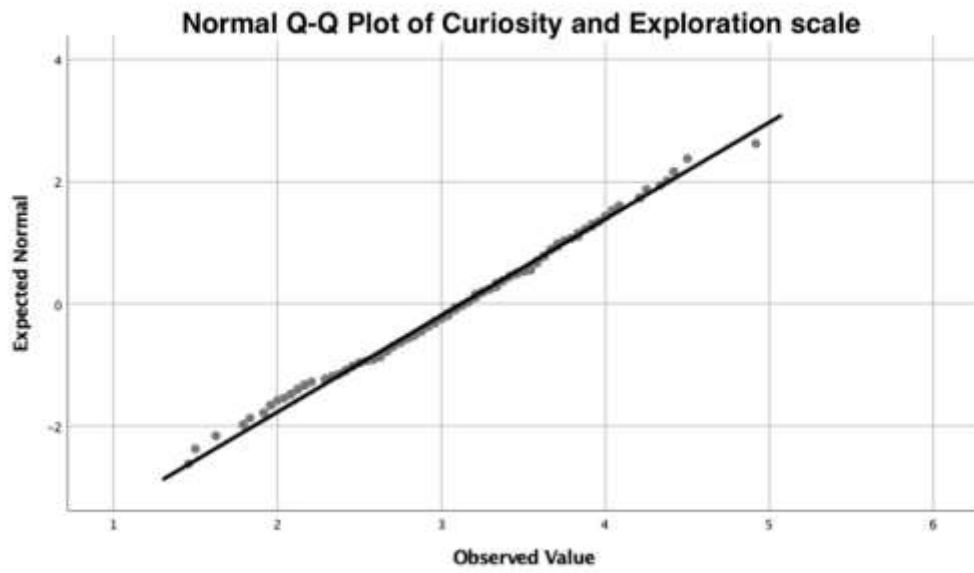


Figure 5. Normal Q-Q plot of Curiosity and Exploration scale

3. RESEARCH AND DISCUSSIONS

In this section, the results of the research will be given and interpreted.

3.1. Findings and comments about the main problem

The main problem statement is seeking the results for the question “

What are the curiosity and exploration characteristics of university undergraduate students whose language of instruction is English and learning a second foreign language?

For this problem, descriptive statistics such as frequency, percentage, mean, standard deviation as well as T-test and also ANOVA test was used.

3.1.1. 1. sub problem

1. sub problem is seeking the results for the question “What are undergraduate students’ perceived levels of curiosity and exploration?”

Table 8. Total Curiosity and Exploration Scale Points of university undergraduate students

	N	Min.	Max.	$\bar{X}$	SD
Curiosity and exploration	228	15	49	31,96	6,281

When the Curiosity and Exploration Scale (N=228) were reviewed that the minimum score was 0, while the maximum was 50. When descriptive statistics regarding curiosity and exploration scale is analyzed, it has been found out that the total average score of the curiosity and exploration scale is $\bar{x}=31,96$.

The conveyed 10 in in agreement with 5-likert Scales. This likert as “1” for “never”, “2” for “seldom”, “3” for “sometimes”, “4” for “often”, and “5” for “most of

the time” resulted in a score range of 15 to 49. When the Curiosity and Exploration Scale (N=228) were reviewed that the minimum score was 0, while the maximum was 50. The mean ($\bar{X}$ =31.96) guide to the interpretation that students’ Curiosity and Exploration levels are close to the mid-value of 31,96, and slightly over it, which is not desirable and which suggests a need for improvement.

3.1.2. 2. sub problem

2. Sub problem is “What are their perceived levels on the acceptance dimension of curiosity and the uncertainty dimension of exploration?”

Table 9. Total Subscales of Curiosity and Exploration Scale points of university undergraduate students

	N	Min.	Max.	$\bar{X}$	SD
Stretching	228	9	30	20,96	4,151
Embracing uncertainty	228	4	20	11,00	3,665

When descriptive statistics regarding Subscales of Curiosity and Exploration Scale is analyzed, it has been found out that the total average scores of the subscales of curiosity and exploration scale are 20,96 and 11,00 respectively.

The applied instrument (Stretching, Subscale of Curiosity and Exploration Scale) conveyed 6 items. The preparation of likert Coding as “1” for “never”, “2” for “seldom”, “3” for “sometimes”, “4” for “often”, and “5” for “most of the time” got a score range of 0 to 50. When the Stretching Scale (N=228), the minimum score was 9, and the maximum is 30. The mean ($\bar{X}$ =20.96) can be a finding that guides to the interpretation that students’ Stretching scores levels are close to the mid-value of 20,96, and slightly over it, which is not desirable and which suggests a need for improvement.

The applied instrument (Embracing uncertainty, Subscale of Curiosity and Exploration Scale) conveyed 4 items with 5-likert. The Coding as “1” for “never”, “2” for “seldom”, “3” for “sometimes”, “4” for “often”, and “5” for “most of the time” resulted in a score range of 4 to 20. When the Embracing uncertainty Scale scores (N=228) were reviewed, it was observed that the minimum score was 4, while the maximum was 20. The mean ($\bar{X}$ =11.00) can be a finding that guides to the interpretation that students’ Embracing uncertainty scores levels are close to the mid-value of 11,00 and slightly over it, which is not desirable and which suggests a need for improvement.

3.1.3. 3. sub problem

3. sub problem is looking for the results for the question “Do undergraduate students’ perceived levels of curiosity and exploration differ significantly depending on their enrollment in a second foreign language course?”

Table 10. Curiosity and exploration perceptions of the students who take second foreign language education and those who do not

	N	Second Foreign Language	$\bar{X}$	SD	T	p
Curiosity and exploration	131	Yes	32,25	6,336	,813	0,416
	97	No	31,57	6,216		
Stretching	131	Yes	21,08	4,085	,489	0,625
	97	No	20,80	4,254		
Embracing uncertainty	131	Yes	11,18	3,137	1,005	0,316
	97	No	10,76	2,968		

As presented Table 10 when the difference of curiosity and exploration perceptions between the students who take second foreign language education and those who does not is analyzed, it has been found out that while there is not any differentiation

regarding the curiosity and exploration total score and embracing uncertainty sub-scale ($p > 0,05$), there is difference in stretching sub-scale ($p < 0,05$).

To find out significant difference in levels of curiosity and exploration, Stretching, and Embracing uncertainty levels of undergraduate students in terms of who take second foreign language education and those who do not, a independent sample t-test between groups has been conducted. The obtained results are in Table 10.

curiosity and exploration, Stretching, and Embracing uncertainty levels ($p = .416$, $p > .05$; $p = .625$, $p > .05$; $p = .316$, $p > .05$;) respectively. Curiosity and exploration is independent of second foreign languages. Second foreign language is not a determinant for the levels of curiosity and exploration. By the way, all individuals who take second foreign language education and those who do not.

3.1.4. 4. sub problem

4. sub problem is looking for the results for the question "Do perceived levels of curiosity and exploration show difference in terms of variables like gender, age, faculty, graduated high school programs, housing, socio-economic status, abroad experience age?"

Table 11. Independent Sample T-test Results about the Curiosity and Exploration Perceptions of undergraduate students with Genders

	N	Gender	$\bar{X}$	SD	F	p
Curiosity and exploration	118	Female	31,62	6,148	0,183	0,396
	110	Male	32,33	6,428		
Stretching	118	Female	20,71	4,192	0,009	0,350
	110	Male	21,23	4,108		
Embracing uncertainty	118	Female	10,91	2,953	0,279	0,635
	110	Male	11,10	3,194		

$p > 0.05$

undergraduate students were meaningfully comparable to the mean score of their Curiosity and Exploration, Stretching, and Embracing uncertainty levels samples t-test technique. Statistics on Curiosity and Exploration levels of students are illustrated in Table 11.

As Table 11 illustrated, when the Curiosity and Exploration scores of males ($M = 32.33$, $SD = 6,428$) and females ($M = 31.62$, $SD = 6,148$) were collated, no significant difference was observed in the Curiosity and Exploration scores of these genders ($N = 228$, $p = .396$, $p > .05$). Curiosity and Exploration levels of are almost the same.

3.1.4.1. The Curiosity and Exploration levels of undergraduate students in a certain age range

Find out Curiosity and Exploration levels of undergraduate students in terms of their age groups, ANOVA has been applied. The obtained results are in Table 12.

Table 12. Comparison of the curiosity and exploration perceptions of the students in terms of age

	N	Age	$\bar{X}$	SD	F	p
Curiosity and exploration	181	18-22	31,88	6,381	0,113	0,953
	45	23-27	32,18	6,054		
	1	28-32	33,00	.		
	1	33-37	35,00	.		
Stretching	181	18-22	21,07	4,199	0,449	0,718
	45	23-27	20,47	4,026		
	1	28-32	20,00	.		
	1	33-37	24,00	.		
Embracing uncertainty	181	18-22	10,81	3,029	1,178	0,319
	45	23-27	11,71	3,195		
	1	28-32	13,00	.		
	1	33-37	11,00	.		

$p > 0.05$

The undergraduate students have a statistically significant relation with their Curiosity and Exploration perception levels is ($p = .953$, $p > .05$). The levels of Curiosity and Exploration perception levels is not dependent of age.

3.1.4.2.The Curiosity and Exploration levels of undergraduate students in faculties

A question of “how do the Curiosity and Exploration perception levels of university undergraduate students vary by the type of faculties?”. The results can be found in Table 13.

Table 13. Comparison of curiosity and exploration perceptions of the students in terms of faculty

	Faculty	N	$\bar{X}$	SD	F	p
Curiosity and exploration	Engineering	72	32,17	6,513	0,714	0,639
	Business Administration	48	31,81	5,350		
	Law	14	32,14	6,237		
	Architecture and Design	53	31,38	6,797		
	Social Sciences	25	31,00	6,665		
	College of Civil Aviation	5	34,80	5,630		
	College of Applied Sciences	11	34,73	5,711		
Stretching	Engineering	72	20,75	4,262	1,058	0,389
	Business Administration	48	21,21	3,678		
	Law	14	21,36	3,895		
	Architecture and Design	53	20,60	4,508		
	Social Sciences	25	20,20	4,453		
	College of Civil Aviation	5	23,40	3,286		
	College of Applied Sciences	11	23,09	3,208		
Embracing uncertainty	Engineering	72	11,42	3,066	0,519	0,794
	Business Administration	48	10,60	2,591		
	Law	14	10,79	3,355		
	Architecture and Design	53	10,77	3,238		
	Social Sciences	25	10,80	3,403		
	College of Civil Aviation	5	11,40	2,608		
	College of Applied Sciences	11	11,64	3,529		
p>0.05						

Statistically important nasty distinction at the>.05 level in Curiosity and Exploration scores for the seven different faculty types. It has been observed that social sciences, business administration and arhitecture and desing students have less (M=31.00) Curiosity and Exploration perceptions than other faculty students. However, no statistically significant difference was found between all faculties. It was also

observed that the Curiosity and Exploration perceptions of the College of Civil Aviation and College of Applied Sciences students were slightly above average ($M=34.80$). Correspondence between curiosity and exploration total scores of the students and sub-scales in terms of faculty has been analyzed. In accordance with this, curiosity and exploration perceptions of the students do not differ in terms of faculty ($p>0,05$).

3.1.4.3. The Curiosity and Exploration undergraduate students level in faculties

Correspondence between curiosity and exploration total scores of the students and sub-scales in terms of graduated high school program has been analyzed. The results can be found in Table 14.

Table 14. Comparison of curiosity and exploration perceptions in terms of graduated high school program

	High School Program	N	$\bar{X}$	SD	F	p
Curiosity and exploration	Regular H. S.	33	31,61	6,901	0,422	0,793
	Anadolu H. S.	167	31,80	6,232		
	Voc. H. S.	4	33,50	4,203		
	Science H. S.	22	33,45	6,405		
	Religious Vocational	2	32,00	1,414		
Stretching	Regular H. S.	33	20,85	4,597	0,374	0,827
	Anadolu H. S.	167	20,83	4,152		
	Vocational H. S.	4	21,75	1,708		
	Science H. S.	22	21,91	3,987		
	Religious Voc.	2	21,50	2,121		
Embracing uncertainty	Regular H. S.	33	10,76	3,455	0,301	0,877
	Anadolu H. S.	167	10,96	2,984		
	Vocational H. S.	4	11,75	3,594		
	Science H. S.	22	11,55	3,262		
	Religious Voc.	2	10,50	,707		

$p>0.05$

In accordance with this, curiosity and exploration perceptions of the students do not differ in terms of graduated high school program ($p>0,05$).

3.1.4.4. Findings and Comments about the Curiosity and Exploration level of undergraduate students according to the category of the school they graduated from

The findings exploring the answer to the question of “how do the Curiosity and Exploration perception levels of university undergraduate students vary in terms of the category of the graduated school?”

Table 15. Comparison of curiosity and exploration perceptions of students in terms of the category of the graduated school

	Graduated School Category	N	$\bar{X}$	SD	t	p
Curiosity and exploration Stretching	Private	33	31,61	6,901	0,366	0,715
	State	167	31,80	6,232		
	Private	33	20,85	4,597	0,012	0,990
	State	167	20,83	4,152		
Embracing uncertainty	Private	33	10,76	3,455	0,616	0,539
	State	167	10,96	2,984		

p>0.05

Correspondence between curiosity and exploration total scores of the students and sub-scales in terms of the category of the graduated school has been analyzed. In accordance with this, curiosity and exploration perceptions of the students do not fluctuate in reports of the category of the graduated school ($p>0,05$).

3.1.4.5. Findings and Comments about the Curiosity and Exploration levels of undergraduate students in terms of housing

The exploring the answer to the question of “how do the Curiosity and Exploration perception levels of university undergraduate students vary in terms of housing?” were found. The results can be found in Table 16.

Table 16. Comparison of curiosity and exploration perceptions of students in terms of housing

	Housing	N	$\bar{X}$	SD	F	P
Curiosity and exploration	With family	109	31,66	5,940	1,634	0,167
	With multiple flat mates	13	31,54	6,514		
	By myself	17	29,00	7,340		
	University Dormitory	86	32,91	6,305		
	Other	3	34,33	8,327		
Stretching	With family	109	20,67	3,991	1,362	0,248
	With multiple flat mates	13	20,08	4,232		
	By myself	17	19,71	4,819		
	University dormitory	86	21,70	4,067		
	Other	3	21,33	7,234		
Embracing uncertainty	With family	109	10,99	3,002	1,835	0,123
	With multiple flat mates	13	11,46	2,817		
	By myself	17	9,29	3,177		
	University dormitory	86	11,21	3,110		
	Other	3	13,00	2,646		

p>0,05

Correspondence between curiosity and exploration total scores of the students and subscales in terms of housing has been analyzed. In accordance with this, curiosity and exploration perceptions of the students do not differ in terms of housing (p>0,05)

3.1.4.6.The Curiosity and Exploration levels of undergraduate students in terms of socio-economic status

Findings the answer to the question of “how do the Curiosity and Exploration perception levels of university undergraduate students vary in terms of socio-economic status?” were found by a one-way between groups analysis of variance (ANOVA). The results can be found in Table 17.

Table 17. Comparison of curiosity and exploration perceptions of students in terms of socio-economic status

	Socio-Economic Status	N	$\bar{X}$	SD	F	p
Curiosity and exploration	Low	5	32,40	3,050	1,402	0,243
	Medium	149	31,35	6,481		
	High	62	33,23	5,924		
	Don't Know	12	32,83	5,997		

Stretching	Low	5	20,60	1,817	0,555	0,645
	Medium	149	20,72	4,356		
	High	62	21,47	3,878		
	Don't Know	12	21,50	3,606		
Embracing uncertainty	Low	5	11,80	1,643	2,177	0,092
	Medium	149	10,63	3,050		
	High	62	11,76	3,066		
	Don't Know	12	11,33	3,200		

p>0,05

Correspondence between curiosity and exploration total scores of the students and sub-scales in terms of socio-economic status has been analyzed. In accordance with this, curiosity and exploration perceptions of the students do not differ in terms of socio-economic status ($p>0,05$).

3.1.4.7. The Curiosity and Exploration levels of undergraduate students in terms of abroad experience

Findings exploring the answer to the question of “how do the Curiosity and Exploration perception levels of university undergraduate students vary in terms of abroad experience?” The results can be found in Table 18.

Table 18. Comparison of curiosity and exploration perceptions of students in terms of abroad experience

	Abroad Experience	N	$\bar{X}$	SD	F	p
Curiosity and exploration	0	74	32,86	6,161	1,139	0,322
	1-3	83	31,49	6,143		
	5-7 and more	71	31,56	6,546		
Stretching	0	74	21,84	3,903	2,526	0,082
	1-3	83	20,45	4,272		
	5-7 and more	71	20,65	4,168		
Embracing uncertainty	0	74	11,03	3,016	0,040	0,961
	1-3	83	11,05	2,955		
	5-7 and more	71	10,92	3,281		

p>0,05

Correspondence between curiosity and exploration total scores of the students and sub-dimensions in terms of abroad experience has been analyzed. In accordance

with this, curiosity and exploration perceptions of the students do not differ in terms of abroad experience ($p>0,05$).

3.2. Comparison of curiosity and exploration perceptions of students who take second foreign language education in terms of elective second foreign language

The findings exploring the answer to the question of “how do the Curiosity and Exploration perception levels of university undergraduate students vary in terms of elective second foreign language?”. The results can be found in Table 19.

Correspondence between curiosity and exploration total scores of the students and sub-dimensions in terms of elective second foreign language has been analyzed. In accordance with this, curiosity and exploration perceptions of the students do not fluctuate in rapport of elective second foreign language ($p>0,05$).

Table 19. Comparison of curiosity and exploration perceptions of students in terms of elective second foreign language

	Elective Second Foreign Language	N	$\bar{X}$	SD	F	p
Curiosity and exploration	German	72	31,36	5,769	1,533	0,173
	Spanish	13	32,69	6,860		
	French	27	33,63	7,164		
	Italian	9	30,89	7,769		
	Chinese	4	38,75	2,986		
	Russian	2	29,00	7,071		
	Arabic	4	35,75	3,202		
Stretching	German	72	20,61	3,829	1,469	0,194
	Spanish	13	20,77	4,494		
	French	27	22,04	4,301		
	Italian	9	20,11	4,986		
	Chinese	4	24,25	2,062		
	Russian	2	18,50	3,536		
	Arabic	4	24,25	3,500		
Embracing uncertainty	German	72	10,75	2,959	1,232	0,294
	Spanish	13	11,92	3,148		
	French	27	11,59	3,630		
	Italian	9	10,78	3,270		
	Chinese	4	14,50	2,380		
	Russian	2	10,50	3,536		

Arabic	4	11,50	1,732
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p>0,05

3.2.1. Comparison of curiosity and exploration perceptions of students who take second foreign language education in terms of level of second foreign language

Correspondence of curiosity and exploration total score and sub-scales in terms of two or three foreign languages is analyzed. According to this, curiosity and exploration total score and perception of embracing uncertainty of students differs from each other ($p<0,05$). Students who have B1.2 level second foreign language have higher curiosity and exploration total scores and embracing uncertainty score than others.

Table 20. Comparison of curiosity and exploration perceptions students in terms of level of the second foreign language

	Level Second Foreign Language	N	$\bar{X}$	SD	F	p
Curiosity and exploration	A1.1	24	31,50	6,386	2,376	0,033
	A1 .2	23	33,87	4,181		
	A2.1	26	30,54	6,476		
	A2.2	19	34,95	7,656		
	B1.1	10	31,50	3,837		
	B1.2	6	37,17	7,910		
	B2 and higher	23	30,17	6,065		
Stretching	A1.1	24	20,92	4,149	1,303	0,261
	A1 .2	23	21,61	3,421		
	A2.1	26	20,00	4,391		
	A2.2	19	22,05	4,288		
	B1.1	10	22,00	3,367		
	B1.2	6	23,67	4,546		
	B2 and higher	23	20,04	4,095		
Embracing uncertainty	A1.1	24	10,58	2,827	3,558	0,003
	A1 .2	23	12,26	2,454		
	A2.1	26	10,54	2,860		
	A2.2	19	12,89	3,900		
	B1.1	10	9,50	1,958		
	B1.2	6	13,50	3,507		

However, the correspondence between the curiosity and exploration total scores of the students who have a second foreign language at the B1.2 level and the sub-scales of stretching and Embracing uncertainty were examined in terms of two or three foreign languages, and these students' total scores of curiosity and exploration and their Embracing uncertainty scores were compared to the others. It was found to be higher. Students who take a second foreign language have a higher perception of stretching towards curiosity and exploration. Students who take a second foreign language are more curious and more open to exploration than students who do not have a second foreign language. According to this result, we can state that the correspondence between the second foreign language and the first foreign language is very strong, and the correspondence between the mother tongue and the first foreign language is not very strong. The reason for this can be shown that the first foreign language originated from the natural language. While learning the second foreign language, it can be said that the experiences gained in the learning course of the first foreign language make it easier for individuals who have learned two foreign languages to learn the second foreign language. In this context, it can be said that while learning grammar subjects, the first and second foreign languages lay the groundwork for each other and the fact that the first and second foreign languages belong to the same language family also has an effect.

3.2.2. Comparison of curiosity and exploration perceptions of students who take second foreign language education in terms of the second foreign languages at A2 level

Correspondence between curiosity and exploration total scores of the students and sub-dimensions in rapports of the second foreign languages at A2 level has been analyzed. In accordance with this, curiosity and exploration perceptions of the students do not differ in terms of the second foreign languages at A2 level ($p>0,05$).

Table 21. Comparison of curiosity and exploration perceptions of students in terms of the number of the second foreign languages at A2 level

	Number of the Second Foreign Languages	N	$\bar{X}$	SD	F	p
Curiosity and exploration Stretching	1	104	32,46	6,324	0,855	0,428
	2	22	30,82	6,681		
	3	5	34,20	4,817		
	1	104	21,09	4,136	0,589	0,567
	2	22	20,64	4,030		
	3	5	22,80	3,421		
Embracing uncertainty	1	104	11,38	3,098	1,334	0,267
	2	22	10,18	3,347		
	3	5	11,40	2,702		

$p>0,05$

3.2.3. Comparison of curiosity and exploration perceptions of students who take second foreign language education in terms of decision to learn a second foreign language

Correspondence between curiosity and exploration total scores of the students and sub-dimensions in terms of decision to learn a second foreign language has been analyzed. In accordance with this, curiosity and exploration perceptions of the students do not differ in terms of decision to learn a second foreign language ($p>0,05$).

Table 22. Comparison of curiosity and exploration perceptions of students in terms of the time of decision to learn a second foreign language

	Time of Decision	N	$\bar{X}$	SD	F	p
Curiosity and exploration	Primary School	25	31,60	4,907	0,135	0,939
	Secondary S.	28	32,11	7,748		
	High S.	43	32,53	5,758		
	University	35	32,49	6,883		
Stretching	Primary S.	25	21,40	3,440	0,351	0,788
	Secondary S.	28	20,39	4,391		
	High S.	43	21,14	3,846		
	University	35	21,31	4,619		
Embracing uncertainty	Primary S.	25	10,20	2,958	1,156	0,329
	Secondary S.	28	11,71	3,750		
	High S.	43	11,40	2,913		
	University	35	11,17	2,965		

p>0,05

3.3.The Relationship between Curiosity and Exploration total scores and Stretching-Embracing Uncertainty

Another analyses of the dissertation is looking for the answer to whether there is a correspondence between the curiosity and exploration total scores of undergraduate students and Stretching-Embracing Uncertainty scores.

Table 23. Analysis Result of the Pearson Correlation between Curiosity and Exploration Scale outputs and the Stretching-Embracing Uncertainty scores.

		Curiosity and Exploration	Stretching	Embracing Uncertainty
Curiosity and Exploration Scale	Pearson Correlation	1	,907**	.821**
	Sig. (2-tailed)		.000	.000
	N	228	228	228
Stretching scores	Pearson Correlation	,907**	1	,504**
	Sig. (2-tailed)	.000		.000
	N	228	228	228
Embracing Uncertainty scores	Pearson Correlation	.821**	,504**	1
	Sig. (2-tailed)	.000	.000	
	N	228	228	228

Curiosity and Exploration perceptions level and Stretching-Embracing Uncertainty level of the undergraduate students (N=228). The Pearson's R for correlation between Curiosity and Exploration level and Stretching level was 0,907. And the Pearson's R for correlation between Curiosity and Exploration level and Embracing Uncertainty level was 0,821. The correspondence is positive relation (Figure 5-6).

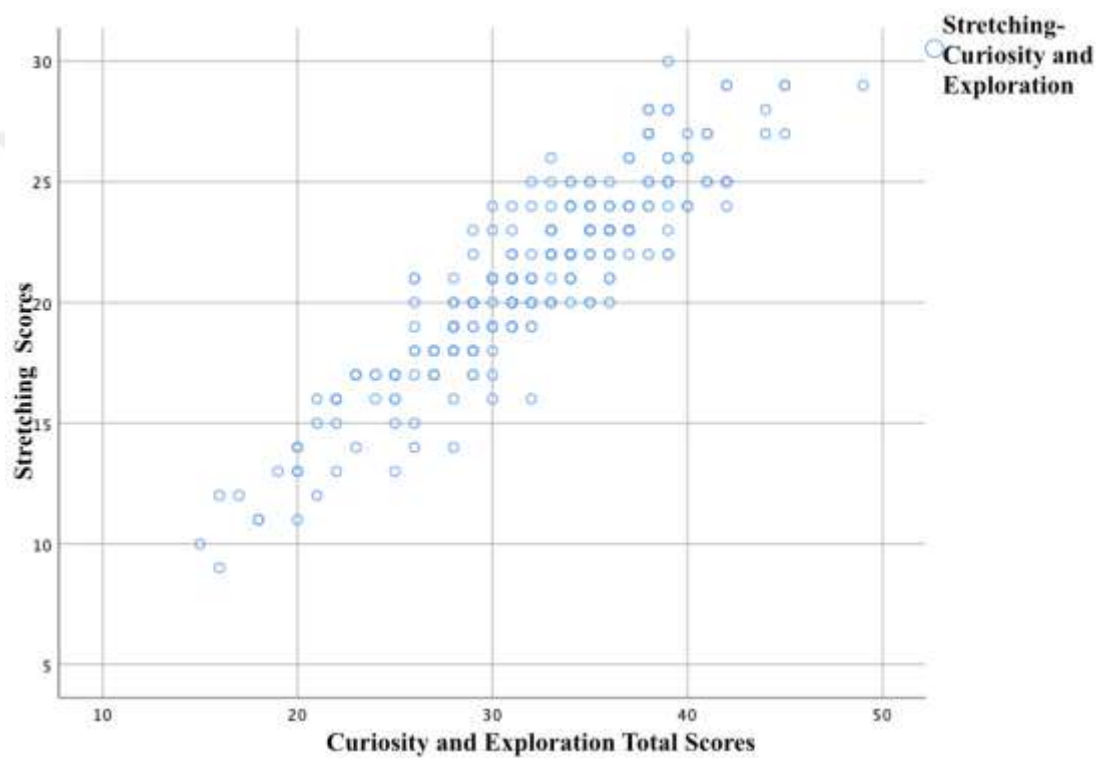


Figure 6. Curiosity and exploration total scores and Stretching scores.

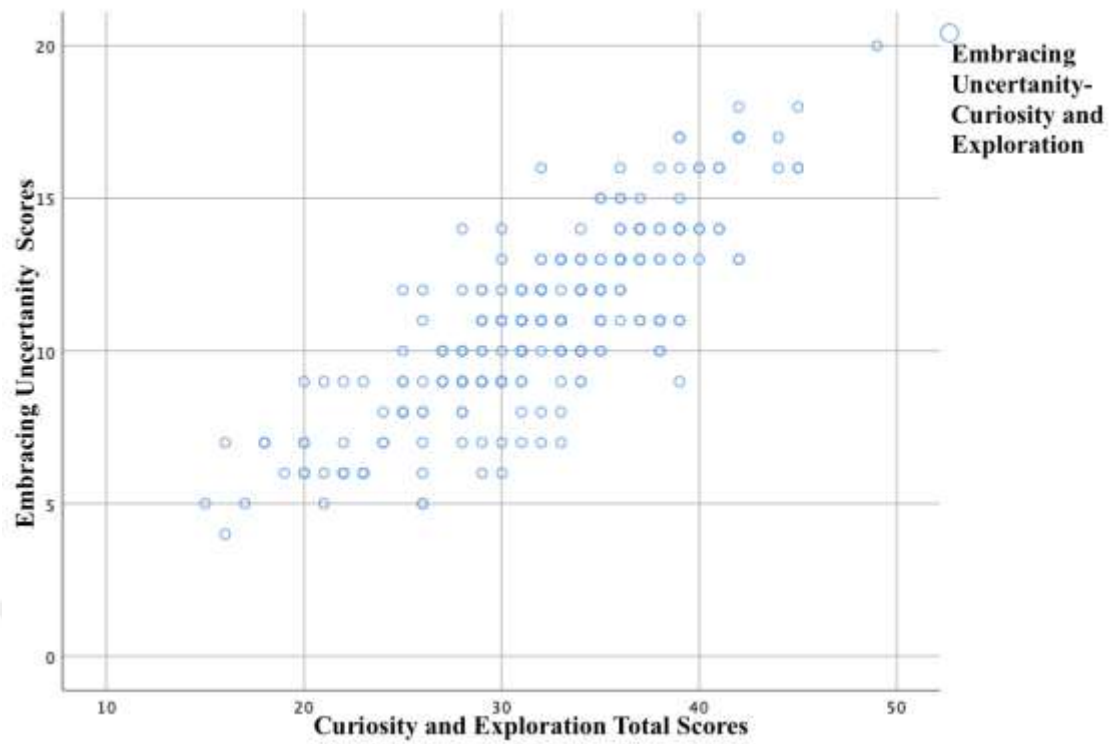


Figure 7. Scatterplot display of the curiosity and exploration total scores and Embracing Uncertainty scores.

4. DISCUSSIONS

4.1. Results of the Study

The purpose of the study is to examine the curiosity and exploration scales of the university students studying a second foreign language. The findings in the setting of the research are summarized below.

For the results of the first problem, curiosity and exploration scale is analyzed, and it has been found out that the total average score of the curiosity and exploration scale is 31,96. According to the total number of students surveyed, this result is slightly above average. It can be said that students' perceptions of curiosity and exploration are at a medium level.

For the results of the second problem, curiosity and exploration sub-scales are analyzed, and it has been found out that the total average score of the sub-scale of stretching is 20,96 and sub-scale of embracing uncertainty is 11,00. The total score of the dimension of stretching, which is one of the sub-dimensions of the curiosity and exploration scale, was high. However, the acceptance of uncertainty subscale score was low. According to this result, it can be said that students' perceptions of stretching are higher than their perceptions of accepting uncertainty.

For the results of the third problem, curiosity and exploration scale is analyzed, and it has been found out that while there is not any change concerning the curiosity and exploration total score and embracing uncertainty sub-dimension, there is difference in stretching sub-dimension. In stretching sub-dimension, score of the students who take 2nd foreign language education is higher than the score of the students who do not take 2nd foreign language education.

For the results of the fourth problem, curiosity and exploration scale is analyzed, and it has been found out that while there is not any difference regarding the curiosity and exploration total score and embracing uncertainty sub-dimension and stretching sub-dimension in terms of demographic characteristics of university students.

Correspondence between curiosity and exploration total scores of the students and sub-dimensions in terms of gender has been analyzed. In accordance with this, curiosity and exploration perceptions of the students do not differ in terms of gender, age, faculty, graduated high school program, category of the graduated school, housing, socio-economic status, abroad experience and elective second foreign language.

Correspondence of curiosity and exploration total score and sub-dimensions in terms of two or three foreign languages is analyzed. According to this, curiosity and exploration total score and perception of embracing uncertainty of students differs from each other. Students who have a second foreign language at B1.2 level have higher curiosity and exploration total scores and scores of accepting uncertainty than others.

Students who take a second foreign language have a higher perception of Stretching towards curiosity and exploration. Students who take a second foreign language are more curious and more open to exploration than students who do not have a second foreign language. According to this result, we can state that the correspondence between the second foreign language and the first foreign language is very strong, and the correspondence between the mother tongue and the first foreign language is not very strong. The reason for this can be seen that the first foreign language originated from the native language. While learning the second foreign language, it can be said that the experiences gained in the learning process of the first foreign language make it easier for individuals who have learned two foreign languages

to learn the second foreign language. In this context, it can be said that while learning grammar, the first and second foreign languages lay the groundwork for each other and the fact that the first and second foreign languages belong to the same language family also has an effect.

Correspondence between curiosity and exploration total scores of the students and sub-dimensions in terms of decision to learn a 2nd foreign language has been analyzed. In accordance with this, curiosity and exploration perceptions of the students do not differ in terms of decision to learn a second foreign language.

Correspondence between curiosity and exploration total scores of the students and sub-dimensions in terms of the second foreign languages at A2 level has been analyzed. In accordance with this, curiosity and exploration perceptions of the students do not differ in terms of the second foreign languages at A2 level.

German is the second foreign language in 55% of the students. 19,8% of the students have A2.1 level in their second foreign languages and 18,3% of students have A1.1 level second foreign language. 79,4% of the participants know one language in A2 level. 32,8% of the students started to learn a second foreign language during high school. 39,7% of the participants have chosen to learn a second foreign language due to their personal characteristics (interest to learn languages, motivation); 35,1% of them have chosen due to their social environment; and %20,6 have chosen due to a cultural means.

97,7% of the students enjoy learning a second foreign language. 84% of them expressed that previously learned language influences second foreign language learning. Considering reasons to learn a second foreign language, 47,3% of the students

have expressed that they have chosen to learn it because they are interested, while %36,6 of the participants said that it is in order to study a master's degree abroad. %87,8 of the students believes that learning a second foreign language influence career development.

In 2002 Richards and Rodgers, state that grammar-translation method as a foreign language teaching method, generally as a traditional method, has had an influence on foreign language Correspondence between curiosity and exploration total scores of the students and sub-dimensions in terms of decision to learn a second foreign language has been analyzed. In accordance with this, curiosity and exploration perceptions of the students do not differ in terms of decision to learn a second foreign language. Correspondence between curiosity and exploration total scores of the students and sub-dimensions in terms of the second foreign languages at A2 level has been analyzed. In accordance with this, curiosity and exploration perceptions of the students do not differ in terms of the second foreign languages at A2 levelhy until today. On the other hand, Demirel (1999: 38) states that according to the grammar-translation method, "learning a language is possible by learning the regular sentence patterns of the language, that is, grammar". However, it should be noted with the research findings that the grammar translation method, which is used frequently in our country, encourages students to memorize, get high marks and study in order to pass the class, does not provide an effective and permanent foreign language learning, and there is a need for alternative method.

According to the findings of the research conducted by Demircan (1988) and Çelebi (2006), different educational institutions are used in the training of foreign language teachers in our country, including graduates of foreign language teaching departments of universities, those who have studied in different departments and

studied foreign languages, They state that higher education graduates studying in a foreign language and those who graduated from Anadolu University Open Education Faculty English Language Teaching department are employed as foreign language teachers. As can be seen, in the employment of foreign language teachers in our country, graduates from different educational institutions have been benefited. This situation confirms and supports the opinions of the students that their second foreign language teachers are from outside the field and that they are not competent in their field.

According to Can's (2014) research findings, teachers are not sufficient in their fields, the education system is changed continuously and unplanned, inadequacy of teacher selection, training and employment, inadequacy of higher education programs that train teachers, managers, teachers, parents, students and civil society organizations' opinions are considered among the obstacles to qualitative development in the Turkish Education System. When these obstacles to qualitative development in our education system are compared with the findings obtained in the research, they can also be shown among the obstacles to not achieving an effective second foreign language teaching.

Işık (2008: 22-24) proposes to establish a coordination board to solve the problems encountered in foreign language teaching in our country, to plan foreign language education, to establish a new foreign language curriculum, to train foreign language teachers with foreign language teaching methods and to organize an in-service training system.

These suggestions are of great importance in terms of solving the basic problems in teaching a second foreign language that emerged in the research. In addition, as Bayraktaroğlu (2012: 3) stated, there is a need to establish an independent,

transparent, fully authorized national quality authority for foreign language education, which sets common standards and policies in foreign language education for quality assurance and accredited by international boards.

It is important to support second foreign language learning and to increase students' curiosity and exploration perceptions in this regard. Increasing their curiosity and exploration perceptions will increase students' success and interest in second foreign education. In this regard, the condition and quality of the training programs to be developed by the educators gain importance. It is important to develop suitable and healthy educational programs to stimulate the feelings of curiosity and exploration by the educators.

4.2. Discussions for the Results of the Study

Heightening the perception of curiosity and exploration as well as implementing an education program in order to increase academic success in learning a second foreign language gains importance. Many researchers used the curiosity feature to measure academic achievement or learning performance (Berlyne, 1960; Reio, 1997; Loewenstain, 1994). (Reio, 1997: 14). Hogan and Greenberger (1969) also observed in a similar study they conducted with teachers that there was a correspondence between students' academic achievement and their level of curiosity (Reio, 1997: 14). Berlyne (1960: 228) stated that especially creative artists, interpreters, listeners, or readers experience processes related to curiosity, and they show their performance as a result of perceptual and cognitive activities. Vidler and Rawan (1975) analyzed the correspondence between academic curiosity and performance of university students in a similar study. The curiosity levels of the students were determined with the Academic Curiosity Scale. Related to academic performance, English and Biology course test

scores of the students were used. As a result of the research, a significant correspondence was found between the scores obtained from the academic curiosity scale and academic performance (Ünal, 2005: 33).

It is important to develop educational programs for second foreign language to trigger the perception of curiosity and exploration in students. In terms of learning experience at school, stating that interest and curiosity can be triggered provides a foresight about how instructional practices should be. For this purpose, explanations stating that interest is an emotion and can be triggered situationally (Izard, 1991; Silvia, 2006) focus on the role of two cognitive linkages in the emergence of this emotion. Accordingly, in order to trigger a sense of interest in individuals in the face of a phenomenon, the situation encountered should include the dimensions of innovation and competence assessment. In other words, the first cognitive criterion for people to be interested in a situation is that that situation is new to the individual. The second cognitive assessment associated with the emergence of interest in a situation actually seems to be effective on sustaining interest rather than initiating it. That is, a situation that passes the innovation assessment or meets that condition is also related to whether the person meets the condition of the ability to understand, explain and predict this new situation they are facing. In his work “Second Language Acquisition. The Effect of Age, Exposure and Motivation” Þorsteinsdóttir (2014) drew attention to the importance of motivation in 2nd foreign language acquisition. The researcher stated that the motivation in second foreign language acquisition consists of three elements. These factors are listed as, (1) the time and effort that the individual spends to use the target language effectively, (2) the willingness to achieve one’s goal in second foreign language acquisition, and (3) the pleasure of learning the language and the positive reflection of this situation on one’s behavior. The researcher argued that with the

combination of these three motivational factors, the individual could speak two foreign languages very well.

In ensuring and sustaining the voluntary participation of students in school activities, an approach to education that triggers their interests and curiosity and aims at the development of their interests is needed. However, the importance given to motivational-emotional variables has remained limited for a long time in motivation studies conducted in the field of educational psychology. On the other hand, anxiety variable, whose role as a motivational-emotional variable on learning and achievement has been studied frequently, has been reported in relation to the avoidance response (Cassady & Johnson, 2002; Elliot & McGregor, 1999). In this regard, intervention efforts to reduce anxiety in participating in school activities have gained importance. However, curiosity and interest are the motivational-emotional variables that prioritize and sustain exploration and approach behavior. From this point of view, it is recommended that the focus should be directed from anxiety to interest and intervention studies by focusing on exploratory behaviors, especially in the form of preventive activities to ensure voluntary participation in school activities.

As a result, teachers and planners of education have a decisive role in ensuring interest and curiosity, which is the precursor of the exploratory behavior that ensures learning, and the formation of well-structured individual interests towards the school. To the extent that this role is supportive and facilitating, it may be possible to achieve a natural spontaneity of learning in school.

Tulgar (2018) reported that in her study, the participants benefitted from the sense of curiosity in developing their knowledge and competence in the target language in terms of linguistic, social-cultural and pragmatic aspects. Therefore, as also

suggested by Phillips (2013), spaces for curiosity should be created for language learners to encourage them to learn the language more effectively and enjoyable. In this sense, the unbreakable cycle between social and cultural interactions and curiosity should be benefitted from in the process of second language education.

Though it aimed to contribute to research on curiosity, her study is not out of limitations. The main limitation is the number of the participants. In addition, the data were collected through a single instrument. In addition, in her study was conducted in a single setting. Therefore, future research can be carried out with more participants whose perspectives will be examined with the help of data collected through different instruments. Future research can also compare cross cases in which the experiences of second language learners participating in different glocal settings can be investigated.

Gurning & Siregar (2017) reported that in their study, Tuckey test was then affected to validate the interface between both model evaluations.

The constraint of this study is that the sample size is not large. Less than 300 samples were collected. It may make the review result not representative enough to performance the typical learning location for university students in İstanbul. This research study also lacks deep investigation. This study that encompasses only numerical inquiry is pragmatic. The survey was conducted in form of forms, without face-to-face consultations.

5. SUGGESTIONS

In line with the research findings, the following suggestions can be made:

- Educators should encourage families to increase student curiosity and exploration perceptions through daily activities.
- In order to improve the curiosity and exploration levels, it is recommended to increase the number of application classes.
- Prospective teachers should be trained on how to gain students the perception of curiosity.
- This study, which aims to contribute to research on curiosity and exploration, is a limited study. The main limitation is the number of participants. In addition, data were collected with a single tool. In addition, the study was conducted in a single environment. Therefore, future research can be conducted with more participants whose perspectives will be examined with the help of data collected by different tools.
- Future research may also compare cross-situations in which the experiences of second language learners in different global settings can be explored.
- In order to identify the problems encountered in the field of second foreign language teaching, comprehensive research should be conducted at national level, solutions should be developed based on the findings, language planning studies should be carried out at the country level,

appropriate language teaching methods specific to our culture, needs and language should be developed and applied.

- International cooperation should be provided to support students' second foreign language learning and enable them to practice, and study abroad opportunities should be provided.
- Foreign language teacher training programs should be reviewed in the relevant departments of universities, programs should be focused on improving teachers' practice skills, existing programs should be reorganized according to the current conditions and student needs and expectations.
- In order to improve and develop the second foreign language teaching system, a coordination board consisting of representatives of the Ministry of National Education (teachers, administrators, students, parents, etc.), university representatives (faculty members), experts and representatives of non-governmental organizations to conduct research on the second foreign language teaching system. It may be beneficial to develop alternative teaching models and effective language tools that will support second foreign language teaching and to carry out studies that will ensure their dissemination in the society.
- Special attention should be paid to the training and employment of second foreign language teachers and teaching staff. In-service training activities should be organized for current teachers and teaching staff.

REFERENCES

- Acun, N., Kapıkıran, Ş., Kabasakal, Z. (2009). Merak ve Keşfetme Ölçeği II: Açımlayıcı ve Doğrulayıcı Faktör Analizleri ve Güvenirlik Çalışması. Türk Psikoloji Yazıları, 16(31), 74-85.
- Akpınar, B. (2013). Eğitimde program geliştirme. Ankara: Data Yayınları.
- Allen, H. (2010). Language-learning motivation during short-term study abroad: An activity theory perspective. Foreign Language Annals, 43(1), 27-49.
- Arslangilay, A. S., & Özdemir, M. Ç. (2016). Third Generation Turkish Children and Bilingual Bicultural Education Models: Hessen State KOALA Project. Journal of Education and Future, (10), 105-135.
- Bayraktaroğlu, S. (2012). Neden Yabancı Dil Eğitiminde Başarılı Olamıyoruz? Türkiye’de Yabancı Dil Eğitiminde Eğilim Ne Olmalı? 1. Yabancı Dil Eğitimi Çalıştayı Bildirileri, 12-13 Kasım 2012.Hacettepe Üniversitesi Yayınları, 2014.
- Berlyne, D. E. (1954). A theory of human curiosity. British Journal of Psychology, 45, 180-191.
- Berlyne, D. E. (1960). Conflict, arousal, and curiosity. New York: McGraw Hill.
- Berlyne, D. E. (1998). Curiosity and Learning. Chicago: Rand McNally.
- Brewster, J, Ellis, G ve Girard, D., (2002), The Primary English Teacher's Guide. New Edition. England: Pearson Education Limited

Bümen, N. T. ve Aktan, S. (2014). Yeniden kavramsallaştırma akımı ışığında Türkiye’de eğitim programları ve öğretim alanı üzerine özeleştirel bir çözümleme. *Kastamonu Eğitim Dergisi*, 22(3), 1123-1144.

Carl, A. E. (1995). *Teacher empowerment through curriculum development: theory into practice*. Cape Town: Juta & Co Ltd.

Can, T. (2004). *Yabancı Dil Olarak İngilizce Öğretmenlerinin Yetiştirilmesinde Kuram ve Uygulama Boyutuyla Oluşturmacı Yaklaşım*. Yüksek Lisans Tezi, İstanbul Üniversitesi Sosyal Bilimler Enstitüsü İngiliz Dili Eğitimi Bölümü, İstanbul.

Cassady, J. C., & Johnson, R. E. (2002). Cognitive test anxiety and academic performance. *Contemporary Educational Psychology*, 27(2), 270-295.

Castellotti, V. (2001). *La langue maternelle en classe de langue étrangère*, Paris: Clé International Yayınları

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates.

Cheung, D., & Wong, H. W. (2002). Measuring teacher beliefs about alternative curriculum designs. *Curriculum Journal*, 13(2), 225–248.

Cook, V. (1997). *Monolingual Bias in Second Language Acquisition Research* by Vivian Cook *Monolingual Bias in Second Language Acquisition Research*. *Revista canaria de estudios ingleses*, 34, 35-50.

Ciampa, K. (2016). Motivating grade 1 children to read: Exploring the role of choice, curiosity, and challenge in mobile ebooks. *Reading Psychology*, 37(5), 665-705. Doi: 10.1080/02702711.2015.1105337.

Chang, C.C., Tseng, K.H., Liang, C., & Yan, C.F. (2013). The influence of perceived convenience and curiosity on continuance intention in mobile English learning for high school students using PDAs. *Technology, Pedagogy and Education*, 22(3), 373-386.

Çelebi, D. (2006). Türkiye’de Anadili Eğitimi ve Yabancı Dil Öğretimi. *Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*. Sayı: 21 Yıl : 2006/2, 285-307.

Demiral, S. (2014). Program Alanı. (A. Arı, Çev.Edt). Eğitim programı, temeller, ilkeler ve sorunlar. (1-36). Konya: Eğitim Yayınevi.

Demirel, M., Coşkun, Y. (2009). Üniversite Öğrencilerinin Meraklılık Düzeylerinin Bazı Değişkenler Açısından İncelenmesi. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, 9(18), 111-134.

Demircan, Ö. (1988). Düünden Bugüne Türkiye’de Yabancı Dil. İstanbul, Remzi Kitabevi.

Demirel, Ö. (1999). İlköğretim Okullarında Yabancı Dil Öğretimi, İstanbul: Milli Eğitim Basımevi.

Demirel, Ö. (2010). Yabancı Dil Öğretimi (5. baskı). Ankara, Pegem Yayıncılık.

Durmuş, M. (2018). Dil Öğretiminin Temel Kavramları Üzerine Düşünceler: Yabancılar Türkçe Öğretimi Mi, Yabancı Dil Veya İkinci Dil Olarak Türkçe Öğretimi mi? *Turkbilig/Turkoloji Arastirmalari Dergisi*, (35).

Elliot, A. J., & McGregor, H. A. (1999). Test anxiety and the hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 76(4), 628-644.

Erden, M. (1998). Eğitimde program değerlendirme. (3. Baskı). Ankara: Anı Yayıncılık.

Eren, A. & Coşkun, H. (2016). Students' level of boredom, boredom coping strategies, epistemic curiosity, and graded performance. *The Journal of Educational Research*, 109(6), 574-599.

Eren, A. (2009). Examining the correspondence between epistemic curiosity and achievement goals. *Eurasian Journal of Educational Research*, 36, 129-144.

Gerber, O. (2009). Curiosity, Exploration, And Strategies For Dealing With Uncertainty Amongst Psychologists-In-Training. Master Thesis. Nelson Mandela Metropolitan University. ZA.

Gömlüksiz, M. N., ve Elaldı, Ş. (2011). Yapılandırmacı Yaklaşım Bağlamında Yabancı Dil Öğretimi. *Electronic Turkish Studies*, 6(2): 67-80.

Gözün-Kahraman, Ö., Ceylan, Ş. ve Ülker, P. (2015). Bilimi yaratan duygu: çocukların fen ve doğaya ilişkin konulardaki bilgi ve merakları. *Türkiye Sosyal Araştırmalar Dergisi*, 19 (1), 207-229.

Gözütok, F. D. (2003). Türkiye’de program geliştirme çalışmaları. *Milli Eğitim Dergisi*, 160, 90-102.

Gurning B., ve Siregar A. (2017). The Effect of Teaching Strategies and Curiosity on Students' Achievement in Reading Comprehension, English Language Teaching; Vol. 10, No. 11; 2017.

Graham, P. & Helen, J. (2011). Stimulating curiosity to enhance learning. GESJ: Education Science and Psychology, 2(19), 25-31.

Gravetter, F.J. and Wallnau, L.B. (2012). *Statistics for the Behavioral Sciences*. 9th edition. The USA: Wadsworth.

Houghton, S. (2014). Exploring manifestations of curiosity in study abroad as part of intercultural communicative competence. System, 42, 368-382.

Hufeisen, B., (2000). Dritt- und Tertiärsprachenforschung".In:Ernst Appeltauer(Hrsg.),Flensburger Papiere zur Mehrsprachigkeit und Kulturenvielfalt im Unterricht, Druck Werner Rux, Heft 26, , s.6- 33.

Hengirmen, M. (1993), Yabancı Dil Öğretim Yöntemleri, Engin Yayınevi, Ankara.

Hogan, R., & Greenberger, E. (1969). The development of new measures of curiosity for children (Report No. 56). Baltimore, MD: Center for the Study of Social Organization of Schools.

Izard, C. E. (1991). The psychology of emotions. New York: Springer Science & Business Media.

Işık, A. (2008). Yabancı Dil Eğitimimizdeki Yanlışlar Nereden Kaynaklanıyor? Journal of Language and Linguistic Studies.Vol.4, No.2, October 2008.

<http://www.jlls.org/Issues/Volume%204/No.2/aisik.pdf>, Web adresinden 05 Ocak 2013 tarihinde edinilmiştir.

İşman, A., ve Eskicumalı, A. (2006). Eğitimde Planlama ve Değerlendirme. Adapazarı, Değişim Yayınları.

Jimenez, I. Maria. (2009a). Mut zur Mehrsprachigkeit, So erziehe ich mein Kind in einer Fremd oder Zweitsprache, Verlag auf dem Ruffel, İstanbul

Jimenez, M. Ines. (2009b). Mut zur Mehrsprachigkeit, Ruffel Yayıncılık

Jirout, J. ve Klahr, D. (2012). Childrens scientific curiosity: in search of an operational definition of an elusive concept. Developmental Review, 32, 2, 125-160.

Küçükahmet, L. (1998). Öğretim ilke ve yöntemleri. (9. Baskı). İstanbul: Alkım Yayınları.

Küçükahmet, L. (2002). Öğretimde Planlama ve Değerlendirme. Ankara, Nobel Yayın Dağıtım.

Krenn, W., ve Puchta, H., (2008). Ideen, Deutsch als Fremdsprache. Kursbuch A1, Vorabdruck Lektion 3, 4, 5, 1. Auflage, Hueber Verlag, Ismaning,

Krumm, Hans-Jürgen (2007). EuroComGerm-Die sieben Siebe: Germanische Sprachen lesen lernen”. In: Vorstand des Goethe-Instituts/ Bimmel, Peter/Fandrych, Christian/Hufeisen, Britta/Krumm, Hans- Jürgen/Wicke, Rainer E, Fremdsprache Deutsch Zeitschrift für die Praxis des Deutschunterrichts Heft 37/ (2007)., Hueber Verlag GmbH& Co KG, Ismaning, s. 60- 61.

Lee, J. W., & Schallert, D. L. (1997). The relative contribution of L2 language proficiency and L1 reading ability to L2 reading performance: A test of the threshold hypothesis in an EFL context. *TESOL QUARTERLY*, 31(4), 713-739.

Litman, J. A. ve Jimerson, T. L. (2004). The measurement of curiosity as a feeling of deprivation. *Journal of Personality Assessment*, 82 (2), 147-157.

Litman, J. A. ve Spielberger, C. D. (2003). Measuring Epistemic Curiosity and Its Diverse and Specific Components. *Journal of Personality Assessment*, 80(1), 75-86.

Lin, D., Wong, K., & McBride-Chang, C. (2012). Reaching motivation and reading comprehension in Chinese and English among bilingual students. *Reading and Writing*, 25(3), 717-737.

Loewenstein, G. (1994) The psychology of curiosity: A review and reinterpretation. *Psychological Bulletin*, 116(1), 75-98.

Marsh, C. J. (2004). Key concepts for understanding curriculum. (3rd ed.). New York: Routledge.

Martinez, P. (1996). *La didactique des langues étrangères*, Paris: PUF Yayınları.

Murphy, S. (2003). Second language transfer during third language acquisition, *Columbia University Working Papers in TESOL and Applied Linguistics*, 3, 1.

Mönch, Ingrid (1995). Kognitive Lernprozesse und Lehrstrategien". In: Sayın, Şara/Bechtold, Gerhard (Hrsg.), *Lerntraditionen und Fremdsprachenerwerb*, Publikationen des Türkischen Deutschlehrervereins, Lebib Yalkın Yayınları ve Basım İşleri A.Ş., İstanbul, , s. 109-116.

Man-shan Y.H.K., ve Lai-Fong C.A. (2012). Psychology Research, ISSN 2159-5542. May 2012, Vol. 2, No. 5, 295-307.

Neuner, G., Hufeisen, B., Kursiša, A., Marx, N., Koithan, U., & Erlenwein, S. (2009). Deutsch als zweite Fremdsprache. Berlin: Langenscheidt.

Neuner, G., ve Kursiša, A., (2006). Deutsch ist easy! Lehrerhandreichungen und Kopiervorlagen “Deutsch nach Englisch” für den Anfangsunterricht. Max Hueber Verlag, Ismaning.

Neuner, G., ve Hufeisen, B. (2005). Mehrsprachigkeitskonzept Tertiärsprachenlernen- Deutsch nach Englisch. Council of Europe Publishing, Strasbourg.

Oğuzkan, A. F. (1993). Eğitim terimleri sözlüğü. (3. Baskı). Ankara: Emel Matbaacılık

Oliva, P. F. (2009). Developing the curriculum. New York: Pearson Allyn and Bacon.

Oliver, A. I. (1977). Curriculum improvement: A guide to problems, principles, and process. (2nd ed.). New York: Harper & Row.

Opdal, M. P. (2001). Curiosity, wonder and education seen as perspective development. Studies in Philosophy and Education, 20, 331–344.

Ornstein, A., C. & Hunkins, F., P. (2014). Program alanı. (Demiral, S. çev.). A. Arı, (Ed). Eğitim Programı temeller, ilkeler ve sorunlar içinde (1-36). Konya: Eğitim Yayınevi.

Oruç, Ş. (2016). “Ana Dili, İkinci Dil, İki Dillilik, Yabancı Dil”, International Journal of Social Science, Number: 45, Spring III 2016, Gazi Üniversitesi Eğitim Fakültesi Alman Dili Eğitimi, Ankara

Özbay, M. (2006). Türkçe Özel Öğretim Yöntemleri, Öncü Kitap, Ankara

Peterson, P. W. (2001). Skills and strategies for proficient listening. In M. Celce Murcia (Ed.), Teaching English as a Second or Foreign Language, (p.69-85). Boston: Heinle & Heinle.

Reio, T. G. (1997) Effects of curiosity on socialization-related learning and job performance in adults. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, USA.

Ruth Dann (2013) Be curious: understanding ‘curiosity’ in contemporary curriculum policy and practice, Education 3-13, 41:6, 557-561, DOI: 10.1080/03004279.2013.850256

Saylor, J. G., Alexander, W. M., & Lewis, A. J. (1981). Curriculum planning for better teaching and learning. New York: Holt, Rinehart and Winston.

Serindağ, Ergün (2003). Zur Didaktik und Methodik Der Ausnutzung Des Englischen Als Erster Fremdsprache Im Unterricht “Deutsch Als Zweite Fremdsprache” Bei Muttersprachlern Des Türkischen, Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Alman Dili Eğitimi Anabilim Dalı, Yayınlanmamış Doktora Tezi, Adana.

Silvia, P. J. (2008). Appraisal Components And Emotion Traits: Examining The Appraisal Basis of Trait Curiosity. *Cognition and Emotion*, 22, 94-113.

Silvia, P. J. ve Kashdan, T. B. (2009). Interesting things and curious people: Exploration and engagement as transient states and enduring strengths. *Social and Personality Psychology Compass*, 3(5), 785-797.

Sönmez, V. (2012). Program geliřtirmede öğretmen elkitabı (Geniřletilmiş 17. Baskı). Ankara: Anı Yayıncılık.

Stenhouse, L. (1975). An introduction to curriculum research and development. London: Heinemann Educational Books Ltd.

Sun, H. ve Chen, A. (2010). A pedagogical understanding of the self-determination theory in physical education. *Quest*, 62, 364–384.

Þorsteinsdóttir, H. (2014). Second Language Acquisition: The Effect of Age, Exposure and Motivation., University of Iceland, Iceland.

Tabachnick, B.G. and Fidell, L.S. (2013). *Using multivariate statistics* (6th ed.). New Jersey: Pearson.

Tulgar A.T., (2018). The Effects of Curiosity on Second Language Learning in terms of Linguistic, Social-cultural and Pragmatic Development, *Journal of Educational Sciences*, 9(2), pp.59-72.

Tompkins, G. E. (1998). Language Arts Content and Teaching Strategies. New Jersey, Prentice-Hall.

Tzur- Bar, D. (2000). Interpreting for Foreign Language Courses, CRL Newsletter, A case study with German, 2000, s.3.

Ur, Penny (1992) “A Course in Language Teaching”, Cambridge University Press.

Ünal, H. (2005) The influence of curiosity and spatial ability on preservice middle and secondary mathematics teachers’ understanding of geometry. Unpublished doctoral dissertation, The Florida State University, College Of Education, USA.

Vidler, D. C., & Rawan, H. R. (1975). Further validation of a scale of academic curiosity. *Psychological Reports*, 37(1), 115-118.

Yılmaz, F. (2007). İngilizce’ nin Türkiye’de İkinci Yabancı Dil Olarak Almanca Öğretimine Etkileri, İstanbul Üniversitesi Yüksek Lisans Tezi, İstanbul

Yüksel, S. (2000). Millî Eğitim Bakanlığındaki program geliştirme çalışmalarının değerlendirilmesi. *Kuram ve Uygulamada Eğitim Yönetimi*, 24(24), 501-608.

APPENDIX A: SURVEY FORM

SURVEY FORM

Sayın Katılımcı,

Bu anket, Yeditepe Üniversitesi Eğitim Bilimleri Enstitüsü Eğitim Programları ve Öğretim Bölümünde yürütülen **"İkinci Yabancı Dil Öğrenimi Gören Üniversite Öğrencilerinin Merak ve Keşfetme Özelliklerinin İncelenmesi"** isimli araştırma ile ilgilidir. Bu araştırma ***tamamen bilimsel bir amaca yöneliktir.***

Yanıtlar **kesinlikle gizli tutulacaktır.** Elde edilen sonuçlar kişi adı belirtmeksizin analize tabi tutulacaktır. Bütün soruların cevaplandırılması, değerlendirmenin sağlıklı yapılabilmesi için büyük önem arz etmektedir. Yardımlarınız için teşekkür ederim.

Tijen Bayar Kuliğ
tijenb@gmail.com

BÖLÜM 1: DEMOGRAFİK ÖZELLİKLERE YÖNELİK SORULAR

1. Cinsiyetiniz

- 1() Kadın
- 2() Erkek

2. Yaşınız

- 1() 18-22
- 2() 23- 27
- 3() 28 – 32
- 4() 33- 37
- 5() 38 ve yukarı

3. Okuduğunuz Fakülte

- 1() Mühendislik Fakültesi
- 2() İşletme Fakültesi
- 3() Hukuk
- 4() Mimarlık ve Tasarım
- 5() Sosyal Bilimler
- 6() Sivil havacılık Yüksekokulu
- 7() Uygulamalı Bilimler Yüksekokulu

4. Mezun olduğunuz lise program türü

- 1() Normal Lise
- 2() Anadolu Lisesi
- 3() Meslek Lisesi
- 4() Fen Lisesi
- 5() İmam Hatip

5. Mezun olduğunuz okul türü

- 1() Özel
- 2() Devlet

6. Barınma durumunuz

- 1() Aile ile birlikte
- 2() Evde birden fazla ev arkadaşıyla
- 3() Tek başıma
- 4() Üniversitenin yurdunda
- 5() Diğer Belirtiniz (.....)

7. Sizce sosyo ekonomik düzeyiniz aşağıdaki seçeneklerden hangisine uymaktadır?

- 1() Düşük
- 2() Orta
- 3() Yüksek
- 4() Fikrim yok

8. Yurt dışı deneyim süreniz

- 1() 0
- 2() 1-3
- 3() 5-7 daha fazla

9. Anne-Baba eğitim düzeyiniz

- 1() Okur yazar değil
- 2() İlkokul
- 3() Ortaokul
- 4() Lise
- 5() Yükseköğretim ve üstü

BÖLÜM 2: İKİNCİ YABANCI DİLE YÖNELİK BULGULAR (İngilizce dışında)

10. İkinci yabancı diliniz var mı? (İngilizce dışında)

- 1() Evet (11.sorudan devam ediniz)
- 2() Hayır (Ankette Bölüm 3'e geçiniz)

11. Seçmeli ikinci yabancı diliniz

- 1() Almanca
- 2() İspanyolca
- 3() Fransızca
- 4() İtalyanca
- 5() Çince
- 6() Rusca
- 7() Arapça

12. Öğrendiğiniz 2 veya 3 yabancı dil seviye düzeyiniz

- 1() A1.1
- 2() A1.2
- 3() A2.1
- 4() A2.2
- 5() B1.1
- 6() B1.2
- 7() B2 ve Üzeri

13. A2 seviyesinde bildiğiniz ikinci yabancı dil sayısı

- 1() 1
- 2() 2
- 3() 3
- 4() 4 ve daha fazla

14. İkinci yabancı dil öğrenmeye ne zaman karar verdiniz?

- 1() İlkokul
- 2() Ortaokul
- 3() Lise
- 4() Üniversite

15. Sizce ikinci yabancı dil öğrenmenize sebep olan etkenler nelerdir?

- 1() Kişisel özelliklerim (dil öğrenmeye karşı ilgim, motivasyonum vb)
- 2() Öğretmen yönlendirmesi (Etkili öğretmenlik becerisi olması, dil becerisini aktarması, teşvik edici olması vb)
- 3() Sosyal çevre (Okul, akraba, arkadaş çevresinin olumlu etkisi)
- 4() Kültürel araç (Seyahat, kültürel merak, film, müzik, internet,..vs / ders materyalleri)

16. İkinci yabancı dil öğrenmek hoşunuza gidiyor mu?

- 1() Evet
2() Hayır

17. Daha öğrence öğrendiğiniz başka bir yabancı dil yeni bir yabancı dil öğrenmenizdeki etkili oldu mu?

- 1() Evet
2() Hayır

18. İkinci yabancı dil öğrenme nedeniniz aşağıdakilerden hangisidir? (Birden fazla seçeneği işaretleyebilirsiniz.)

- 1() Yurt dışında yüksek lisans yapmak
2() Yurt dışında çalışmak
3() İlgi duyduğunuz için
4() Ders programında zorunlu olduğu için
5() Diğer Belirtiniz (.....)

19. İkinci yabancı dil öğrenmenin kariyer gelişiminizi olumlu yönde etkilediğine inanıyor musunuz?

- 1() Evet
2() Hayır
3() Kararsızım

MERAK VE KEŞFETME ÖLÇEĞİ

	Açıklama: Aşağıdaki cümleler kendinizle ilgili duygu ve davranışlarınızı ne kadar yansıttıklarını işaretleyiniz. Yapmayı düşündüğünüz değil, sizin geneldeki duygu ve davranışlarınızla ilgili olmalıdır. Eğer sizi hiç yansıtmıyorlarsa “1”, biraz yansıtıyorsa “2”, ortalama olarak yansıtmıyorlarsa “3”, oldukça fazla yansıtmıyorlarsa “4” ve çok fazla yansıtmıyorsa “5” işaretleyiniz. Mümkün olduğunca dürüst davranın lütfen. Boş madde bırakmamaya çalışınız. . Katkılarınız için çok teşekkür ederim.	Hiç	Biraz	Ortalama	Oldukça fazla	Çok fazla
1.	Yeni durumlarda aktif olarak edinebildiğim kadar bilgi ararım.					
2.	Günlük yaşamın belirsizliğinden gerçekten hoşlanan bir insanımdır					
3.	Karmaşık ya da mücadele gerektiren şeyler yapmada çok iyiyimdir.					
4.	Gittiğim her yerde yeni şeyler ya da deneyimler ararım.					
5.	Mücadele edilmesi gereken durumları gelişme ve öğrenme fırsatı olarak görürüm.					
6.	Biraz korkutucu olan şeyleri yapmaktan hoşlanırım.					
7.	Daima kendime ve dünyaya ilişkin olabilecek (düşündüğüm) güçlüklerle (zorluklarla) ilişkili deneyimler ararım.					
8.	Kesinlikle kestirilemeyen – tahmin edilemeyen işleri tercih ederim					
9.	Kişi olarak gelişebileceğim ve kendimle mücadele edebileceğim fırsatları sıklıkla ararım.					
10.	Aşına olmadığım kişileri, olayları ve yerleri kabul eden bir insanımdır.					

APPENDIX B: ETHICS COMMITTEE APPROVAL



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İNSAN ARAŞTIRMALARI ETİK KURULU TOPLANTI TUTANAĞI

TOPLANTI SAYISI : 2019/13
TOPLANTI TARİHİ : 24.12.2019
TOPLANTI YERİ : Özyeğin Üniversitesi
KATILANLAR : Prof. Dr. G. Canan Ergin
Dr. Sibel Oktar Thomas
Dr. Ceren Hayran Şanlı

ARAŞTIRMA ETİK KURULU PROJE BAŞVURU FORMU (FORM A)	
Projenin Adı	İkinci Yabancı Dil Öğrenimi Gören Üniversite Öğrencilerinin Merak ve Keşfetme Özelliklerinin İncelenmesi
Proje Yürütücüsü	Tijen Bayar Kuliğ
Proje Yürütücüsünün İletişim Bilgileri	tijen.bayar@ozyegin.edu.tr
Projeye Katılan Diğer Araştırmacılar	Tez Danışmanı: Doç. Dr. Yelkin Diker Coşkun
Projenin Süresi (Başlangıç ve Bitiş Tarihi)	11. 11.2019-10.01.2020
Araştırmanın Amacı ve Özeti	Yeditepe Üniversitesi Eğitim Bilimleri Enstitüsü, Eğitim Programları ve Öğretim dalında tez aşaması öğrencisiyim. Doç. Dr. Yelkin Diker Coşkun hocamın danışmanlığında İkinci yabancı dil öğrenimi gören Üniversite öğrencilerinin Merak ve Keşfetme özelliklerinin inceleyeceğim. Öğrencilerin ikinci yabancı dilde etkinlikleri ve öğrenme durumları ile merak ve keşfetme özellikler arasında ilişki olup olmadığı değerlendireceğim.
Araştırmanın Yöntemi	Araştırmada, betimsel araştırma yöntemi kullanılacaktır. Veriler; anket, yoluyla toplanacaktır. Hazırlanan anket formu dağıtılacak ve elde edilen veriler SPSS paket programında

	analiz edilecektir. Verilerin analizi sonrasında teze bulgular ve yorumlar dahil edilecektir. <u>Notlar:</u> a) Veriler ScOLa Modern Diller Bölümünden ikinci yabancı dil alan ve almayan UGE öğrencilerden toplanacaktır. b) İkinci yabancı dil derslerine giren öğrencilerden dersin başında veya sonunda Anket formu aracılığıyla veriler toplanacaktır. Araştırmada kullanılacak olan anket formu kapalı uçlu sorulardan ve ölçekten meydana gelmektedir. Öğrencilerin kişisel bilgileri ve ikinci yabancı dil bilgilerine yönelik sorular ile Merak ve Keşfetme Ölçeği yer almaktadır. c) Araştırma süresince katılımcıların fiziksel, duygusal veya bilişsel olarak olumsuz etkilenecekleri bir durum oluşmayacaktır. d) Anket, görüşme ve gözlemlere katılım gönüllülük esasına dayalı olacak ve katılımcıların onayı gönüllü onay formu ile alınacaktır e) Anket, görüşme ve gözlemlerde elde edilen verilerde katılımcı isimleri yer almayacak olup, veriler sadece bilimsel amaçlar için kullanılacak ve kimlikler kesinlikle gizli tutulacaktır f) katılımcıları bu ankettan bir fayda kazanmayacaktır, bu anket ile araştırmama gönüllü destek vermiş olacaklar. g) Araştırmada toplanan veriler, araştırma süresince sadece benim erişimimde olup, araştırma süreci sonlandığında imha edilecektir.
Etik ve Veri Yönetim Planı	a) Toplanan veriler toplu olarak (anonim) analiz edilecek, kişi bazında değerlendirme yapılmayacaktır. b) Araştırmada elde edilen anket verileri sadece araştırmacı olan benim tarafımdan kayıt altında tutulacak, analiz edilecek ve araştırma sonlanana kadar saklanacaktır.
Katılımcı Özellikleri	Modern Diller Bölümünden İkinci yabancı dil alan 150 (Türk) öğrenci ve ikinci yabancı dil almayan (Undergraduate English

	alan) en az 50(Türk) öğrenci. Katılımcıların araştırmaya katılması gönüllülük esasına dayalıdır.
Araştırma Bütçesi ve Kaynakları	Herhangi bir bütçe ihtiyacı bulunmamaktadır.

Özyeğin Üniversitesi Yabancı Diller Yüksekokulu Modern Diller bölümü öğretim üyesi Tijen Bayar Kuliğ tarafından yürütülen “İkinci Yabancı Dil Öğrenimi Gören Üniversite Öğrencilerinin Merak ve Keşfetme Özelliklerinin İncelenmesi” başlıklı proje değerlendirilmiştir.

Proje etik açısından uygun bulunmuştur.
Projenin etik açısından geliştirilmesi gerekmektedir.
Proje etik açısından uygun bulunmamıştır.

☒
☐
☐

İmzalar:

Prof. Dr. G. Canan Ergin
Etik Kurulu Başkanı

Dr. Sibel Oktar Thomas
Etik Kurulu Üyesi

Dr. Ceren Hayran Şanlı
Etik Kurulu Üyesi

Tijen Bayar Kulig-INVESTIGATION OF THE CURIOSITY AND
EXPLORATION CHARACTERISTICS OF UNDERGRADUATE
STUDENTS IN TERMS OF SOME VARIABLES-Savunma

Sonrası 14.03.2021

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