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COUNSELING**

**AN EXPLORATION OF ALEXITHYMIA IN ADULTHOOD:
THE PREDICTIVE POWER OF PERCEIVED PARENTING ATTITUDES
AND COGNITIVE FLEXIBILITY**

GİZEM AKKAYA

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**YEDİTEPE UNIVERSITY
GRADUATE SCHOOL OF EDUCATIONAL SCIENCES
DIRECTORATE**

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APPROVAL:

Dr. Öğr. Üyesi Ayşen Köse Şirin
(Advisor)

(Signature)

Doç. Dr. Seval Erden Çınar
(Member)

(Signature)

Dr. Öğr. Üyesi Oğuzhan Doğan
(Member)

(Signature)

SUBMITTED BY : Gizem Akkaya
DATE OF THESIS DEFENSE : 01.07.2021
DATE OF THESIS APPROVAL : 14.07.2021

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Name/Surname: GİZEM AKKAYA

Date : 01.07.2021

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ABSTRACT

The main purpose of this study is to explore the predictive power of perceived parental attitudes and cognitive flexibility on adults' alexithymia levels. The participants of the study consist of 400 adults aged 18-65 living in Turkey. As the data collection, the demographic information form prepared by the researcher, the 20-item Toronto Alexithymia Scale (TAS-20) adapted to Turkish by Güleç et al. (2009), the Abbreviated Perceived Parental Attitudes Scale-Child Form (EMBU-C) adapted to Turkish by Dirik et al. (2015), and Cognitive Flexibility Inventory (CFI) adapted to Turkish by Sapmaz and Doğan (2013) were used. The data were analyzed with the SPSS 26.0 package program. The results of the data of the descriptive statistics, Independent Groups t-test, One-Way Analysis of Variance (ANOVA), Post-Hoc techniques Tukey analysis, Pearson Product Moment Correlation, and Hierarchical Regression Analysis are presented in the tables. According to the results, the predictive role of perceived parental attitudes and cognitive flexibility on adults' alexithymia levels are found. The independent variables explain %33 of the total variance regarding the total alexithymia score of adults. Significant differences are found between the alexithymia levels of adults and the demographic variables of gender, age and education status; no significant difference is found between the marital status. The limitations and findings of the study are discussed according to the related literature. Along with these, suggestions for future research are presented.

Keywords: Alexithymia, Perceived Parenting Attitudes, Cognitive Flexibility

ÖZET

Bu çalışmanın temel amacı, algılanan ebeveyn tutumu ve bilişsel esnekliğin yetişkinlerin aleksitimi düzeyleri üzerindeki yordama gücünü incelemektir. Araştırmanın katılımcılarını Türkiye’de yaşayan yaşları 18-65 değişen 400 yetişkin oluşturmaktadır. Verilerin toplanmasında araştırmacı tarafından hazırlanan demografik bilgi formu, Güleç ve arkadaşları (2009) tarafından Türkçe’ye uyarlanan 20 Maddelik Toronto Aleksitimi Ölçeği (TAS-20), Dirik ve arkadaşları (2015) tarafından Türkçe’ye uyarlanan Kısaltılmış Algılanan Ebeveyn Tutumları Ölçeği-Çocuk Formu (EMBU-C) ve Sapmaz ve Doğan (2013) tarafından Türkçe’ye uyarlanan Bilişsel Esneklik Envanteri (CFI) uygulanmıştır. Elde edilen veriler SPSS 26.0 paket programı ile analiz edilmiştir. Verilere ait yüzde, frekans, ortalama puan, standart sapma gibi değerler ve yapılan Bağımsız Gruplar t Testi, Tek Yönlü Varyans Analizi (ANOVA), Post-Hoc tekniklerinden Tukey analizi, Pearson Çarpım Moment Korelasyonu ve Hiyerarşik Regresyon Analizi sonuçları tablolar halinde sunulmuştur. Sonuçlar, algılanan ebeveyn tutumu ve bilişsel esnekliğin yetişkinlerin aleksitimi düzeyleri üzerinde yordayıcı role sahip olduğunu göstermiştir. Bağımsız değişkenler, yetişkinlerin toplam aleksitimi skoru ile ilgili toplam varyansın %33’ünü açıklamaktadır. Yetişkinlerin aleksitimi düzeyleri ile cinsiyet, yaş ve eğitim durumu demografik değişkenleri arasında anlamlı farklılık bulunurken; medeni hal arasında anlamlı farklılıklar bulunmamıştır. Araştırmanın sınırlılıkları ve bulguları ilgili literatüre göre tartışılmıştır. Bunlarla birlikte, gelecekteki araştırmalar için öneriler sunulmuştur.

Anahtar sözcükler: Aleksitimi, Algılanan Ebeveyn Tutumları, Bilişsel Esneklik

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ABBREVIATION LIST

TAS : Toronto Alexithymia Scale

TAS-20 : Twenty-item Toronto Alexithymia Scale

EMBU-C : Short Form of the Perceived Parental Attitudes Scale-Child Form

CFI : Cognitive Flexibility Inventory



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CHAPTER I

INTRODUCTION

Human beings are social creatures. Therefore, she/he always wants to be in movement and communication. As a social being, the emotions, thoughts, behaviors, and physiological responses of the person as a whole must work in a coordinated manner. The emotions form the basis of this integrity. Emotions that make up the meaning of life are one of the most important characteristics that distinguish people from other living things (Koçak, 2002).

Emotions are difficult to describe. Scientists have not agreed on the definition of emotions for centuries since the expression of emotions can vary from person to person and from culture to culture (Bakırcıoğlu, 2012). The root of the word emotion comes from the Latin verb "mote", which means "to act". When this verb is prefixed with "e-", it means to move away. Every emotion leads us to an action. Emotions enable us to respond to a particular situation in a certain way to struggle with life (Goleman, 2004).

It is an accepted fact that revealing emotions is significant for mental and physical health. If a person's emotional awareness level is low, suppressing, or defensive about feelings, if the vocabulary is not enough to express his feelings, the mental and physical integrity of the person will be negatively affected as a result of all these. Therefore, it is essential to recognize and express emotions sufficiently (Schwartz & Kline, 2002). There is also a side of emotions that affects one's interpersonal relationships and the inner world (Denollet et al., 2008). This problem experienced by individuals at the point of recognizing and expressing their emotions has been up to date since the existence of humanity (Koçak, 2003). Alexithymia is the name given to this problem. Sifneos (1972)

was the first person in the literature to use the concept of alexithymia; he defined it as an absence of words for emotions. Sifneos (1972), a psychotherapist, defined alexithymia due to observations he made on patients with psychosomatic complaints at the hospital where he worked.

Alexithymia is explained as difficulty dreaming, identifying and expressing emotions (Grabe et al., 2008). Limited ability to dream, impulsive behavior, lack of empathy and rigid thinking are characteristics of alexithymia (Ahrens & Deffner, 1986; Taylor, 2000). Alexithymia was initially thought to be specific only to psychosomatic patients, as it was a concept that emerged as a result of Sifneos' (1972) research on these patients. However, studies have shown that alexithymic characteristics can also be observed in people with different psychiatric and physical disorders and the healthy population (Dereboy, 1990; Koçak, 2002).

The factors affecting people's lives are covered under two headings: environmental and genetic. When environmental factors are evaluated, it is necessary to first look at the relationships established with the parents. According to the statements of developmental psychologists, the way parents raise their children has different effects in the areas of emotional and psychosocial development of children. Because when a child becomes an adult in the future, his or her well-being, both physically and psychologically, depends on his or her parents' love and closeness to him or her (Barnett et al., 1992).

Mutual relations established in childhood affect the processes of understanding, recognizing, and regulating emotions (Taylor et al., 1991; Laible, 2007). It is found that perceived parental attitudes lay the groundwork for developing alexithymia (Kooiman et

al., 2004). Arrindell et al. (1999) collected perceived parental attitudes in 3 dimensions: emotional warmth, overprotective, and rejection. If a child is growing up in a warm, safe and supportive environment physically and emotionally, she/he can express her/his feelings comfortably. In other words, the alexithymic characteristics of the individual can develop according to the degree of free experience and expression of emotions in the environment in which they grow (Berenbaum & James, 1994).

Martin and Pihl (1986), acting on Lazarus' (1982) idea that emotions always arise due to a cognitive evaluation, said that alexithymics are at the lowest stage of the cognitive evaluation process. In addition, alexithymics express their feelings through bodily reactions, not words, due to cognitive distortions. Cognitive flexibility means that a person should think about all the alternatives that may be possible to find a solution to their behavior or situation and have this awareness (Martin et al., 1998). On the other hand, individuals with alexithymic characteristics have strict rules and want to get rid of the problems as soon as possible, without thinking about alternative solutions to the problems they experience (Taylor, 1984). Considering that all these situations are opposite to cognitive flexibility, it is predicted that people with alexithymia have low cognitive flexibility.

In light of these statements, perceived parental attitudes and cognitive flexibility are predicted to affect alexithymia. It is believed that this study will contribute to the literature, as a study couldn't be found in which these three variables were considered together.

1.1. The Importance of the Study

The place of emotions and social relationships are especially critical in human life for a meaningful life. A healthy communication process takes place by expressing emotions correctly and understanding the feelings of the other person. Perceived parental attitudes also have a significant influence on human life. Perceived parental attitudes have an important role in shaping people's views of life, behaviors and emotional worlds. It is known that parental attitudes are a concept that should be taken into account not only in the management of emotions, but also in the management of cognitive processes. Because positive or negative parental attitudes are decisive when creating people's cognitive schemes. Considering this condition, it is expected that there will also be a relationship between them and cognitive flexibility. On the other hand, cognitive flexibility has an important place in the cognitive expression of emotions. Alexithymic individuals have no escape from this world full of emotions. The fact that alexithymia, which was initially thought to be unique to psychosomatic patients, has also been seen in healthy population in recent years makes it important to investigate this concept. Examining alexithymia in terms of these two variables will provide a better understanding of this concept.

Alexithymia is a concept that has gained importance in recent years, and research in the relevant literature is limited. When previous studies in the literature were examined, it was seen that the relationship between alexithymia and perceived parental attitudes was examined in terms of different variables such as adult attachment styles, depression level, psychological birth order, psychological adjustment, somatic symptoms, parental control and personality disorders. In the same way, some studies investigate the

effect of the relationship between perceived parental attitudes and cognitive flexibility in terms of together and different variables. In the literature review conducted within the scope of this study, no study examining the effect of perceived parental attitudes and cognitive flexibility on alexithymia was found. Since this research explains a previously untapped topic, it is thought that it might contribute to the literature. Also, in our country, it has been observed that research conducted in recent years is usually conducted on university students. This study differs from other studies in that it consists of adult participants. Finally, it is believed that the findings obtained as a result of this research will be informative for psychological counselors and psychologists, while for parents, it will raise awareness of their attitudes towards their children.

1.2. Purpose of the Study

The main aim of this study is to examine the predictive power of perceived parental attitude and cognitive flexibility in exploration of alexithymia levels in adulthood.

1.3. Research Questions

The following questions were addressed in this study:

1. Is there a significant relationship between perceived parental attitudes, cognitive flexibility and alexithymia?
2. To what extent do perceived parental attitudes and levels of cognitive flexibility predict the level of alexithymia in adults?
3. Do alexithymia scores of adults significantly differ by gender, age, marital status and educational status?

4. Do perceived parental attitude scores of adults significantly differ by gender, age, marital status and educational status?
5. Do cognitive flexibility scores of adults significantly differ by gender, age, marital status and educational status?

1.4. Assumptions

1. It is assumed that the data collection tools used in the research is suitable for the purpose of the research.
2. It was assumed that participants in the study gave sincere responses when answering substances contained in the scales.

1.5. Limitations

The research is limited to 400 participants reached through the online Google-form. The data obtained in the study are limited to the participants' responses to the demographic information form and the scales of the research.

1.6. Definitions

Alexithymia: Alexithymia is explained by the difficulty in fantasy life and dreaming, the difficulty in identifying and expressing emotions, operational thinking and externally focused cognitive style (Lesser, 1981; Taylor, 1984).

Perceived Parenting Attitudes: Adults' perceptions of their parents' parenting styles, attitudes, behaviors and expectations for them during childhood constitute perceived parental attitudes (Arindell et al., 1999; Dirik et al., 2015).

Cognitive Flexibility: It is defined as the fact that a person is aware of their alternatives and different ways of communication in the face of a situation or problem,

has the ability to adapt to new situations, and feels competent when it is flexible (Martin & Rubin, 1995).



CHAPTER II

CONCEPTUAL FRAMEWORK

This chapter examines the concept and history of alexithymia, alexithymic symptoms, the theoretical approaches to alexithymia; the concept of perceived parenting attitudes, the dimensions of perceived parenting attitudes, perceived parenting attitude and alexithymia, the concept of cognitive flexibility, cognitive flexibility and alexithymia, and the relationship between alexithymia, perceived parenting attitudes and cognitive flexibility.

2.1. Alexithymia

In the following, the concept of alexithymia, alexithymic symptoms and theoretical approaches to alexithymia are explained.

2.1.1. The Concept and History of Alexithymia

The term alexithymia is of Greek origin and was first used by Sifneos at a conference in Europe in 1972. As dictionary meaning, alexithymia is composed of the words that mean a = absent, lexis = word, thymos = emotion in Greek. Sifneos (1973) created the concept of alexithymia based on the fact that people with alexithymic characteristics are incapable of understanding and expressing their feelings. This concept was translated into Turkish by Dereboy (1990) as "absence of words for emotions". Şahin (1992), on the other hand, did not find this definition sufficient and introduced the definition of "emotional deafness" since alexithymic people are both mute and deaf to emotions. Dökmen (2000) proposed "slavery of thought" as the equivalent of alexithymia (p.135).

Considering the studies conducted in the years before the concept of alexithymia was defined by Sifneos (1972), it is seen that scientists made various definitions for patients with alexithymic features. Ruesch (1948) found that in his therapies with psychosomatic patients (now called alexithymic), these individuals reacted physically rather than expressing their emotions verbally or symbolically. He described this as an "infantile personality" (as cited in Lesser, 1981). In a 1949 paper, Maclean stated that psychosomatic patients did not have a cognitive predisposition to express emotions verbally and that these individuals expressed their feelings through organ language (as cited in Lesser, 1981). Horney and Kelman (1952) observed that some psychiatric patients were inadequate for psychoanalytic psychotherapy. According to them, these patients have adopted a lifestyle with insufficient emotional awareness and little internal control, low dreaming, and their behavior is shaped according to the other party's expectations instead of rules (Taylor & Bagby, 2012). Freedman and Sweet (1954) defined psychosomatic patients as emotional illiterates. French psychoanalysts Marty and de M'Uzan (1963) called the way of thinking of psychosomatic patients "operative thinking" (*la pensée opératoire*) based on their observations. So instead of touching their inner world, they prefer to engage their minds with the events around them (Lesser, 1981). Krystal (1979) has researched people who have survived Nazi concentration camps and experienced post-traumatic disorders due to the severe traumatic events they experienced there. He observed that these patients have problems in their emotional world and had difficulty understanding and expressing their feelings and that there were limits in their fantasy lives. When Nemiah and Sifneos (1970) examined the records of psychosomatic patients, they found that these patients had some similar symptoms. They

listed these symptoms as difficulty recognizing and expressing emotions and dreaming (Lesser, 1981). Sifneos (1973) collected all of these symptoms under the heading of alexithymic symptoms in 1973 due to his clinical observations for years. Nemiah et al. (1976) defined alexithymia as a versatile concept with four distinctive characteristics. These characteristics are (1) difficulty recognizing emotions and differentiating physical of emotions and emotional insight; (2) difficulty expressing sensation to other human beings; (3) limited and incomplete imaginary processes and a fantasy world; (4) stimulus-dependent extroverted mental style (as cited in Taylor & Bagby, 2012).

Since Sifneos made these observations on psychosomatic patients and this concept was used mainly by psychosomatic theorists during the investigation of alexithymia, it was thought that this disorder was specific to psychosomatic patients only (Dereboy, 1990). Although it was thought that way in the early days, alexithymia has also been associated with specific conditions such as depression, trauma, adverse childhood experiences, emotional disorders, eating disorders and substance abuse (as cited in Guttman & Laporte, 2002; Van Der Kolk, 2018). Briefly, more and more researches results in recent years show that alexithymia is also common in the healthy population (Batıgün & Büyüksahin, 2008; Epözdemir 2012; Van Der Kolk, 2018).

2.1.2. Alexithymic Symptoms

The most distinctive feature of alexithymics is that they have problems making sense of emotions. Although they are accepted as intelligent in daily life, they cannot use this intelligence to emotions (Sifneos, 1988). It cannot be said that alexithymics do not feel anything. It has been observed that they seemingly live in harmony with the environment but cannot achieve this harmony with their spiritual worlds (Dereboy,

1990). It is indicated that this harmony observed from the outside is "false normality" (McDougall, 1982). Because the connection between their emotions and thoughts is disconnected, and they cannot distinguish between their emotions and bodily sensations (Koçak, 2003). In other words, these people cannot explain the emotional state that corresponds to their mental animation, dreams and thoughts. For example, an alexithymic person hears a strange sound, but instead of finding out where the sound is coming from, she/he thinks about foods; she/he fights with someone but does not know what she/he is angry with; she/he does not know how to be happy by thinking of a beautiful moment. They act like they are not from this world. Although people with alexithymic properties have such difficulty with emotions, they have no escape from this world full of emotions. Considering all these conditions, it is inevitable for these individuals to experience significant difficulties in their lives (Sifneos, 1988). In addition, it is expected that individuals with alexithymia who have such difficulties in making sense of their emotional states do not understand the other person's feelings. In other words, they have difficulty empathizing (Guttman & Laporte, 2002).

The different opinions in the definition of the concept of alexithymia are also seen in detecting alexithymic properties. As a result of experimental findings and observations, symptoms of alexithymia were collected under four main headings: (1) difficulty identifying and expressing emotions; (2) difficulty in fantasy life and dreams; (3) operational thinking (4) externally focused cognitive style (Nemiah et al., 1976; Taylor, 1984).

2.1.2.1. Difficulty Identifying and Expressing Emotions

The most basic feature of alexithymic people is difficulty expressing their feelings (Sifneos, 1972). They experience this difficulty in daily life events, losing a loved one or losing their job. Even in the face of a severe life event, it was observed that instead of expressing their feelings, they described physical symptoms or did not seem to understand the question asked (Lesser, 1985). When asked about her/his feelings to an alexithymic person, she/he acts as if she/he has heard the word for the first time in his/her life and does not know its meaning (Dereboy, 1990). From the outside, this behavior evokes the prediction that one's emotional life is limited. The absolute truth is not that the person lacks emotions but that the emotions she/he experiences are not differentiated. In fact, what is happening is not that a person is deprived of their feelings, but that the emotions they experience are undifferentiated (Kooiman et al., 1998).

Alexithymic individuals talk about thoughts and events because they cannot recognize and express unique feelings. When they should talk about their feelings, they prefer a superficial and simple language narrative or instead talk about their bodily complaints (Lesser, 1981). Their speech is repetitive and detailed, as they cannot distinguish between their emotions and physical symptoms (Sifneos, 1988). This limitation in their emotional world manifests itself because their posture is dull, and their emotions are not reflected on their faces (Sifneos et al., 1977; Lesser, 1981).

2.1.2.2. Difficulty in Fantasy Life and Dreaming

Alexithymic individuals are far from emotional depth and highly mechanical in terms of experiencing emotions. Accordingly, their ability to dream is insufficient, and their powers of fantasy and imagination are weak. Most of the time, they cannot dream,

and they see it as a waste of time. When they dream, these dreams are dry, colorless and uninspired (Lesser, 1981; Taylor & Bagby, 1988). They also stay away from dreaming reminiscent of their feelings (Lesser, 1981). Their creativity has not developed because they could not imagine (Sifneos, 1988).

Alexithymic individuals rarely remember their dreams. When describing their dreams, they also lack in defining and explaining the emotions that accompany the dream. It has been observed that the content of dreams is more related to daily life events and has concrete features (Sifneos, 1988; Lumley & Bazydlo, 2000).

2.1.2.3. Operational Thinking

The concept of operational thinking was first used by French psychoanalysts Marty and de M'Uzan (1963). This concept has specific patterns that contain functional purposes, depend on facts, concrete and mechanical (as cited in Pirlot & Corcos, 2012). Nemiah et al. (1976) stated that operational thinking emerged due to combining a bit of fantasy world and a cognitive style based on stimuli (as cited in Taylor & Bagby, 2012). Alexithymics live a superficial life without touching their inner world. Being away from their inner world allows them to find concrete and short-cut solutions without investigating the cause of the problems they face. This is because they have a mechanical and utilitarian way of thinking (Koçak, 2002). Even if they are far from the world of emotions, thanks to these features, they can live a largely harmonious and trouble-free life with other people (Lesser, 1985; Taylor et al., 1991).

2.1.2.4. Externally Focused Cognitive Style

Alexithymic individuals have a cognitive style that they shape depending on external stimuli, regardless of the source. The reason for this is their tendency to think mechanically, pragmatic and adaptively (Taylor et al., 1991). Thanks to these cognitive styles, they make an eager effort to communicate, and as a result, they are known by their environment as people who can establish smooth and harmonious relationships (Sifneos et al., 1977; Taylor et al., 1991). Because they are focused on external control, they attach great importance to what people around them expect of them. Individuals with alexithymic traits are described as intelligent, and they use this intelligence to hide their emotions and adapt to their environment (Koçak, 2002).

Even considering all these described features, it is impossible to establish any diagnostic criteria in terms of alexithymic features. For this reason, it is appropriate to mention the level of alexithymia instead of making a diagnosis. In addition to these four basic features in alexithymic individuals, important secondary features are frequently seen (Koçak, 2003). To mention them briefly;

- They prefer to live a monotonous life without creativity (Krystal, 1979).
- Their emotions cannot be read from their faces. Seen from the outside, they are seen as rigid, callous and lifeless (Sifneos, 1988).
- They rarely cry. However, due to anger, grief and sadness, in some cases, they may be seen to cry excessively (Sifneos, 1988).
- Even if they are depressed or stressed, they do not accept it. They try to explain the state of emotion they are in as bodily complaints (Koçak, 2002).

- The high level of physical complaints and thought intensity creates the impression that alexithymic individuals are neurotic. Nevertheless, there is a difference between the two. Problems in the emotional structures of neurotics are limited to areas of psychological conflict, while in alexithymic individuals, these problems are spread to all areas (Krystal, 1979).

2.1.3. The Theoretical Approaches to Alexithymia

Freyberger (1977) and Krystal et al. (1986) stated that alexithymia should be analyzed from different theoretical perspectives. These theories can be listed as follows: psychoanalytic, cognitive, cognitive-behavioral, social learning, neurophysiological and transactional (Koçak, 2002).

2.1.3.1. Psychoanalytic Approach

There are similarities between the approach of psychoanalytic theory to alexithymia and its approach to psychosomatic diseases. According to Freud (1933), emotions can be expressed verbally when they reach consciousness from the unconscious. Since their contents cannot be perceived and expressed consciously when emotions are out of consciousness, the response of this situation is in the form of conflict, tension and bodily complaints. The physical expression of emotions in this way is similar to alexithymia. The relationship between alexithymia and the psychoanalytic approach is based on understanding and expressing emotions (Nemiah, 1977; Stoudemire, 1991).

According to McDougall (1982), alexithymic features are a defense mechanism developed against anxiety and conflicts resulting from the broken relationship between mother and child in the early period. Since this deterioration inhibits the ability to create

intrinsic representation in childhood, producing fantasy in adulthood cannot develop due to this situation. The results show that the imagination and fantasy worlds of alexithymia are limited (de M'Uzan, 1974; McDougall, 1982). Corcos and Speranza (2003), on the other hand, attribute the basis of its alexithymia to the mother depriving her baby of emotional experiences and consequently the lack of ability to fantasize (as cited in Tychey et al., 2010). According to Von Rad (1984), the disruption experienced in the process of separation and individuation in the context of object relations theory leads to the incomplete development of an individual's sense of identity and self-representation.

The most comprehensive psychoanalytic explanation of the etiology of alexithymia belongs to Krystal (1979). He argued that the development of the child's emotional communication ability depends on the relationships established by the family and the enrichment of the child's emotional life resulting from these relationships established. The emotional development process consists of the stages of differentiation of emotions, desomatization and verbalization. Some alexithymics are people who have become stuck or regressed in the first period of affective development due to traumatic experiences in childhood. Traumas experienced in adulthood also have a regressive effect on this development process. He saw the lack of anhedonia of alexithymic individuals as the most definitive evidence of these traumatic experiences and attributed the lack of creativity and imagination to this condition.

2.1.3.2. Cognitive Approach

Cognition is a way of perceiving and evaluating the outside world. When it comes to a psychological condition, the cognitive theory's perspective on this situation is different from other approaches. According to the cognitive approach, mental processes

between the individual's responses and stimuli are essential in the face of a psychological problem. If stimuli from the outside and inner worlds are detected and interpreted through a dysfunctional cognitive process, psychological problems arise. The cognitive approach explains alexithymia by adhering to this point of view (Koçak, 2002; Şaşıoğlu et al., 2013).

Cognitive explanations of alexithymia are based on the views of Lazarus and Piaget (Dereboy, 1990). According to Lazarus (1982), emotions are always included in cognitive appraisal and occur due to this evaluation. Cognitive appraisal follows an order from simple to complex. The simplest form of cognitive evaluation is pre-language consciousness and unconscious; the developed form is consciousness and finds expression through verbal images (Dereboy, 1990; Koçak, 2002). Based on this idea of Lazarus, Martin and Pihl (1986) stated that alexithymics are at the lowest stage of the cognitive evaluation process, and therefore they perform the cognitive evaluation in a symbolic and non-verbal way. Alexithymics cannot express their emotions due to their cognitive distortions, and they show their experiences as bodily reactions.

Lane and Schwartz (1987) developed a cognitive development model based on Piaget's Cognitive Development theory. According to this model, everything called emotion occurs due to the cognitive process of emotional arousal. Piaget's Cognitive Development process is hierarchical order from simple to complex and consists of five emotional sensitivity steps. Alexithymics have remained in the stage where emotions, which are the lower stage of these steps, do not decompose and have bodily characteristics (Lane & Schwartz, 1987; Dereboy, 1990).

In the socialization process, thought and belief systems, assumptions and generalizations are formed due to the experiences and learning experienced in childhood. This, in turn, leads to the formation of non-functional cognitive schemas. In the content of these schemas are cognitive distortions such as contempt and worthlessness. Cognitive theorists have accepted that these distortions determine emotions and behaviors. As a result, the individual begins to have difficulty in recognizing and expressing their emotions in adulthood and alexithymic features begin to emerge (Koçak, 2002).

Stoudemire (1991) explains alexithymia from a cognitive perspective; individuals with alexithymic characteristics were stuck between the sensory-motor period of cognitive development and the pre-operational period. As a result of this situation, they express their emotional states by showing physical reactions.

2.1.3.3. Cognitive-Behavioral Approach

Alexithymia is a cognitive-emotional communication problem that individuals experience in verbal communication processes at the point of defining and expressing their emotions (Way et al., 2007). According to cognitive theory, emotions depend on the cognitive development process (Martin & Pihl, 1986). Accordingly, it has been stated that alexithymia occurs due to problems and deficiencies (distortions, irrational thoughts) experienced in this cognitive development process (Bağcı, 2008).

Four fundamental concepts affect each other in the process of psychosocial development of people. These are thoughts, behaviors, physiological states and emotions. The latest accepted current approach to emotions is based on the cognitive explanation of emotions. When a person encounters a stimulant due to a sensation, they relate to their thoughts, and their feelings are formed due to this relationship (Özer, 1994; Koçak,

2002). According to Lazarus, one of the leading proponents of cognitive theory, emotions also arise from an individual's inner life (Koçak, 2002). The concepts of emotion and cognition cannot be thought apart from each other. It has been accepted that cognitive factors are essential in forming emotions, the definition and recognition of emotions. For this reason, if the bonds between these two elements are broken, disorders and diseases will be observed (Schwartz & Kline, 2002).

Alexithymics are accepted at the bottom of the cognitive development process because they express their emotions in the form of bodily responses instead of verbally expressing them (Lane & Schwartz, 1987). They use primitive cognitive schemes because they are at the lowest level. Automatic thoughts created by cognitive schemas prevent the awareness of emotions, and the person reflects emotions as bodily complaints (Martin & Pihl, 1986; Lane & Schwartz, 1987).

2.1.3.4. Social Learning-Behavioral Approach

Alexithymia is a cross-cultural phenomenon identified due to studies conducted with 18 different ethnic and racial groups (Thorberget al., 2011). Its first appearance was in western societies. Where the verbal expression of emotions is considered a sign of maturity (Lesser, 1981). Based on this situation, Lesser (1981) said that in Eastern societies, people learn from their social environment to hide and suppress, rather than express their feelings, and as a result, express their feelings physically. According to this approach, people's behavior occurs due to learning in the social environment in which they are located. All their behaviors, communication styles, expressions of feelings, and thoughts accepted as usual throughout the individuals' lives are shaped by the influence of their families and social environments (Lesser, 1985). Borens et al.(1976) conducted a

study on psychosomatic patients raised in low and high social classes. As a result of this study, it was found that people with low socioeconomic levels living in undeveloped societies showed more alexithymic characteristics.

According to the social learning approach, individuals learn behaviors by observing people's social environment (Bandura, 1986). Stoudemire (1991) stated that individuals' ability to communicate depends on the family and social environment. If a child learns to suppress or physically express feelings and thoughts from its social environment instead of expressing them, then alexithymia characteristics begin to emerge.

2.1.3.5. Neurophysiological Approach

There are different studies explaining alexithymia based on a neurophysiological approach. One of the first basic studies in this field is the one that has been done on patients with commissurotomy. It has been explained that these patients have a disconnect between the hemispheres of the brain. The right brain hemisphere is responsible for processing emotional information, and the left brain hemisphere is responsible for processing language-related skills. As a result of a break in the connection between the two hemispheres, the expression of emotion in people occurs in bodily complaints and reactions. Because patients with commissurotomy show alexithymic characteristics, it has been observed that when the connection between the two brain hemispheres is cut, feelings are shown by somatization (Moruguchi et al., 2006). This situation confirms the researchers' view that the cause of alexithymia is a disconnection in the brain's hemispheres (Larsen et al., 2003).

MacLean (1949), who researched psychosomatic patients, advocated the notion that the basis of these diseases is neurophysiological. Emotional information cannot be verbalized due to a transmission problem between the limbic systems of psychosomatic patients and their neocortexes and that these individuals somatization their emotions (Reker et al., 2010).

In researches on the neurophysiology of alexithymia, distortions in the processing of emotional information have been taken into account. It has been noted that low activity of the amygdala may be associated with alexithymia especially (Reker et al., 2010). As a result of the study conducted by Kano and Fukudo (2013), it was found that the impaired emotional orientation systems of alexithymic individuals cause strict cognitive regulation.

As a result of research, people with alexithymic characteristics are more prone to psychosomatic diseases due to the less active right hemisphere of the brain. Which of the brain hemispheres are actively used determines which area the person is skilled in. Individuals with alexithymic traits are shown to use the left hemisphere of their brain more as the cause of their limited imagination, physical complaints, and rigid thoughts (Kano et al., 2003).

2.1.3.6. Transactional Analysis Approach

Transactional analysis is based on ego states. Ego states are an emotional system and affect the behavior patterns of the individual. The ego states of the individuals are grouped under three subtitles as a parent, adult and child ego state (Berne, 1996). A spiritually healthy person in their daily life enters these three ego states at different levels, depending on their time and place and exhibits behavior by the role they enter. Adult ego status comes to the fore when it comes to alexithymic individuals. Because, according to

research, it is believed that there may be a relationship between alexithymia and adult ego status (Koçak, 2002). Individuals who use adult ego state more can be intelligent, but they can gradually turn into a robot because they use their intelligence to hide their feelings. These people cannot act spontaneously because they keep parent and child aspects in the background. This coincides with individuals with alexithymic properties (Sifneos, 1988; Taylor, 1991). People who actively use the adult ego state lack the ability to empathize. Since it is known that alexithymic individuals do not develop empathy abilities, it is seen that they show similar characteristics to those who use an adult ego state (Krystal, 1979).

2.2. Perceived Parenting Attitudes

This section discusses the concept of perceived parenting attitude, the dimensions of perceived parenting attitudes, and the perceived parenting attitude and alexithymia.

2.2.1. The Concept of Perceived Parenting Attitude

Each person has a family impact on their life that begins before birth and lasts until the end of life (Upshur, 1991). Born with specific hereditary characteristics, the child learns how to adapt to the social environment and behave in social life (as cited in Parlar & Özbuk, 2018). Because children grow up modeling their parents, parents' attitudes towards life are a resource for them (Kaya, 1997).

In the child's development, parents' attitudes towards the child are much more important than environmental variables. Individuals' personalities and self-development depend on parental attitudes in childhood (Grusec & Davidov, 2007). The communication process between the family and the child, which begins with birth, has a

great place in the child's spiritual world. For the child's personality structure to be strong, positive and constructive, communication between the parent and the child must be established. As a result of the inability to establish this communication healthily, emotions are suppressed and cannot be expressed, and the resulting problems remain unresolved (Grusec & Davidov, 2007; Yavuzer et al., 2011). The positive and constructive behaviors of the parents are essential in terms of the child's first life pattern, and they provide the formation of a solid personality in the child (Rackley, 2007). Parental attitudes include verbal or non-verbal messages conveyed to the child in an emotional atmosphere and behaviors made for a specific purpose or behaviors that are not intended for a purpose (Darling & Steinberg, 1993).

Perceived parental attitudes are how parents' ways and attitudes of raising their children are perceived by their children (Arrindell et al., 1999). Even if a parent has shown a warm and caring attitude towards their child, the child in the opposite way may have a perception that their parents do not love him or her (Rohner et al., 2005). For this reason, it was seen important how children perceive and evaluate their parents' attitudes and behaviors, rather than the actual behavior of parents (Cheng & Furnhan, 2004).

When studies on the classification of parental attitudes are examined, it is seen that they have something in common, but their nomenclature is different. In the studies carried out, these attitudes; it has been seen to be concentrated in four dimensions as democratic, authoritarian, protective-demanding and repressive-authoritarian (Hacıkeleşoğlu, 2020). In a democratic attitude, the child is considered an individual in the family and responsibilities are given in an affirmative, warm environment. In an authoritarian attitude, the child's presence is ignored in the family, and her/his personality

is kept under control with strict rules and a disciplined attitude. In the protective-demanding attitude, exaggerated worry and anxiety are intervened in the child's life, and the family always makes requests from the child. In the repressive-authoritarian attitude and the authoritarian attitude, the child is prevented from acting freely by being oppressed in all matters (Maccoby & Martin, 1983; Baumrind, 1991).

2.2.2. The Dimensions of Perceived Parenting Attitudes

The perceived parental attitudes have three dimensions. In this section, these three dimensions will be examined, which other researchers have often used recently. The three dimensions of perceived parenting attitudes are emotional warmth, overprotection and rejection (Arrindell et al., 1999; Dirik et al., 2015).

2.2.2.1. Perceived Emotional Warmth Parental Attitude

The emotional warmth dimension of perceived parental attitude is related to the fact that parents accept their children unconditionally and express their love, interest, and compassion through physical and verbal behavior (Rohner et al., 2005). This dimension includes the accepting, supportive and caring attitudes of parents towards their children (Dirik et al., 2015). The emotional warmth attitude can also be called the democratic parental attitude, as it is close to the dimension of democratic attitude from Baumrind's, Maccoby's, and Martin's classifications of parental attitude (Perris et al., 1980). In a democratic attitude, parents allow their children to be individualized by setting the necessary restrictions and providing adequate control. Parents with this attitude treat their children in a supportive way and pay attention to their decisions and the ideas they express (Baumring, 1996; Sümer et al., 2010). A child who receives warmth, attention, compassion, care, and support from their parents in this way knows that they are

emotionally accepted (Rohner et al., 2005). Children whom their parents accept feel self-sufficient. They can give the proper emotional responses, manage their emotions, and their independence levels are also high (Kim & Rohner, 2002).

2.2.2.2. Perceived Overprotection Parental Attitude

The overprotection dimension of perceived parental attitude includes exaggerated anxious attitudes and behaviors that parents have towards the safety of their children (Dirik et al., 2015). Parents with this attitude pay excessive attention to their children and are tolerant of them at a level that can be considered negligent. They are also known to be inconsistent in setting rules for their children (Arrindell et al., 1999). They think and do it for their children and fulfill their every request unconditionally (Kaya, 1997). Because it is said that they see themselves as a chance to provide every desire of their children (Arrindell et al., 1999), children who grow up with an overprotective parental attitude may experience difficulties in the expression of emotions and interpersonal communication. The child who grows up in such an environment cannot control their behavior and has trouble learning their limits (Thomasgard et al., 1995).

Overprotective parents interfere in their children's lives in more ways than they should, so they are an obstacle to their children's individuality. Because these children cannot learn to trust themselves, their self-esteem and self-confidence are low, and they become emotionally dependent on others (Afat, 2013).

2.2.2.3. Perceived Rejection Parental Attitude

The rejecting dimension of the perceived parental attitude includes the attitudes and behaviors of parents that do not care about the needs of their children and constantly

criticize and judge them (Dirik et al., 2015). Behavior such as arbitrarily blaming, criticizing, or punishing a child expresses rejection of parental (Rapee, 1997). In other words, the child cannot see the warmth, love, the support he needs under any circumstances from his parents. However, they also expose to the psychologically hurtful behavior of their parent (Rohner et al., 2005).

It can be accepted that the rejecting parental attitude is the most harmful style among all other attitudes because the child growing up in such a mentally hurtful environment will feel unloved, unwelcome (Hacikeleşoğlu, 2020). A parent who is in a rejection attitude expects the child to do things above their abilities and punishes them when it makes the slightest mistake. This wrong attitude will damage the child's personality development and cause him/her to lose self-confidence and self-esteem and not establish social relations with people (Baumrind, 1993).

2.2.3. Perceived Parenting Attitude and Alexithymia

Alexithymia is defined as a problem experienced in the cognitive evaluation of emotions and is considered as a separate personality structure (Şaşıoğlu et al., 2013). Although alexithymia, which means the absence of words for emotions, was initially thought of as a concept specific to psychosomatic patients, it is also seen in today's healthy population (Koçak, 2002). Alexithymia is also described in the literature as a personality trait that can occur in connection with the dysfunctional attitude of parents. According to researchers, alexithymic characteristics may be observed in children exposed to negative parenting attitudes in childhood due to their inability to recognize and express emotions (Berenbaum & James, 1994; Van der Kolk & Fissler, 1994; Brown et al., 2016).

Babies experience their emotions at the physical level at the first stage. However, over time, these feelings are perceived, named and reflected by their parents. In this way, it is believed that emotions at the physical level are carried to the verbal and mental levels. When this situation does not occur, problems with the regulation and expression of emotions can form the basis of alexithymia (Kooiman et al., 2004).

De Panfilis et al. (2008) examined the relationship between parental attitudes and alexithymia in their study. As a result of this study, it was found that dysfunctional parental attitudes have a mediating effect from alexithymic traits to others on the difficulty of identifying and explaining emotions.

Faced with a rejection parental attitude, children resort to self-control skills and prefer somatization and acting events rather than cognitively responding to internal emotional stimuli. On the other hand, overprotection parental attitude makes it difficult to express emotions. Accordingly, in cases where the mental process needs to be expressed in language, if this situation is prevented or suppressed by the mother or father, recognizing the feelings is interrupted. Therefore, parental attitudes contribute to understanding the causes of alexithymia (Pellerone et al., 2017).

Hussain and Ahmed's research on parental acceptance in 2014 showed that parental behavior is an essential determinant for alexithymia. The fact that parents are uninterested, inconsistent, and unwilling in the emotional communication they establish with children will affect children's ability to regulate emotions (Hussain & Ahmed, 2014). Growing up in such an environment, where emotions and thoughts are prevented from being expressed in childhood, a child learns bodily expression rather than learning

to express their feelings from their family. As a result of this situation, they tend to show alexithymic properties (Stoudemire, 1991).

It is stated that adults who have difficulty understanding and expressing emotions grow up in a family environment where negative emotions are at the forefront (Dunn & Brown, 1994). Because individuals' physical and psychological well-being in adulthood depends on the love and intimacy, they see from their parents in childhood (Barnett et al., 1992).

The effects of relationships between parent and child leave traces in the child's life for many years. It has been stated that the emotional, cognitive and social development of children who grow up with an accepting attitude are more advanced than children who grow up with a rejection attitude. That is why parents must take a supportive and caring approach to their children by accepting them unconditionally (Önder & Gülay, 2007).

2.3. Cognitive Flexibility

In this section, the concept of cognitive flexibility, cognitive flexibility and alexithymia are included.

2.3.1. The Concept of Cognitive Flexibility

People face some problems in many different areas, especially social relations, in the chaos of daily life. In order to solve these problems, each person will try different solutions by reacting differently. The ability of the person to develop different solutions is directly proportional to the measure of flexibility. The measure of flexibility is also associated with the mental processes of the individual. What is needed at this point is

cognitive flexibility (Martin et al., 1998). The development of cognitive flexibility begins with birth and continues throughout adolescence. Considering this situation, it can be said that the experiences in the first years of life and the relationship of the individual with their parents affect the development of cognitive flexibility (Bilgin, 2009; Gündüz, 2013).

When looking at the studies conducted, it is possible to see different definitions for cognitive flexibility. This is because cognitive flexibility has a complex structure (Şirin Ayva, 2018). Cognition in the concept of cognitive flexibility represents mental structures in acquiring knowledge, while flexibility represents the ability of the individual to flexibly use previously acquired knowledge in different event situations (Spiro et al., 1987). Three essential features are emphasized when defining cognitive flexibility: An individual is aware of (a) the existence of solutions and alternatives that exist when faced with any situation, (b) a willingness to adapt to the situation and be flexible, (c) its potential and ability to be flexible (Martin et al., 1998).

Cognitive flexibility can be defined as the ability of individuals to adapt to changes encountered and adapt to new situations that arise by trying different solutions to problems (Martin & Rubin, 1995; Martin & Anderson, 1998). The individual needs cognitive flexibility to adapt to a changing environment or find solutions when faced with any problems. Because a suitable solution must be found to overcome the difficulty encountered. Finding the best possible solution also depends on trying different alternatives (Steven, 2009). The most important thing to consider in cognitive flexibility should be to see all options rather than seeing the correct option before making a choice (Martin & Anderson, 1998).

Cognitive flexibility and communication skills are associated with each other. Communication ability is seen as an essential component of cognitive flexibility (Martin & Anderson, 1998). In this case, cognitive flexibility also means that the person has self-efficacy and confidence to adapt to the situation encounters by being aware of the communication options (Maltby et al., 2004).

Some personality traits also differ according to cognitive flexibility levels. People with a high level of cognitive flexibility can show flexibility by focusing and motivating according to their situations and approaching all kinds of changes with a solution-oriented approach. It is stated that people with low levels of cognitive flexibility have a focus problem in the situations they encounter, act in a fixed way of thinking and resist innovations (Jonassen & Grabowski, 1993). People with cognitive flexibility have many positive personality traits thanks to this flexibility. These people consider themselves adequate in their social relationships, and they are balanced, determined and responsible. In cases of disagreement, they are not belligerent and show an understanding attitude (Martin & Anderson, 1998).

Cognitive flexibility is not limited to the situation that individuals face and the time when the event occurs. In daily life flow, in social relationships and in solving problems, it is a skill in which creativity is necessary must be used in all situations (Martin et al., 2011).

2.3.2. Cognitive Flexibility and Alexithymia

People face problems at different times in their lives and look for solutions to them. Even when there are no problems, they have to make decisions on specific issues

(Sapmaz & Doğan, 2013). At times like this, it is necessary to develop different solutions. The concept that comes up at this point is cognitive flexibility (Martin et al., 1998).

Cognitive flexibility is a cognitive process that is also affected by the emotional state of the stimulus in an event encountered. Therefore, individuals should have the ability to understand emotions (Deveney & Deldin, 2006). It is known that people with alexithymic traits have problems in recognizing and understanding emotions (Sifneos, 1988). They also have a poor ability to understand and empathize with others (Krystal, 1979). In such a case, the question comes to mind of what is the effect of a person's cognitive flexibility on alexithymia because the person who has cognitive flexibility knows what emotion causes which behavior (Doğan Laçın & Yalçın, 2018).

The person with high cognitive flexibility has a high awareness of the feelings and thoughts of the other person in their social relationships. A person with cognitive flexibility can adapt and develop solutions by focusing on the event in difficult situations. The person who does not have cognitive flexibility cannot focus on the event, is distracted and tends to take a strict attitude towards change (Jonassen & Grabowski, 1993). Cognitive flexibility is in interaction with emotion regulation. When cognitive processes deteriorate, there may be problems with emotional processes (Malooly et al., 2013).

Alexithymia is a personality structure related to the difficulties experienced in the process of recognizing and understanding emotions. Alexithymic individuals can act without thinking, and they tend to use incompatible problem-solving methods. They have tense and strict rules, and they have repetitive conversations about the same topic (Sifneos, 1988; Sirait, 2019). People with alexithymic properties want to reach a solution

as soon as possible without thinking deeply about solving problems (Taylor, 1984). These characteristics of alexithymic individuals are associated with low cognitive flexibility (Sirait, 2019). Cognitive flexibility means having the cognitive abilities to cope with stressful situations. Individuals with low cognitive flexibility show cognitive rigidity with an incompatible thinking style (Dennis & Vander Wal, 2010). This condition appears to be compatible with the high alexithymic property.

Considering cognitive flexibility and alexithymic features, it can be thought that there is a negative relationship between the two concepts. As a result of this study, cognitive flexibility is expected to predict alexithymia.

2.4. Relationship between Alexithymia, Perceived Parenting Attitudes and Cognitive Flexibility

According to studies on the causes and theoretical approaches of alexithymia, alexithymia and childhood lives are related to each other (Koçak, 2002). It is also known that childhood lives leave traces in the lives of individuals. Given that the family environment is where these experiences first begin, it is known that perceived parental attitudes will affect children's lives emotionally and physically (Barnett et al., 1992). It should be considered that childhood life affects the formation of alexithymic features (Koçak, 2002). Another area where childhood life is practical is the thoughts and cognition system of individuals.

When the concept of cognitive flexibility is evaluated, it is necessary to pay attention to parents' attitudes towards the child. Because of these relationships established with the parents, the child's cognitive structure is formed, and the level of cognitive flexibility is affected accordingly (Melby et al., 1993; Bilgin, 2009). There are opinions

that disruptions in the cognitive development process affect the emotions and behaviors of individuals, which will cause alexithymia (Koçak, 2003; Epözdemir, 2012). Especially given the rapid decision-making behaviors of alexithymic individuals, it is noted that alexithymia and cognitive flexibility are associated with finding solutions to problems (Martin & Anderson, 1998).

Briefly, in light of these explanations, in this current study, it is argued that perceived parental attitudes and cognitive flexibility can predict the concepts of alexithymia.

CHAPTER III

LITERATURE REVIEW

This chapter examines the previous studies on the dependent variable, namely alexithymia and independent variables, namely perceived parenting attitudes and cognitive flexibility that constitute the subject of the study have been examined.

3.1. Research on Alexithymia and Demographic Variables

When the literature on alexithymia and gender is scanned, it is noticeable that many studies support no difference between male and female alexithymia scores. In addition, some studies have found a difference between male and female alexithymia scores. The studies are described below in order.

Pasini et al. (1992) conducted a study in which they examined alexithymia in terms of sociodemographic variables. A total of 417 people ranging in age from 21 to 64, 209 of whom were men and 208 of whom were women, made up the study sample. As a result of the one-way analysis of variance, no significant difference was observed between gender and alexithymia scores. A similar result was found in the study of Parker et al. (1993). They conducted a study in which they investigated the relationship between alexithymia and facial expressions of emotion on a total of 216 students attending Ontario University. As a result of this research, they stated no significant difference between alexithymia scores and gender.

Similar results have been found in domestic studies. Durak Batıgün and Büyükşahin (2008) conducted a study in which they examined the relationship between alexithymia and psychological symptoms and attachment styles in normal individuals.

300 people between the ages of 18-40 have participated in the study. When the alexithymia scores obtained from the study data were analyzed in terms of gender variable, it was seen that there was no significant difference. In another study, in a classification study in which Tepeli Temiz (2018) investigated alexithymic symptoms and attachment patterns, there was no significant difference between alexithymia scores by gender. As a result of a study in which K ro lu (2019) investigated the relationship between the alexithymia levels of university students and their communication skills, there was no significant relationship between alexithymia scores and gender.

As a result of a literature review, some research has also shown a significant difference between alexithymia and gender. A study conducted by Cooper & Holmstrom (1984) found that alexithymic traits are more common in women than in men ($\bar{x}=10.66$, $SD=2.65$; $\bar{x}=9.64$, $SD=2.52$; $t=2.19$, $p<0.05$). Similarly, in T rk's (1992) study with university students, it was noted that women showed higher alexithymic characteristics compared to men.

Lane et al. (1998) conducted a study to investigate the correlation between alexithymia and sociodemographic variables. As a result of this study, which involved 380 people aged 18-80 from the normal population, it was found that there was a significant correlation between gender and alexithymia and that men's alexithymia scores were higher than women's alexithymia scores. Similar results have been found in some studies conducted in Finland. Salminen et al. (1999) ($\bar{x}=48.8$, $SD=11.4$; $\bar{x}=43.8$, $SD=11.3$), Kokkonen et al. (2001) ($\bar{x}=46.8$, $SD=10.1$; $\bar{x}=42.5$, $SD=10.2$), and Matilda et al. (2006), as a result of their research related to alexithymia at different times, was found to be associated with gender and alexithymia, and that men's alexithymia scores were

higher than women's. Finally, as a result of the study conducted by Erdem and Eker (2020) with 410 adults between the ages of 24-65, it was observed that there was a significant difference between male and female participants in terms of alexithymia, and men had higher alexithymia levels than women ($\bar{x}=49.62$, $SD=9.73$; $\bar{x}=46.48$, $SD=11.03$). In conclusion, there is no consistency in terms of gender with alexithymia.

When the literature is examined, it has been seen that different research results have been reached on alexithymia and age. While some studies have found a relationship between alexithymia and high age, some studies have found no relationship between these two variables. The studies are described below in order.

Parker et al. (1989) examined the structure of alexithymia regarding sociodemographic variables and their relationship to intelligence. 101 adults between the ages of 20 and 80 had participated in the study. As a result of this study, no significant association was found between alexithymia and age. In their research, in which crested Tepeli Temiz (2018) and Koroğlu (2019) studied different variables with alexithymia, they reached conclusions that supported the work of Parker et al. (1989).

Some studies have been conducted on alexithymia with representative samples of the adult Finnish population. As a result of these studies, Pasini et al. (1992) ($\bar{x}=36.3$, $SD=13.7$; $\bar{x}=34.9$, $SD=13.1$; $\bar{x}=37.8$, $SD=14.2$), Salminen et al. (1999), Honkalampi et al. (2000) and Mattila et al. (2006) ($\bar{x}=54.9$; $\bar{x}=53.4$; $\bar{x}=50.4$; $\bar{x}=47.2$; $\bar{x}=44.8$; $\bar{x}=42.9$) found a significant positive relationship between an older age.

Domestic studies, Erdem and Eker's (2020) study, which alexithymia level studies in terms of different demographic factors, found a significant relationship between the alexithymia scale sub-dimensions and the age variable ($\bar{x}=53.47$; $\bar{x}=48.42$; $\bar{x}=47$;

$\bar{x}=46.76$; $\bar{x}=45.09$; $\bar{x}=47.85$). In another study, Oktay and Durak Batıgün (2014) conducted a study of 591 people aged 18-60 to examine the relationships between alexithymia and attachment, self-perception, interpersonal relationship styles and anger in individuals. As a result of this study, a significant association was found between age and alexithymia. In conclusion, there is no consistency in terms of age with alexithymia.

When the literature is examined, it is seen that most of the studies on alexithymia and education find a relationship between alexithymia and education level. Studies are grouped below and explained.

As a result of research conducted by Lane et al. (1998) ($r=-0.30$, $p<0.001$), Salminen et al. (1999) ($\bar{x}=41.1$, $SD=9.9$; $\bar{x}=48.5$, $SD=11.6$), Kokkonen et al. (2001) ($\bar{x}=43.4$; $SD=9.9$; $\bar{x}=44.7$, $SD=9.9$; $\bar{x}=46.6$, $SD=11.5$; $\bar{x}=42.7$, $SD=10.1$), and Mattila et al. (2006) ($r=-0.57$, $p<0.01$), a negative significant association was found between alexithymia and low educational status. Alexithymia has been strongly associated with a low education status. Similar results have been found in domestic research. As a result of studies conducted by Durak Batıgün and Büyükşahin (2008), it was found that educational status had a significant negative impact on the total scores taken from the alexithymia scale ($F(1, 294)=7.31$, $p<0.01$, $\eta^2=0.03$). In another study, Erdem and Eker (2020) found a significant negative relationship between the sub-dimensions of the alexithymia scale and the educational variable ($\bar{x}=21.42$; $\bar{x}=22.68$; $\bar{x}=21.84$; $\bar{x}=20.55$; $\bar{x}=20.04$; $\bar{x}=19.53$; $\bar{x}=18.96$). In conclusion, there is a consistency in terms of educational status with alexithymia.

When the literature is examined, most studies show no significant relationship between alexithymia and marital status. Apart from the research conducted by Matilla et

al. (2006), studies conducted by Joukamma et al. (1996), Salminen et al. (1999), Honkalampi et al. (2000), Kokkonen et al. (2001), and Durak Batıgün and Büyüksahin (2008) found no significant relationship between alexithymia and the marital status variable. In conclusion, there is a consistency in terms of marital status with alexithymia.

3.2. Research on Perceived Parenting Attitudes and Demographic Variables

When the literature is examined, research results on perceived parenting attitudes and gender generally show a relationship between these two variables. These studies are described below in order.

Someya et al. (1999) conducted a study examining the relationship between demographic variables and the EMBU scale on a sample of 1320 healthy Japanese volunteers. The research shows that gender had a significant effect on paternal rejection scores (male scores > female scores), ($\bar{x}=34.9$; $\bar{x}=33.2$), and both genders had significant effects on emotional warmth scores for both parents. In other research, Petrowski et al. (2009) conducted a study in which they aimed to evaluate the relationship between remembered parenting behavior, life satisfaction and interpersonal problems. The sample of this study is a representative population sample ($n = 2948$) selected from healthy individuals aged between 18 and 92 in Germany. As a result of this study, it was found that perceived parental attitudes were significantly related to gender. Male participants encountered more rejection and stricter parenting attitudes than female participants ($\bar{x}=12.81$, $SD=4.33$; $\bar{x}=11.91$, $SD=4.12$). On the other hand, female participants perceived the emotional warmth of their parents more than male participants ($\bar{x}=19.05$, $SD=4.71$; $\bar{x}=18.32$, $SD=4.34$).

Looking at domestic research, it seems that similar results have been achieved. We can list these studies on adults as follows. Demirsu (2018) conducted a study in which she investigated the role of sensitivity anxiety and psychological resilience to determine the relationship between perceived parental attitudes and trait anxiety. 385 university students between the ages of 18 and 33 participated in this study, and the results of the study showed that the perceived emotional warmth mother average scores of female participants were higher than that of male participants ($\bar{x}=21.53$, $SD=3.92$; $\bar{x}=20.71$, $SD=3.96$), while the perceived rejection father average scores of male participants were significantly higher than that of female participants ($\bar{x}=9.80$, $SD=3.28$; $\bar{x}=8.91$, $SD=2.43$). Cankardaş (2019) conducted a study of 230 university students aged 18-30. This study aimed to investigate the role of perceived parental attitudes and self-esteem in determining fear of being negatively evaluated in men and women. As a result of the research, it was found that male participants encountered more rejection attitudes than female participants ($\eta^2=0.36$) and those female participants perceived their parents' emotional warmth more than ($\eta^2=0.29$) male participants. A similar study was conducted by Altıntaş (2019) with the participation of 367 university students between the ages of 18-25. As a result of this study, it was found that female students' perceived rejection (mother) scores were lower than those of male students ($\bar{x}=9.92$, $SD=3.51$; $\bar{x}=10.79$, $SD=4.11$). Again, in the same years, a study of 1220 adults from seven geographical regions of Soyyiğit (2019) found that female participants' perceived parental emotional warmth scores were higher than those of male participants ($\bar{x}=18.90$, $SD=3.88$; $\bar{x}=18.28$, $SD=3.42$). As a result of a study conducted by Uzun (2019) with 429 university students determined that mother overprotection ($\bar{x}=21.78$, $SD=6.08$; $\bar{x}=20.14$,

SD=5.52), mother emotional warmth ($\bar{x}$ =20.50, SD=4.68; $\bar{x}$ 19.37, SD=4.42), and father emotional warmth scores ($\bar{x}$ =18.96, SD=5.06; $\bar{x}$ =17.24, SD=4.67) from perceived parental attitudes were significantly higher in women than in men. In conclusion, there is a consistency in terms of gender with perceived parenting attitudes.

When the literature is examined, it has been seen that different research results have been reached on perceived parenting attitude and age. While some studies have found a relationship between perceived parenting attitude and age, some studies have found no relationship between these two variables. The studies are described below in order.

A study conducted by Someya et al. (1999) in Japan found that the younger the participants, the stronger they remembered their parents' overprotection. Petrowski et al. (2009) found that older participants remembered their parents as more rejection ($\bar{x}$ =11.72, SD=3.71; $\bar{x}$ =12.17, SD=3.75; $\bar{x}$ =12.33, SD=3.83) and less emotional warmth than younger participants ($\bar{x}$ =21.69, SD=4.41; $\bar{x}$ =20.83, SD=4.48; $\bar{x}$ =20.90, SD=4.23). In domestic studies, different results were found. As a result of Altıntaş's (2019) study, rejection (mother) scores of participants aged 20-21 years ($\bar{x}$ =9.81, SD=3.36) were statistically significantly lower than those of 18-19 years ($\bar{x}$ =10.07, SD=3.57), and 22 years and older ($\bar{x}$ =10.92, SD=4.25). As a result of Soyyiğit's (2019) research, no significant difference was found between these two variables. In conclusion, there is no consistency in terms of age with perceived parenting attitudes.

When the relevant literature was examined, it has been seen that there was a small number of studies examining the relationship of perceived parental attitude to educational

status and marital status. Therefore, the studies investigating these two variables are explained below together.

As a result of Soyuyiğit's (2019) research, it was found that the perceived emotional warmth parental attitude scores of those with graduate education are higher than those with high school and lower education ($\bar{x}=17.68$, $SD=4.48$; $\bar{x}=19.52$, $SD=3.45$), and the perceived rejection parental attitude scores of participants with high school and lower education are higher than all other groups ($\bar{x}=11.73$, $SD=4.68$; $\bar{x}=9.78$, $SD=3.04$; $\bar{x}=9.87$, $SD=3.43$; $\bar{x}=9.56$, $SD=2.84$; $\bar{x}=9.91$, $SD=3.41$). In addition, no relationship was found between the perceived parental attitude scores and the marital status variable. As a result of Altıntaş's (2019) research, it was found that the perceived overprotection ($\bar{x}=18.74$, $SD=5.08$; $\bar{x}=20.71$, $SD=5.9$; $\bar{x}=17.74$, $SD=4.63$), and rejection mother attitude scores of participants who were married were statistically significantly higher than those of participants who were single and flirting ($\bar{x}=9.96$, $SD=3.43$; $\bar{x}=13.42$, $SD=5.4$; $\bar{x}=10.52$, $SD=4$). In conclusion, there is no consistency in terms of educational and marital status with perceived parenting attitudes.

3.3. Research on Cognitive Flexibility and Demographic Variables

When the literature on cognitive flexibility and gender is reviewed, it is noteworthy that many studies support that there is no difference between the cognitive flexibility scores of men and women. However, some studies find differences between the cognitive flexibility scores of men and women. Studies are described below in order.

A study was conducted by Çuhadaroglu (2011) to determine predictors of cognitive flexibility. As a result of this descriptive model, which consisted of 30 people, including teachers and university final year students, there was no found significant

relationship between levels of cognitive flexibility and gender. In the same year, a study conducted by Altunkol (2011) aimed to examine the relationship between the cognitive flexibility of university students and perceived stress levels reached a different conclusion. According to the results of this study, men's cognitive flexibility levels were higher than those of women. A similar result was found by Asıcı and İkiz (2015) due to a study conducted with the participation of 278 university students. As a result of this study, in which they investigated the relationship between cognitive flexibility and happiness, they concluded that men had higher levels of cognitive flexibility than women. In another study, Güzeltepe (2017) aimed to examine the levels of cognitive flexibility in terms of psychological contract roles with the participation of 299 public employees. As a result of this study, it was found that control sub-dimension scores of cognitive flexibility were higher in men than in women. The study conducted by Üzümcü and Muezzin (2018) aimed to examine the level of cognitive flexibility and job satisfaction of teachers. As a result of this study, in which 529 teachers participated, there was no significant difference between cognitive flexibility levels and the gender variable. In another research, Karayol and Doğar (2020) conducted a study to examine teachers' levels of cognitive flexibility and social appearance anxiety. As a result of this study, which involved 160 teachers, no significant association was found between levels of cognitive flexibility and the gender variable. A similar situation was observed due to a study conducted by Sucu (2020) with the participation of 574 university students. As a result of this study, which examined the relationship between social problem-solving skills of college students and gender, parental attitudes, and cognitive flexibility, no significant

relationship between gender and cognitive flexibility was found. In conclusion, there is no consistency in terms of gender with cognitive flexibility.

When the literature is examined, it has been seen that different research results have been reached on cognitive flexibility and age. The studies are described below in order.

As a result of research conducted by Asıcı and İkiz (2015), Karayol and Doğar (2020), no significant differences were found between the age variable and cognitive flexibility. As a result of research conducted by Güzeltepe (2017), Üzümcü and Müezzini (2018), Balta (2020), and Geyik Koç (2020), a significant positive relationship between cognitive flexibility levels and age was found. In conclusion, there is no consistency in terms of age with cognitive flexibility.

When the relevant literature was examined, it has been seen that there were very few studies that examined the relationships between cognitive flexibility and educational status and cognitive flexibility and marital status. Therefore, the studies investigating these two variables are explained below together.

As a result of research conducted by Güzeltepe (2017), it was found that cognitive flexibility levels increased as participants' education levels increased, and cognitive flexibility levels were higher in married participants. In another study conducted by Balta (2020), there was no significant difference between educational status and cognitive flexibility. In addition, cognitive flexibility scores of participants who were married were found to be lower than those who were single. The study conducted by Karayol and Doğar (2020) found that levels of cognitive flexibility do not differ according to marital

status. In conclusion, there is no consistency in terms of educational and marital status with cognitive flexibility.

3.4. Alexithymia and Perceived Parenting Attitudes

As a result of the relevant literature review, it was found that there was a relationship between alexithymia and perceived parental attitude. Studies in which alexithymia and parental attitudes are considered together with different variables are described below. While listing these studies, their relationship with each other and publication dates were taken into account.

Berenbaum and James (1994) examined the relationship between alexithymia and the family environment; it was found that alexithymic characteristics emerge depending on how individuals can freely express and experience their feelings in the family environment in which they grow up. Similar findings were found in Lumley et al.'s (1996) study. They found a positive relationship between recognizing and expressing emotions, which is one of the alexithymic characteristics, and the negative patterns within the family. In another study, a significant negative correlation was found between difficulty in understanding emotions from alexithymic features and the care and support provided by the mother (Fukunishi et al., 1997). Mason et al. (2005) made a similar inference to the results of studies conducted by Berenbaum and James (1994) and Fukunishi et al. (1997). With the correlation analysis conducted in this study, a relationship between the mother's overprotection and the difficulty of identifying emotions from alexithymic traits was found.

Kench and Irwin (2000) tested the hypothesis that the family environment characteristics in childhood predicted alexithymic tendencies with their regression

analysis. As a result, the family environment level in childhood was a predictor for alexithymic features.

Ergün (2008) found a significant relationship between democratic attitudes and alexithymic characteristics due to regression analysis in his study. She examined the relationship between alexithymic characteristics, parental attitudes, attachment characteristics and adolescent addiction characteristics of adolescents and their parents.

Pellerone et al. (2017) conducted a study that may be similar to this study on adults. As a result of this study, which investigated the relationship between parenting, alexithymia, and adult attachment styles, alexithymia was associated with perceived parental attitudes and attachment style.

Thorberg et al. (2011) conducted a meta-analysis study to investigate the strength of the relationship between alexithymia and parenting style. Nine samples were selected due to research conducted through Web of Science, PsycInfo, PubMed and ProQuest. As a result of the examinations, it was concluded that there is a strong relationship between alexithymia and parental bonding. The study conducted by Cuzzocrea et al. (2015) gave results that confirm this research. As a result of the correlation analysis conducted for this study, which examined the relationship between alexithymia, parenting style and parental control, it was found that alexithymia was a positive predictor of authoritarian and permissive parental attitudes, and alexithymia was a negative predictor of democratic parental attitudes. Accordingly, it was found that there was a significant relationship between alexithymia and parenting style.

Karukivi et al.'s (2011) result of the study investigated the relationship of perceived social support and parental attitude to alexithymia was Mason et al. (2005), and

Fukunishi et al. (1997) supported the findings of the studies. Perceived social support and parental attitude experienced according to correlation analysis results were found to be associated with alexithymic characteristics. The results revealed that intrusive and overprotective parental attitudes played an essential role in the development of alexithymia.

Hussain and Ahmed (2014) conducted a study in which they investigated the effect of parental acceptance and rejection on alexithymia. In this study, it was revealed that parental behavior is an essential factor in predicting alexithymia. They noted that parental attitudes could affect emotional performance. As a result of the study, a significant relationship was found between perceived acceptance of mother and father and alexithymia.

Zdankiewicz-Ścigała et al. (2019) conducted a study to examine the mediating role of alexithymia in the relationship between parental attitudes and impulsive aggression. With correlation, regression, and mediation analysis, it was found that there were strong relationships between parental attitudes and the tendency to develop alexithymia and various symptoms of aggression.

3.5. Alexithymia and Cognitive Flexibility

When the literature is examined, it is seen that there are very few studies examining alexithymia and cognitive flexibility together. In these studies, it was found that there is a relationship between alexithymia and cognitive flexibility. These studies are explained below, taking into account the publication dates.

An experimental study investigated whether the alexithymic characteristics of individuals are related to cognitive and empathic variables. The study revealed that people with high alexithymic characteristics and impulsivity characteristics have lower attention and executive function performance levels. From this result, it is inferred that high alexithymic features have low cognitive flexibility. Because cognitive flexibility also sets an example for executive functions (Romero Martinez et al., 2019).

Ghadampour et al. (2019) conducted a comparative causal study. This study compares the cognitive flexibility, cognitive avoidance and alexithymia scores of male students with and without stuttering. According to the study results, the cognitive flexibility scores of the stuttering students were lower than the regular students, and the cognitive avoidance and alexithymia scores were higher.

Sirait (2019) investigated the relationship between psychology students' alexithymia levels and their cognitive flexibility. As a result of the analysis, a significant negative relationship was found between alexithymia and cognitive flexibility. The study revealed that people with alexithymic features have low cognitive flexibility.

Atadokht and Ahmadi's (2021) study aimed to examine the mediating role of alexithymia in the pattern of structural relationships of mobile phone dependence based on cognitive flexibility. It was found that mobile phone dependence was negatively associated with cognitive flexibility and positively associated with alexithymia. It has also been noted that there is a negative directional relationship between alexithymia and cognitive flexibility. As a result of the model, adaptation indexes have been verified that alexithymia has a mediating role in cell phone addiction based on cognitive flexibility.

3.6. Alexithymia, Perceived Parental Attitude and Cognitive Flexibility

When the relevant literature was examined, it was seen that there were more studies abroad on alexithymia than domestic studies. These studies started with examining psychosomatic patients for the first time in parallel with the emergence of alexithymia. However, studies have shown that alexithymia is also seen in the healthy population. Considering this situation, it is crucial to investigate which variables affect alexithymia in the average population. As a result of the literature review, no study examining the effect of perceived parental attitudes and cognitive flexibility on alexithymia in domestic or abroad.

CHAPTER IV

RESEARCH METHODOLOGY

This chapter includes information about research model, the participants of the research, and the characteristics of the data collection tools used in the research, the data collection process, and the analysis of the data.

4.1. Research Model

The model of this quantitative research was created in accordance with the predictor correlational research method, one of the correlational research models, to determine the predictive power of perceived parental attitude and cognitive flexibility in the study of alexithymia levels in adulthood. Correlational research is conducted to determine the relationships between two or more variables and to find out to what extent these types of relationships exist. In predictive correlational studies, changes in dependent variables are explained depending on one or more independent variables. In this type of researches, when examining the relationships between variables, the value of the other variable is tried to be predicted by moving from one of the variables to which the relationship is established (Büyüköztürk et al., 2019). The variable whose value is known is called the predictor variable and the variable whose value is to be determined is called the criterion variable (Fraenkel et al., 2012). The predictor variables of this research are perceived parental attitude and cognitive flexibility, while the criterion variable is alexithymia.

According to the number of predictor variables, predictor correlational patterns can be divided into two parts: single and multi-factor. Since there are two predictor

variables in this study, there is a multi-factor predictor correlational pattern(Büyüköztürk et al., 2019).

4.2. Participants of the Research

The participants consist of 400 adults aged 18 and over who are living in Istanbul and Izmir. University students and people from various professional groups (e.g. workers, tradesmen, housewives, theatergoers, engineers, teachers, psychological counselors) were included. During January, February and March in 2021, data collection was carried out via Google-form based on voluntary participation. Research data was collected by convenience sampling method.

Demographic information about the participants is presented in Table 1, Table 2, Table 3 and Table 4below.

Table 1: *Frequency and percentage values for the gender variable*

Gender	Frequency (n)	Percent (%)
Female	283	70.8
Male	117	29.3
Total	400	100

According to the Table 1, participants consisted of a total of 400 adults, 283 (%70.8) of whom were women and 117 (%29.3) of whom were men.

Table 2: *Frequency and percentage values for the age variable*

Age	Frequency (n)	Percent (%)
18-29	119	29.8
30-59	267	66.8
60+	14	3.5
Total	400	100

According to the Table 2, 119 (%29.8) of the participants were between 18 and 29 years old, 267 (%66.8) were between 30 and 59 years old and 14 (%3.5) were over 60.

Table 3: *Frequency and percentage values for the education status variable*

Education Status	Frequency (n)	Percent (%)
Primary School	8	2.0
High School	65	16.2
Undergraduate Level	267	66.8
Graduate Level	60	15
Total	400	100

Participants' educational status is divided into 5 categories. According to the table 3, numbers of participants for each category are; 8 (%2) Primary School graduates, 65 (%16.3) High School graduates, 267 (%66.8) Undergraduate Level, and 60 (%15) Graduate Level.

Table 4: *Frequency and percentage values for the marital status variable*

Marital Status	Frequency (n)	Percent (%)
Single	177	44.25
Married	223	55.75
Total	400	100

Finally, the marital status of the participants is divided into 2 categories. According to the Table 4, of the participants, 177 (%44.25) were single, and 223 (%55.75) were married reported.

4.3. Data Collection Tools

Demographical Information Form, Twenty-item Toronto Alexithymia Scale (TAS-20), Short Form of the Perceived Parental Attitudes Scale-Child Form (EMBU-C) and Cognitive Flexibility Inventory (CFI) were used to collect data for the present study. The following gives detailed information about these measurement tools.

4.3.1. Demographical Information Form

A personal information form edited by the researcher was used to collect demographic information (Appendix-1) of participants. In this form, there are 4 questions regarding the gender, age, marital status and educational status of the participants.

4.3.2. Twenty-item Toronto Alexithymia Scale (TAS-20)

The scale was developed by Bagby et al. (1994) to assess the levels of alexithymia of individuals. TAS is a self-report scale of 20 items. Each scale item evaluated in a Likert type scale with five intervals as "never (1), rarely (2), sometimes (3), frequently (4), always (5)". The scale has three sub-dimensions: difficulty identifying

feelings, difficulty describing feelings, and external oriented thinking. The scale can be calculated on a total score. There are five negative scored items (4, 5, 10, 18 and 19. items). While the total alexithymia score is the sum of the responses given to all 20 items, the score of each subscale factor is the sum of the responses given to that subscale. The lowest score that can be obtained from the scale is 20 and the highest score is 100. A high score on the scale indicates the presence of a high level of alexithymia. The Cronbach's alpha value of the scale was 0.81, the test-retest reliability was 0.77, and the internal consistency coefficients of the subscales were 0.78, 0.75 and 0.66, respectively (Bagby et al., 1994).

TAS-20 was adapted into Turkish by Güleç et al. in 2009 (Appendix-2). Participants of this study consist of 390 undergraduate and graduate students in total studying at Karadeniz Technical University and Health Education Institute. The Cronbach's alpha value of the scale was 0.78, and the internal consistency coefficients of the subscales were 0.80, 0.57 and 0.63, respectively (Güleç et al., 2009). According to the Tas-20 cut-off score, 51 points taken from the scale were accepted as the lower value and 59 points as the upper value. It was noted that people who scored 59 and above showed pure alexithymic properties (Güleç & Yenel, 2010). Erdem and Eker (2020) conducted a study examining the level of alexithymia in adult groups in terms of different demographic factors. The study involved 410 adults aged between 25 and 65. In this study using TAS-20, which was adapted to Turkish by Güleç et al. (2009), the Cronbach's alpha coefficient of the scale was found to be 0.78 for the whole group. Within the scope of this study, the internal consistency coefficient of TAS-20 was found to be 0.78. In this study, the values found for the sub-dimensions are given in the Table 5.

Table 5: *Internal Consistency Coefficients for TAS-20 sub-dimensions*

Sub-dimensions	Cronbach's Alpha reliability co-efficient
Difficulty Identifying Feelings	0.84
Difficulty Describing Feelings	0.75
External-Oriented Thinking	0.65
Total	0.78

4.3.3. Abbreviated Perceived Parental Attitudes Scale-Child Form (EMBU-C)

Child form of perceived parental attitudes scale developed by Perris et al. (1980) is a self-report scale that evaluates how adults perceive their parents' behaviors and attitudes towards them in childhood. The original name of the scale is Egna Minnen Barndoms Uppfostran (EMBU). The original form of the scale consists of 81 items, and because of its long form, Arrindell et al. (1999) collected data from four different countries and created a final version of 23 items, abbreviated. The scale items are evaluated with four interval grading as "1 = No, never, 2 = Yes, but seldom, 3 = Yes, often, 4 = Yes, most of the time". Participants respond to scale items separately for the mother and father. The scale has three sub-dimensions: rejection, overprotection and emotional warmth. A high score from each subdivision indicates the perception of parental attitude represented by that factor. Only the 17th item among the scale items is scored negatively. Internal consistency coefficients of the scale were evaluated separately for the mother and father and found to range from 0.72 to 0.85 for each subscale (Arrindell et al., 1999).

The Turkish standardization study of the scale was conducted by Dirik et al. (2015) with a study of 271 adults (Appendix-3). As a result of the analyses, it was determined that the scale was valid and reliable and also contained three dimensions

similar to the original. The Cronbach Alpha values for perceived father attitudes calculated within the scope of the scale's reliability analyses are 0.79, 0.73, 0.71, respectively, for the sub-dimensions of emotional warmth, overprotection and rejection. The Cronbach Alpha values for perceived mother attitudes are 0.75, 0.72, and 0.64, respectively, for the dimensions of emotional warmth, overprotection and rejection (Dirik et al., 2015). In this study, the values found for the sub-dimensions are given in the Table 6.

Table 6: *Internal Consistency Coefficients for EMBU-C sub-dimensions*

Sub-dimensions	Cronbach's Alpha reliability co-efficient
<i>Of the Fathers</i>	
Emotional Warmth	0.84
Overprotection	0.82
Rejection	0.85
<i>Of the Mothers</i>	
Emotional Warmth	0.82
Overprotection	0.80
Rejection	0.81

4.3.4. Cognitive Flexibility Inventory (CFI)

The Cognitive Flexibility Inventory (CFI) was developed by Dennis and Vander Wal (2010) to measure the ability of individuals to be aware of alternative options in the face of difficult situations or events, to produce appropriate, harmonious and balanced thought. CFI is a seven-point likert-type self-report scale which consisting of 20 items. The scale includes two sub-dimensions: alternatives and control. There are negative scored items on the scale (2., 4., 7., 9., 11., and 17. items). Three different types of points are obtained from the scale, including total points and points from sub-dimensions. A

high overall score taken from the scale indicates a high level of cognitive flexibility. CFI's reliability analyses were carried out by calculating the internal coefficient of consistency and using test-retest reliability methods. The Cronbach alpha internal consistency coefficient for the entire scale is 0.90 for the first measurement and 0.91 for the second measurement. In both measurements for the alternatives sub-dimension, the internal coefficient of consistency was found to be 0.91. The internal coefficient of consistency for the control sub-dimension was found to be 0.86 in the first measurement and 0.84 in the second measurement (Dennis & Vander Wal, 2010).

The Turkish standardization study of the scale was carried out by Sapmaz and Doğan (2013) (Appendix-4). The study was completed with the participation of 551 university students. Since the original form of the scale is a seven-point likert type that will cause difficulty in terms of Turkish meaning, the Turkish form of the scale was adapted to the five-point likert type. The Cronbach alpha internal consistency coefficient was calculated for the reliability analysis of the scale. The internal consistency coefficient was found to be 0.90 for the entire scale, 0.90 for the alternatives sub-dimension, and 0.84 for the control sub-dimension. The results of the factor analysis showed that the scale was in a two-dimensional structure. According to the data obtained as a result of the analysis of validity and reliability, the adaptation of the scale is largely similar to the original (Sapmaz & Doğan, 2013). Within the scope of this study, the Cronbach's Alpha internal consistency coefficient for CFI was found as 0.93. In this study, the values found for the sub-dimensions are given in the Table 7.

Table 7: *Internal Consistency Coefficients for CFI sub-dimensions*

Sub-dimensions	Cronbach's Alpha reliability co-efficient
Alternatives	0.93
Control	0.86
Total	0.93

4.4. Data Collection Process

Before proceeding the data collection process, authors who developed and adapted the scales were contacted by e-mail and permission was obtained to use the scales (Appendix-5). Then a demographic information form was created. The necessary permissions for the conduct of the research have been obtained from Yeditepe University Ethics Committee (Appendix-6). After the participant's approval, including the information and consent form, an ongoing survey link was created with demographic forms and scales. The data was collected through the fact that one person from each occupational group distributed the online survey form link to their colleagues through online resources. Data collection process started in January 2021 and ended in March 2021. The completion of survey lasted for approximately 10-15 minutes.

4.5. Analysis of the Data

The steps followed in the data analyses procedure is presented in this section. When the data collection process ended, all the data was merged into an excel file. The scale elements on the Excel file were shortened to their subscale and order, and then transferred from the Excel file to SPSS 26. All analyses were performed with IBM Statistical Packages of Social Sciences (SPSS) 26.0 version. Label edits were made for categorical variables and reverse-rated elements of scales were recoded. The total scores

of scales and sub-dimensions were calculated, and missing data was checked. The missing value analysis showed that there was no lost data. Independent sample t-test and one-way variance analysis (ANOVA) were used to compare intergroup averages. Pearson Correlation analysis was conducted to examine whether there was a statistically significant relationship between variables. Hierarchical regression analysis was conducted to examine the predictive power of perceived parental attitudes and cognitive flexibility on alexithymia.

The cognitive approach is the most current theoretical approach to the explanation of emotions. According to this approach, dysfunctional distortions that exist in the cognitive schemes of individuals determine their emotions and behaviors. Alexithymia is also explained as a result of these distortions. These schemes are shaped by the attitude of the family from the first years of life when individuals start the socialization process. Alexithymia was found to be associated with perceived parental attitudes and cognitive flexibility in a literature review. Based on these cognitive approach-based explanations, the predictive power of cognitive flexibility on alexithymia was seen as more important. For this reason, hierarchical regression analysis was used to examine the predictive power of cognitive flexibility on alexithymia by controlling the effect of perceived parental attitude in the study.

4.5.1. Assumption Checks

Before performing hierarchical regression analysis, it was examined whether the scale data met the regression analysis assumptions.

4.5.1.1. Normality Tests

According to Tabachnick and Fidell (2013), skewness and kurtosis values are considered a range of ± 3 as a normal distribution. The data evaluated according to this acceptance are presented in Table 8.

As seen in Table 8 the skewness and kurtosis values of the TAS-20 scale are 0.66 and 0.73. The skewness and kurtosis values for the subscales of TAS-20 are the lowest 0.20 and the highest 0.80. The skewness and kurtosis values of the EMBU-C scale are 0.53 and 1.3. The skewness and kurtosis values for the subscales of EMBU-C for father and mother separately are the lowest -0.73 and the highest 2.8. The skewness and kurtosis values of the CFI scale are -0.97 and 1.9. The skewness and kurtosis values for the subscales of CFI are the lowest -1.2 and the highest 2.6. The Skewness and Kurtosis values were ranged from -3 to +3. This indicates that there is no deviation from the normal distribution (Tabachnick & Fidell, 2013). In light of these results, normality prerequisites are successfully provided in this research.

Table 8: *Skewness and Kurtosis values of dependent and independent variables.*

Variables	n	$\bar{x}$	Skewness	Kurtosis
Alexithymia	400	52.48	0.66	0.73
Difficulty Identifying Feelings	400	15.13	0.80	0.64
Difficulty Describing Feelings	400	13.52	0.76	0.65
Externally-Oriented Thinking	400	23.82	0.20	0.34
Perceived Parental Attitudes				
Rejection-Father	400	13.64	1.82	2.87
Rejection-Mother	400	13.54	1.61	2.76

Emotional Warmth-Father	400	17.65	-0.10	-0.73
Emotional Warmth-Mother	400	19.11	-.27	-0.53
Overprotection-Father	400	19.67	.79	0.31
Overprotection-Mother	400	20.91	.59	-0.15
Cognitive Flexibility	400	77.49	-.97	1.94
Alternatives	400	52.73	-1.21	2.62
Control	400	24.76	-.56	0.30

n=400

In addition, Kolmogorov-Smirnov values were found to be greater than 0.05 for all scales and their sub-dimensions, and distributions were considered normal due to the normal distribution of variable errors in histogram and p-plot graphs.

4.5.1.2. Multicollinearity

In order to avoid multiple linearity problems, the VIF value should be less than 10 and the tolerance value should be greater than 0.10 (Çokluk et al., 2012). In this study, VIF values were found between 1.1 and 3.8, and tolerance values were between 0.26 and 0.66. These scores provided proposition of multicollinearity for VIF and tolerance values.

4.5.1.3. Assumption of Independence of Residuals

The Durbin-Watson coefficient test was performed to examine the independence assumption of residuals. According to Tabachnick and Fidell (2013), it must provide the condition that the value be less than 4, so as not to violate the assumption. In the analysis conducted for this study, the Durbin-Watson value was calculated as 1.85. This value showed that assumptions were not violated.

CHAPTER V

RESULTS

This section describes the analysis and results of the data. Descriptive statistics about the variables, the correlations between study variables, hierarchical regression analysis, and demographic variables are presented in the rest of the chapter.

5.1. Descriptive Statistics

The descriptive statistics for the dependent variable (alexithymia) and two independent variables (perceived parental attitude and cognitive flexibility) of this study are showed in Table 9.

Table 9: *Descriptive statistics for the dependent and independent variables of the study*

Variables	$\bar{x}$	SD	Min-Max
Alexithymia	50.43	9.20	32.00-86.00
Difficulty Identifying Feelings	15.12	5.03	7.00-34.00
Difficulty Describing Feelings	11.90	3.76	5.00-25.00
Externally-Oriented Thinking	23.41	2.90	15.00-33.00
Rejection-Father	10.44	4.16	7.00-28.00
Rejection-Mother	10.33	3.63	7.00-25.00
Emotional Warmth-Father	17.65	5.04	7.00-28.00
Emotional Warmth-Mother	19.12	4.59	7.00-28.00
Overprotection-Father	19.65	5.70	9.00-36.00
Overprotection-Mother	20.88	5.46	10.00-36.00
Cognitive Flexibility	77.48	12.68	21.00-100.00
Alternatives	52.73	8.86	14.00-65.00
Control	24.76	5.57	7.00-35.00

n=400

For alexithymia mean score was 50.43 standard deviation was 9.20 and minimum maximum scores ranged between 32.00 and 86.00. When the mean scores of alexithymia subscales were examined, participants were more likely to use externally-oriented thinking style ($\bar{x}$ =23.41, SD=2.9). When the perceived parental attitudes subscale mean scores were examined; it is seen that each subscale score for mother and father is close to each other, and the participants perceive the mother's overprotection attitude more ($\bar{x}$ =20.88, SD=5.46). For cognitive flexibility mean score was 77.48 standard deviation was 12.68 and scores ranged between 21.00 and 100.00. When the mean scores of cognitive flexibility subscales were examined, participants were more likely to use alternatives ($\bar{x}$ =52.73, SD=8.86).

5.2. Correlations among the Study Variables

The Pearson's correlation coefficients were calculated to aim of revealing the relationship between the variables of the study for TAS-20 EMBU-C and CFI and its subscales, and correlation coefficients matrix is set forth in Table 10.

Table 10: *Pearson correlation coefficients among the study variables*

	TAS-20	DIF	DDF	EOT	R-F	R-M	EW-F	EW-M	O-F	O-M	CFI	A	C
TAS-20	1												
DIF	.89**	1											
DDF	.86**	.69**	1										
EOT	.52**	.19**	.252**	1									
R-F	.22**	.19**	.24**	.04	1								
R-M	.23**	.26**	.17**	.06	.62**	1							
EW-F	-.18**	-.17**	-.20**	-.03	-.46**	-.35**	1						
EW-M	-.13*	-.14**	-.10**	-.03	-.23**	-.46**	.67**	1					
O-F	.17**	.18**	.17*	.01	.60**	.48**	-.16**	-.08	1				
O-M	.18**	.18**	.20**	.02	.39**	.56**	-.12*	-.08	.77**	1			
CFI	-.54**	-.48**	-.49**	-.26*	-.20**	-.27**	.33**	.30**	-.14**	-.19**	1		
A	-.43**	-.35**	-.40**	-.24**	-.19**	-.21**	.34**	.30**	-.07**	-.10**	.93**	1	
C	-.54**	-.53**	-.47**	-.20**	-.16**	-.28**	.21**	.21**	-.21**	-.29**	.80**	.52**	1

**p<0.01 *p<0.05 TAS-20: Toronto Alexithymia Scale. DIF: Difficulty Identifying Feelings. DDF: Difficulty Describing Feelings. EOT: Externally-Oriented Thinking. R-F: Rejection of Father. R-M: Rejection of Mother. EW-F: Emotional Warmth of Father. EW-M: Emotional Warmth of Mother. O-F: Overprotection of Father. O-M: Overprotection of Mother. CFI: Cognitive Flexibility Scale. A: Alternatives. C: Control.

There are no fully understood common ranges in the evaluation of correlation coefficients in terms of size. Pearson correlation coefficients; values between 0.70 and 1.00 are grouped as high, values between 0.70 and 0.30 are medium, and values between 0.30 and 0.00 are low (Büyüköztürk, 2004).

As shown in Table 11, a positive low significant relationship was found between alexithymia total score, difficulty identifying emotions and difficulty describing emotions scores, and the perception score of the parent rejection and parent overprotection attitude in childhood. A negative low significant relationship was found between alexithymia total score, difficulty identifying emotions and difficulty describing emotions scores, and the perception score of the parent emotional warmth attitude in childhood. No relationship was found between externally oriented thinking score and perceived parental attitudes.

A negative low significant relationship was found between cognitive flexibility total score, alternatives and control scores and the perception score of the parent rejection and parent overprotection attitude in childhood. A positive medium significant relationship was found between cognitive flexibility total score and alternatives scores and the perception score of the parent emotional warmth attitude in childhood. A positive low significant relationship was found between control scores and the perception score of the parent emotional warmth attitude in childhood.

A negative medium significant relationship was found between alexithymia total score, difficulty identifying emotions and difficulty describing emotions scores, and cognitive flexibility total score, alternatives and control scores. A negative low significant relationship was found between externally-oriented thinking score, and cognitive flexibility total score, alternatives and control scores.

5.3. Hierarchical Regression Analysis for Alexithymia

Hierarchical regression analysis was carried out within the aim of investigating the predictive power of perceived parenting attitudes and cognitive flexibility on alexithymia. The regression analysis of the measures of the study was shown below in Table 11.

Hierarchical regression analysis identifies the individual variables that affect the result most. In accordance with the hierarchical regression analysis conditions, the order in which the independent variable sets will be entered in the analysis was predetermined (Licht, 2000). Based on the explanations of the cognitive approach about alexithymia, it was desirable to keep the perceived parental attitudes under control and to look at the predictive power of cognitive flexibility on alexithymia. For this reason, the variables were added to the model in the following order.

- Model 1. Perceived Parental Attitudes- Rejection-F, Rejection-M, Emotional Warmth-F, Emotional Warmth-M, Overprotection-F, Overprotection-M
- Model 2. Cognitive Flexibility- Alternatives, Control

Table 11: *The hierarchical regression analysis of alexithymia on account of variables (EMBU-C and CFI)*

		B	SE	β	t	p
1	(Constant)	2.30	.161		14.306	0.000
	Rejection-F	0.060	0.067	0.078	0.891	0.029
	Rejection-M	0.040	0.063	0.045	0.628	0.031
	Emotional Warmth-F	-0.076	0.049	-0.119	-1.537	0.012
	Emotional Warmth-M	-0.018	0.054	-0.025	-0.327	0.044
	Overprotection-F	0.018	0.069	0.025	0.267	0.190
	Overprotection-M	0.078	0.069	0.103	1.131	0.259
2	(Constant)	3.690	0.177		20.824	0.000
	Rejection-F	0.075	0.057	0.097	1.313	0.012
	Rejection-M	0.093	0.074	0.105	1.245	0.009
	Emotional Warmth-F	-0.009	0.042	-0.014	-0.205	0.038
	Emotional Warmth-M	-0.053	0.046	-0.075	-1.144	0.023
	Overprotection-F	0.004	0.058	0.005	0.067	0.447
	Overprotection-M	0.017	0.059	0.022	0.284	0.576
	Alternatives	-0.137	0.034	-0.203	-4.036	0.000
	Control	-0.247	0.029	-0.428	-8.500	0.000

a. Predictors: (Constant), Rejection-F, Rejection-M, Emotional Warmth-F, Emotional Warmth-M, Overprotection-F, Overprotection-M

b. Predictors: (Constant), Rejection-F, Rejection-M, Emotional Warmth-F, Emotional Warmth-M, Overprotection-F, Overprotection-M, Alternatives, Control

c. Dependent Variable: TAS

In regression analysis, perceived parental attitudes in the first step and cognitive flexibility in the second step were added to the analysis. As a result of both models, the predictive power on the alexithymia of variables was found to be significant.

Table 12: Comparison values for hierarchical model

Model	R	R ²	Adjusted R ²	R ² Changed	F	P
1	0.272 ^a	0.074	0.060	-	5.24	0.00
2	0.584 ^b	0.342	0.328	0.268	79.46	0.00

According to the Table 12, Model 1 significantly predict, outcome variable, level of alexithymia in adult and explained % 6 of the total variance $F(6, 394) = 5.23$, $p < 0.05$, adjusted $R^2 = 0.06$. When Model 2 was added to the formulation, it contributed a statistically significant amount (%26) variation. The final two Model accounted for %33 of the overall variation in alexithymia scores. This full two models still reflected statistical significance, $F(8, 392) = 79.46$, $p < 0.05$, adjusted $R^2 = 0.33$.

5.4. Demographic Variables

Normality analysis was checked before starting analyses on demographic variables, and the data was found to have a normal distribution. Differences between scores from Tas-20, EMBU-C and CFI were investigated by 4 demographic variables: gender, age, educational status and marital status. One-way analysis of variance (ANOVA) was carried out for age, educational status and marital status variables. Independent samples t-tests carried out for gender.

5.4.1. Findings of Adult Alexithymia Scores by Gender, Age, Educational Status and Marital Status

The study's third research question was “Do alexithymia scores of adults differ by gender, age, marital status and educational status?” To answer this question independent t-test and one way analysis of variance (ANOVA) was computed. The results of the analyses are set forth in Table 13, Table 14, Table 15, and Table 16.

Table 13: *Independent t-test results related to alexithymia with regard to gender*

					t-test	
					t	Sig. (2-tailed)
	Group	n	$\bar{x}$	SD		
Alexithymia	Female	283	49.30	8.54	-3.91	0.00
	Male	117	53.18	10.16		

* $p < 0.05$

According to Levene's homogeneity variance test result ($p = 0.178$, $p > 0.05$), we call it homogeneous because it is greater than 0.05. As presented in Table 13, there is a significant difference between the scores of female ($\bar{x} = 49.30$, $SD = 8.54$) and male ($\bar{x} = 53.18$, $SD = 10.16$); $t(400) = -3.91$, $p < 0.05$). Total alexithymia scores of men were found to be higher than those of women.

Table 14: Descriptive statistics for alexithymia and one way analysis of variance (ANOVA) results of alexithymia levels with regard to age

Descriptive

Groups	n	$\bar{x}$	SD	Min	Max
1. (18-29)	119	53.66	9.84	33.00	86.00
2. (30-59)	267	49.27	8.61	32.00	80.00
3. (60-65)	14	45.21	7.06	33.00	58.00

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.	Sig. difference
	Between Groups	1980.69	3	990.34	12.36	0.00	1-2
Alexithymia	Within Groups	31805.35	397	80.11			1-3
	Total	33786.04	400				

*p<0.05

According to Levene's homogeneity variance test result ($p=0.26$, $p>0.05$), the distribution of variances is homogeneous. As presented in Table 14, there is a significant difference between age and alexithymia total scores, $F(3,397)=12.36$, $p(p=.00)<0.05$.

Post hoc analysis of these data was carried out by Tukey test. According to Tukey test results, people aged "18-29" have significantly higher alexithymia total scores than people aged "30-59" and "60" and older.

Table 15: *Descriptive statistics for alexithymia and one way analysis of variance (ANOVA) results of alexithymia levels with regard to educational status*

Descriptive						
	n	$\bar{x}$	SD	Min	Max	
1. Primary School	8	57.50	6.85	45.00	66.00	
2. High School	65	53.77	10.21	34.00	80.00	
3. Undergraduate Level	267	49.98	8.68	32.00	86.00	
4. Graduate Level	60	47.88	9.35	32.00	74.00	

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Alexithymia	Between Groups	1568.45	4	522.82	6.43	0.00
	Within Groups	32217.59	396	81.36		
	Total	33786.04	400			

*p<0.05

According to Levene's homogeneity variance test result ($p=0.26$, $p>0.05$), the distribution of variances is homogeneous. As presented in Table 15, there is a significant difference between educational status and alexithymia total scores, $F(4,396)=6.43$, $p(p=.00)<0.05$. Post-hoc analysis of these data was carried out through the Tukey test. According to the Tukey test results, "primary school" education status has significantly higher alexithymia total scores than "graduate level" education status and "high school" education status has significantly higher alexithymia total scores than "undergraduate level" and "graduate level" education status.

Table 16: *Independent t-test results related to alexithymia with regard to marital status*

					t-test	
					t	Sig. (2-tailed)
	Group	n	$\bar{x}$	SD		
Alexithymia	Single	117	51.91	10.00	2.90	0.06
	Married	223	49.25	8.36		

* $p < 0.05$

According to Levene's homogeneity variance test result ($p = 0.67$, $p > 0.05$), the distribution of variances is homogeneous. As presented in Table 16, there is no significant difference between scores of single ($\bar{x} = 51.91$, $SD = 10.00$) and married ($\bar{x} = 49.25$, $SD = 8.36$); $t(400) = 2.90$, $p > 0.05$).

5.4.2. Findings of Perceived Parental Attitude Scores by Gender, Age, Educational Status and Marital Status

The study's fourth research question was "Do perceived parental attitude scores of adults differ by gender, age, marital status and educational status?" To answer this question independent t-test and one way analysis of variance (ANOVA) was computed. The results of the analyses are set forth in Table 17, Table 18, Table 19 and Table 20.

Table 17: *Independent t-test results related to sub-dimensions of perceived parental attitude with regard to gender*

	Group	n	$\bar{x}$	SD	t- test	
					t	Sig. (2-tailed)
Rejection-F	Female	283	10.28	4.18	-1.16	0.248
	Male	117	10.81	4.13		
Rejection-M	Female	283	10.52	3.91	1.84	0.067
	Male	117	9.87	2.83		
Emotional Warmth-F	Female	283	17.93	4.86	1.70	0.090
	Male	117	16.99	5.43		
Emotional Warmth-M	Female	283	19.06	4.55	-0.42	0.673
	Male	117	19.27	4.70		
Overprotection-F	Female	283	20.05	6.01	2.43	0.016
	Male	117	18.68	4.75		
Overprotection-M	Female	283	21.25	5.73	2.33	0.020
	Male	117	19.97	4.65		

*p<0.05

According to Levene's homogeneity variance test result of perceived parental attitudes sub-dimensions, the distribution of variances is homogeneous (Respectively, p=0.71; p=0.69; p=0.22; p=0.72; p=0.58; p=0.53). As shown in Table 17, there is a significant difference among overprotection sub-dimensions of father between the scores of female

($\bar{x}$ =20.05, SD=6.01) and male ($\bar{x}$ =18.68, SD=4.75); $t(400)=2.43$, $p<0.05$). Female perceived father rejection scores were higher than those of men. There is a significant difference among overprotection sub-dimensions of mother between the scores of female ($\bar{x}$ =21.25, SD=5.73) and male ($\bar{x}$ =19.97, SD=4.65); $t(400)=2.33$, $p<0.05$). The perceived mother's overprotective attitude score was found to be higher in female than in male.

Table 18: *Descriptive statistics for perceived parental attitudes and one way analysis of variance (ANOVA) results of sub-dimensions of perceived parental attitude with regard to age*

Descriptive

	Groups	n	$\bar{x}$	SD	Min	Max
Rejection-F	1. (18-29)	119	10.50	3.87	7.00	26.00
	2. (30-59)	267	10.39	4.33	7.00	28.00
	3. (60-65)	14	10.79	3.64	7.00	20.00
Rejection-M	1. (18-29)	119	10.39	3.31	7.00	22.00
	2. (30-59)	267	10.31	3.84	7.00	25.00
	3. (60-65)	14	10.07	2.27	7.00	14.00
Emotional Warmth-F	1. (18-29)	119	17.22	5.37	7.00	28.00
	2. (30-59)	267	17.84	4.94	7.00	28.00
	3. (60-65)	14	17.86	4.24	13.00	25.00
Emotional Warmth-M	1. (18-29)	119	19.74	4.41	11.00	28.00
	2. (30-59)	267	18.84	4.68	7.00	28.00
	3. (60-65)	14	19.29	4.07	13.00	25.00
Overprotection-F	1. (18-29)	119	20.24	6.05	9.00	36.00
	2. (30-59)	267	19.35	5.59	9.00	36.00
	3. (60-65)	14	20.29	4.60	12.00	27.00
Overprotection-M	1. (18-29)	119	22.17	5.29	10.00	35.00
	2. (30-59)	267	20.30	5.52	10.00	36.00

3. (60-65)	14	20.93	3.83	15.00	29.00
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ANOVA

		Sum of Squares	df	Mean Square	F	Sig.	Sig. difference
Rejection-F	Between Groups	2.84	3	1.42	0.08	0.92	
	Within Groups	6925.60	397	17.45			
	Total	6928.44	400				
Rejection-M	Between Groups	1.38	3	0.69	0.05	0.95	
	Within Groups	5276.72	397	13.29			
	Total	5278.10	400				
Emotional Warmth-F	Between Groups	32.65	3	16.33	0.64	0.53	
	Within Groups	10131.43	397	25.52			
	Total	10164.08	400				
Emotional Warmth-M	Between Groups	67.14	3	33.57	1.60	0.20	
	Within Groups	8327.86	397	20.98			
	Total	8395.00	400				
Overprotection-F	Between Groups	70.12	3	35.06	1.08	0.34	
	Within Groups	12895.18	397	32.48			
	Total	12965.30	400				
Overprotection-M	Between Groups	286.25	3	143.12	4.89	0.00	1-2
	Within Groups	11616.00	397	29.26			
	Total	11902.24	400				

*p<0.05

According to Levene's homogeneity variance test result of perceived parental attitudes sub-dimensions, the distribution of variances is homogeneous (Respectively, $p=0.21$; $p=0.10$; $p=0.96$; $p=0.08$; $p=0.10$; $p=0.12$). As presented in Table 18, there is a significant difference between age and mother overprotection scores, $F(3,397) = 4.89$, $p(p=.00) < 0.05$. Post hoc analysis of these data was carried out by Tukey test. According to Tukey test results, people aged "18-29" have significantly higher mother overprotection scores than people aged "30-59".

Table 19: Descriptive statistics for perceived parental attitudes and one way analysis of variance (ANOVA) results of sub-dimensions of perceived parental attitude with regard to educational status

<i>Descriptive</i>						
	Groups	n	$\bar{x}$	SD	Min	Max
Rejection-F	1. Primary School	8	10.62	3.42	7.00	18.00
	2. High School	65	10.80	4.70	7.00	26.00
	3. Undergraduate Level	267	10.49	4.24	7.00	28.00
	4. Graduate Level	60	9.78	3.23	7.00	23.00
Rejection-M	1. Primary School	8	10.88	3.90	7.00	20.00
	2. High School	65	10.23	3.50	7.00	22.00
	3. Undergraduate Level	267	10.24	3.62	7.00	25.00
	4. Graduate Level	60	10.73	3.88	7.00	25.00
Emotional Warmth-F	1. Primary School	8	16.38	3.46	10.00	22.00
	2. High School	65	16.17	5.61	7.00	27.00
	3. Undergraduate Level	267	17.73	4.99	7.00	28.00
	4. Graduate Level	60	19.13	4.44	7.00	28.00
Emotional Warmth-M	1. Primary School	8	16.38	3.66	10.00	22.00
	2. High School	65	18.34	4.63	7.00	27.00
	3. Undergraduate Level	267	19.31	4.66	8.00	28.00
	4. Graduate Level	60	19.48	4.16	10.00	28.00
Rejection-F	1. Primary School	8	22.38	4.90	16.00	31.00
	2. High School	65	19.29	6.28	11.00	34.00
	3. Undergraduate Level	267	19.83	5.58	10.00	36.00

	4. Graduate Level	60	18.85	5.64	9.00	36.00
Rejection-M	1. Primary School	8	22.25	4.62	17.00	31.00
	2. High School	65	21.37	5.54	12.00	33.00
	3. Undergraduate Level	267	20.73	5.37	10.00	36.00
	4. Graduate Level	60	20.85	5.93	10.00	36.00

ANOVA

		Sum of Squares	df	Mean Square	F	Sig. difference	
Rejection-F	Between Groups	69.18	4	17.29	0.99	0.41	
	Within Groups	6859.26	396	17.37			
	Total	6928.44	400				
Rejection-M	Between Groups	25.47	4	6.37	0.48	0.75	
	Within Groups	5252.63	396	13.30			
	Total	5279.00	400				
Emotional Warmth-F	Between Groups	291.76	4	72.94	2.92	0.02	
	Within Groups	9872.31	396	24.99		3-2	
	Total	10164.08	400				
Emotional Warmth-M	Between Groups	157.45	4	39.36	1.89	0.11	
	Within Groups	8237.54	396	20.86			
	Total	8395.00	400				
Overprotection-F	Between Groups	130.92	4	32.73	1.01	0.40	
	Within Groups	12834.38	396	32.49			
	Total	12965.30	400				
Overprotection-M	Between Groups	44.95	4	11.24	0.37	0.83	
	Within Groups	11857.29	396	30.02			
	Total	11902.24	400				

* $p < 0.05$

According to Levene's homogeneity variance test result of perceived parental attitudes sub-dimensions, the distribution of variances is homogeneous (Respectively, $p=0.25$; $p=0.31$; $p=0.26$; $p=0.11$; $p=0.14$; $p=0.36$).

As presented in Table 19, there is a significant difference between educational status and father emotional warmth attitude scores. Post-hoc analysis of these data was carried out through the Tukey test. According to the Tukey test results, for the perceived father's emotional warmth attitude scores of high school education status and graduate level education status significant difference from each other. Perceived father's emotional warmth scores were found to be higher in graduate level education status than in high school education status.

Table 20: *Independent t-test results related to sub-dimensions of perceived parental attitude with regard to marital status*

	Group	n	$\bar{x}$	SD	t- test	
					t	Sig. (2-tailed)
Rejection-F	Single	283	11.02	4.54	2.50	0.112
	Married	117	10.00	3.79		
Rejection-M	Single	283	11.00	3.79	3.34	0.237
	Married	117	9.80	3.43		
Emotional Warmth-F	Single	283	17.23	5.35	-1.51	0.133
	Married	117	18.00	4.78		
Emotional Warmth-M	Single	283	19.18	4.71	0.20	0.838
	Married	117	19.10	4.49		
Overprotection-F	Single	283	20.26	5.97	1.92	0.055
	Married	117	19.16	5.44		
Overprotection-M	Single	283	21.66	5.45	2.60	0.061
	Married	117	20.26	5.40		

*p<0.05

According to Levene's homogeneity variance test result of perceived parental attitudes sub-dimensions, the distribution of variances is homogeneous (Respectively, p=0.60;

$p=0.48$; $p=0.33$; $p=0.42$; $p=0.18$; $p=0.20$). As presented in Table 20, there is no significant difference between marital status and perceived parental attitudes.

5.4.3. Findings of Cognitive Flexibility Scores by Gender, Age, Educational Status and Marital Status

The study's fifth research question was “Do cognitive flexibility scores of adults differ by gender, age, marital status and educational status?” To answer this question independent t-test and one way analysis of variance (ANOVA) was computed. The results of the analyses are set forth in Table 21, Table 22, Table 23 and Table 24.

Table 21: *Independent t-test results related to cognitive flexibility with regard to gender*

		t-test				
		n	$\bar{x}$	SD	t	Sig. (2-tailed)
Group						
Cognitive Flexibility	Female	283	77.34	11.47	-0.36	0.72
	Male	117	77.84	15.26		

* $p<0.05$

According to Levene's homogeneity variance test result ($p=0.35$, $p>0.05$), we call it homogeneous because it is greater than 0.05. As presented in Table 21, there is no significant difference between the scores of female ($\bar{x}=77.34$, $SD=11.47$) and male ($\bar{x}=77.84$, $SD=15.26$); $t(400)=-.36$, $p(p=0.72)>0.05$).

Table 22: *Descriptive statistics for cognitive flexibility and one way analysis of variance (ANOVA) results of cognitive flexibility with regard to age*

<i>Descriptive</i>						
Groups	n	$\bar{x}$	SD	Min	Max	
1. (18-29)	119	75.40	13.67	21.00	98.00	
2. (30-59)	267	78.22	12.25	31.00	100.00	
3. (60-65)	14	81.00	10.21	58.00	100.00	

<i>ANOVA</i>						
		Sum of Squares	df	Mean Square	F	Sig. difference
Cognitive	Between Groups	834.72	3	417.36	2.62	0.07
Flexibility	Within Groups	63301.16	397	159.45		
	Total	64135.88	400			

* $p < 0.05$

According to Levene's homogeneity variance test result ($p = 0.12$, $p > 0.05$), the distribution of variances is homogeneous. As presented in Table 22, there is no significant difference between age and cognitive flexibility total scores, $F(3,397) = 2.62$, $p(p = 0.07) > 0.05$.

Table 23: *Descriptive statistics for cognitive flexibility and one way analysis of variance (ANOVA) results of cognitive flexibility with regard to educational status*

Descriptive							
		n	$\bar{x}$	SD	Min	Max	
1. Primary School		8	74.00	9.68	60.00	90.00	
2. High School		65	73.20	15.76	31.00	100.00	
3. Undergraduate Level		267	78.09	11.80	21.00	100.00	
4. Graduate Level		60	79.90	12.22	30.00	97.00	
ANOVA							
		Sum of Squares	df	Mean Square	F	Sig.	Sig. difference
Cognitive	Between Groups	1737.06	3	579.02	3.68	0.012	3-2
Flexibility	Within Groups	62398.82	397	157.57			4-2
Total		64135.88	400				

* $p < 0.05$

According to Levene's homogeneity variance test result ($p = 0.22$, $p > 0.05$), the distribution of variances is homogeneous. As presented in Table 23, there is a significant difference between educational status and cognitive flexibility total scores. Post-hoc analysis of these data was carried out through the Tukey test. According to the Tukey test results, "high school" education status, "undergraduate level" education status and "graduate level" education status significant difference from each other. "Undergraduate level" education status and "graduate level" education status are higher than "high school" education status for cognitive flexibility total scores.

Table 24: *Independent t-test results cognitive flexibility with regard to marital status*

					t-test	
					Sig. (2-tailed)	
	Group	n	$\bar{x}$	SD	t	
Cognitive Flexibility	Single	177	76.31	13.86	-1.65	0.100
	Married	223	78.41	11.60		

* $p < 0.05$

According to Levene's homogeneity variance test result ($p=0.79$, $p > 0.05$), the distribution of variances is homogeneous. As presented in Table 24, there is no significant difference between the scores of single ($\bar{x}=76.31$, $SD=13.86$) and male ($\bar{x}=78.41$, $SD=11.60$); $t(400)=-1.65$, $p(p=0.10) > 0.05$).

CHAPTER VI

DISCUSSION

This study examined the predictive power of perceived parental attitudes and cognitive flexibility on adult alexithymia levels. In this section, the findings obtained for the primary purpose and sub-purposes of the research are interpreted and discussed in the order in the light of the relevant literature.

6.1.1. Discussion of Findings on the power of Perceived Parental Attitudes and Cognitive Flexibility to Predict Adult Alexithymia Levels

The study's main aim was to examine whether perceived parental attitudes and cognitive flexibility predicted adult alexithymia levels. When the results of hierarchical regression analysis findings were examined for this purpose, it was found that perceived parental attitudes and cognitive flexibility significantly predicted adults' alexithymia levels.

In the first step of hierarchical regression analysis, sub-dimensions of the perceived parental attitudes were added to the system. From these sub-dimensions, it is seen that the rejection attitude of the mother and father significantly positive predictor of adult alexithymia levels, and the emotional warmth of the mother and father significantly negative predictor of adult alexithymia levels. These results in this direction are consistent with the studies in the literature examining the relationships between perceived parenting attitudes and alexithymia (e.g., Berenbaum & James, 1994; Lumley et al., 1996; Kench & Irwin, 2000; Mason et al., 2005; De Panfilis et al., 2008; Karuviki et al., 2011; Cuzzocrea et al., 2015; Pellerone et al., 2017; Zdankiewicz-Ścigala et al., 2019). It

can be thought that the reason for this situation is that individuals' parental attitudes shape their emotional worlds. It is seen that the perceived overprotective attitude of parents does not significantly predict adult alexithymia levels. This result was compatible with other studies in the literature (e.g., Fukunishi et al., 1997; Thorberg et al., 2011).

In the second phase of hierarchical regression analysis, sub-dimensions of the cognitive flexibility scale were added to the system. As a result of the analysis, it is seen that alternatives and control sub-dimensions are a significant negative predictor of adult alexithymia levels. These results in this direction are consistent with research examining the relationship between alexithymia and cognitive flexibility in the literature (e.g., Romero-Martinez et al., 2019; Ghadampour et al., 2019; Sirait, 2019; Atadokht & Ahmadi, 2021). As a cause of this condition, individuals with low cognitive flexibility may be shown to have a low ability to notice, recognize, and understand emotions.

Considering the r-square changes in hierarchical multiple regression analysis results, cognitive flexibility is the strongest predictor of alexithymia. Correlation results also supported this finding. Based on the explanation of alexithymia according to cognitive theory, this study showed the prediction to which perceived parental attitudes and cognitive flexibility explain the level of alexithymia of adults. The study's findings showed that, as predicted by cognitive theory, alexithymia is associated with individuals' emotional and cognitive development processes. In addition, according to the results of the research, the most potent predictor of alexithymia is cognitive flexibility. These findings, in general, have been found to support the assumptions of cognitive theory about alexithymia.

6.1.2. Discussion of Findings on Relationship between Perceived Parental Attitudes, Cognitive Flexibility and Alexithymia

The second research question of this study was to examine the relationship between perceived parental attitudes, cognitive flexibility, and alexithymia. As a result of the Pearson correlation analysis, the relationships between these variables were studied in light of the relevant literature.

A significant positive correlation was found between the total alexithymia score, difficulty identifying feelings and difficulty describing feelings scores, and the perception scores of perceived rejection parental attitude and perceived overprotection parental attitude. This result is consistent with research in the literature that found a significant positive association between alexithymia and negative parental styles (e.g., Kench & Irwin, 2000; Mason et al., 2005; Karuviki et al., 2011; Thorberg et al., 2011; Cuzzocrea et al., 2015; Pellerone et al., 2017; Zdankiewicz-Ścigala et al., 2019).

A significant negative correlation was found between the total alexithymia score, difficulty identifying feelings and difficulty describing feelings scores, and the perception scores of perceived emotional warmth parental attitude. This result is consistent with research in the literature that found a significant negative association between alexithymia and positive parental styles (e.g., Berenbaum & James, 1994; Kench & Irwin, 2000; Thorberg et al., 2011; Hussain & Ahmed, 2014; Cuzzocrea et al., 2015; Pellerone et al., 2017). No association was found between the externally oriented thinking score, the third sub-factor of alexithymia, and perceived parental attitudes. This result was also compatible with the relevant literature (e.g., Kench & Irwin, 2000; Fukunishi et al., 1997; Thorberg et al., 2011).

A significant positive relationship was found between the perception scores of perceived emotional warmth parental attitudes and total scores of alternatives sub-dimension, control sub-dimension, and cognitive flexibility. This result was found to be consistent with research in the literature that found a significant positive relationship between cognitive flexibility and positive parental styles (e.g., Asghari & Besharat, 2011; Wu et al., 2020).

A significant negative relationship was found between the perception scores of perceived rejecting parental attitude and perceived overprotection parental attitude and the total scores of alternatives sub-dimension, control sub-dimension and cognitive flexibility. This result was consistent with research in the literature that found a significant negative relationship between cognitive flexibility and negative parental styles (e.g., Roehling & Robin, 1986; Wu et al., 2020).

A significant negative relationship was found between the total scores of individuals with difficulty identifying feelings, difficulty describing feelings, externally-oriented thinking and alexithymia, and the total scores of alternatives, control and cognitive flexibility. These results in this direction are consistent with the literature examining the relationships between cognitive flexibility and alexithymia (e.g., Romero-Martinez et al., 2019; Ghadampour et al., 2019; Sirait, 2019; Atadokht & Ahmadi, 2021).

6.1.3. Discussion of Findings on Adult Alexithymia Scores According to Gender, Age, Educational Status and Marital Status Variables

The third research question of this study was to examine whether adults' alexithymia scores differed by gender, age, educational status, and marital status. As a result of an independent sample t-test, it was found that the alexithymia scores of adults differed

significantly according to gender. Men's alexithymia scores were found to be higher than women's. These results are consistent with studies in the relevant literature that found a higher alexithymia level in males (e.g., Lane et al., 1998; Salminen et al., 1999; Kokkonen et al., 2001; Matilda et al., 2006; Erdem& Eker, 2020). This may be because women are better at recognizing and expressing their feelings than men.

As a result of the one-way ANOVA test performed in the second stage, it was found that the alexithymia scores of adults differed significantly according to age. It was found that people between the ages of 18 and 29 had higher levels of alexithymia than people between the ages of 30 and 65. This result is consistent with research in the literature that found a significant negative relationship between alexithymia and age (e.g., Bağcı, 2008; Erdem& Eker, 2020). It has been observed that with increased age, there is a decrease in the level of alexithymia.

As a result of the one-way ANOVA test performed in the third stage, it was found that the alexithymia scores of adults differed significantly according to their educational status. It was found that alexithymia scores of people who graduated from Primary School were higher than those who had from graduation level, and people who graduated from high school were higher than those who had an undergraduate and graduate degree. This result is consistent with research in the literature that found a significant negative association between alexithymia and education status (e.g., Lane et al., 1998; Salminen et al., 1999; Kokkonen et al., 2001; Mattila et al., 2006; Batıgün& Büyükşahin, 2008). By causing this result, it can be considered that the increased level of education is inversely related to alexithymia.

As a result of the independent sample t-test performed in the fourth stage, it was observed that the alexithymia scores of adults did not differ according to the marital status. This result was also found to be compatible with the relevant literature (e.g., Matilla et al., 2006; Joukamma et al., 1996; Salminen et al., 1999; Honkalampi et al., 2000; Kokkonen et al., 2001; Durak Batıgün & Büyükşahin, 2008).

6.1.4. Discussion of Findings on Perceived Parental Attitudes Scores According to Gender, Age, Educational Status and Marital Status Variables

The fourth research question of this study was to examine whether perceived parental attitudes scores differed by gender, age, educational status, and marital status. As a result of an independent sample t-test, it was found that the perceived overprotection attitude differed significantly according to gender. Perceived overprotection paternal attitude and maternal attitude scores were found to be higher in women than in men. This result was found to be compatible with the research results of Someya et al. (1999) in the relevant literature. In addition, some studies find a relationship between gender and perceived rejection and emotional warmth parental attitudes (Petrowski et al., 2009; Demirsu, 2018; Cankardaş, 2019). Cultural traits and gender roles influence parents' styles of raising their children. As a reason why their mothers raised the participants in this study with an overprotective attitude, it can be considered that the view that girls need more protection than boys has been accepted by our society.

As a result of the one-way ANOVA test conducted in the second stage, it was found that the perceived parental attitude scores differed significantly according to age. The perceived mother overprotection attitude score was higher in people aged 18-29 than in those aged 30-59. This result was found to be compatible with the research results of

Someya et al. (1999) in the relevant literature. There is no consensus on which sub-dimensions of perceived parenting attitudes are associated with age in the relevant literature. Considering that participants' perceived mother overprotection attitude scores were higher and the probability of recalling memories would decrease as age increased, the high perceived maternal protective attitude scores of this age group were expected.

As a result of the one-way ANOVA test conducted in the third stage, it was found that the perceived parental attitude scores differed significantly according to educational status. It was found that perceived father's emotional warmth attitude scores of people who graduated from undergraduate education status were higher than those from high school. This result was found to be consistent with research in the literature (Soyyigit, 2019).

As a result of an independent sample t-test conducted in the fourth stage, it was found that the perceived parental attitude scores did not differ according to marital status. This result was also compatible with the relevant literature (e.g., Kıray, 2018; Saral, 2018; Soyyigit, 2019).

6.1.5. Discussion of Findings on Cognitive Flexibility Scores According to Gender, Age, Educational Status and Marital Status Variables

The fifth research question of this study was to examine whether cognitive flexibility scores differed by gender, age, educational status, and marital status. As a result of the independent sample t-test, it was found that the cognitive flexibility scores were not significantly differentiated according to gender. These results in this direction are consistent with the studies in the literature examining the relationships between cognitive

flexibility and gender (e.g., Çuhadaroğlu, 2011; Altunkol, 2011; Üzümcü & Müezzini, 2018; Karayol& Doğar, 2020; Sucu, 2020).

As a result of the one-way ANOVA test conducted in the second stage, it was found that cognitive flexibility scores were not significantly differentiated according to age. These results in this direction are consistent with the studies in the literature examining the relationships between cognitive flexibility and age (e.g., Asıcı& İkiz, 2015; Karayol& Doğar, 2020).

As a result of the one-way ANOVA test conducted in the third stage, it was found that cognitive flexibility scores differed significantly according to educational status. It was found that cognitive flexibility scores of people who graduated from high school were lower than those who graduated from undergraduate and graduate levels. When the relevant literature is examined, it has been observed that there are not many studies examining the relationship between cognitive flexibility and educational status. The result in this direction was found in the literature by the relevant study (Güzeltepe, 2017)

As a result of the independent sample t-test conducted in the fourth stage, it was observed that the cognitive flexibility scores did not differ according to marital status. This result was also compatible with the relevant literature (Güzeltepe, 2017; Karayol & Doğar, 2020).

6.2. Implications, Recommendations and Limitations

This section includes implications and recommendations for practitioners, field researchers and policy makers, and limitations based on study results.

6.2.1. Implications and Recommendations for Practitioners

The study results show that perceived parental attitudes and cognitive flexibility are predictors of alexithymia, and this result was also found to be compatible with correlation analysis. When the regression analysis results are examined, it is seen that the positive contribution of perceived negative parental attitudes to the prediction of adults' alexithymia level and the negative contribution of perceived positive parental attitudes and cognitive flexibility to the prediction of adults' alexithymia level. In order to minimize the negative attitudes of parents towards their children, it can be ensured that they are directed to informative pieces of training on child-rearing, and family counseling programs can be given importance. Individual or group counseling programs can be prepared for people who have grown up with a negative parental attitude. In addition, considering that cognitive flexibility and adults' alexithymia levels are negatively related to each other, it is thought that including activities and interventions for cognitive flexibility in family counseling programs may produce positive results.

The result of the study was shown that men's levels of alexithymia were higher than in women. Gender inequality and gender-based stereotypes can be considered as the cause of this situation. Domestic attitudes can be seen as the first place where gender inequality begins. Because mothers and fathers see their daughters as more vulnerable and in need of protection, they raise them from this point of view. They raise their sons

with the idea that they are strong and do not need protection. This phrase, widely used in Turkish society, men do not cry, is the best representation of this situation. In addition, the interactions of boys and girls with peer groups are also different. Girls' communication foundations are based on being intimate and building relationships, while boys are based on competition and teamwork. As a result of this competitive attitude among men, men of emotional nature are known to be excluded from the group. Thus, children who want to be accepted themselves, both in the family and in the group of friends, learn to hide their feelings, and they also cannot develop a vocabulary or awareness for their feelings.

There is discrimination between men and women as a result of false attitudes arising from gender stereotypes that have settled in our subconscious. For example, when the stereotypes about women are considered, emotional, compassionate, powerless, and delicate etc. come to mind. For men, however, concepts such as strong, callous, protective and head of the family come to mind. In this case, both women and men are forced to live in accordance with the roles they are assigned.

As a result, looking at gender inequality and gender-based stereotypes, it becomes clear why men's abilities to understand and express their feelings are lower than women's. For this purpose, individual or group psychological counseling programs can be prepared for male alexithymic individuals to make sense and notice of emotions.

The result of the study was showed that the increased level of alexithymia is associated with a decreased level of education. Accordingly, psychoeducation programs can be prepared on the awareness and expression of emotions at every level of education, starting from kindergartens.

6.2.2. Implications and Recommendations for Field Researchers

First, given the limitations of this study, it is recommended that the research be conducted with the same variables as a larger group of participants. While this study examined the predictive power of perceived parental attitude and cognitive flexibility in exploring alexithymia levels in adulthood, it was not looked at which variable affected the other. It may be helpful to conduct path analysis at future research taking this into account.

In order to better understand the causes of alexithymia, more comprehensive results can be obtained by conducting qualitative research. Due to the hierarchical regression design of this study, no inference can be made about causality. Therefore, using more potent research methods, the dynamics between alexithymia perceived parental attitudes and cognitive flexibility can be explored.

Finally, given the limited number of studies conducted on alexithymia in our country, especially in a healthy population, it may be helpful to conduct more research on different groups on the prevalence, causes and relationships of alexithymic traits.

6.2.3. Implications and Recommendations for Policy Makers

In order to minimize alexithymic characteristics, studies can be conducted on parental attitudes that have a significant effect on human life. For this purpose, couples who marry can be educated in municipalities, and parents who have children can be educated through family medicine services.

In order to increase cognitive flexibility, which has a predictive effect on alexithymic characteristics, appropriate educational environments and curriculum

arrangements can be made at education levels to take precautions starting from childhood.

6.2.3. Limitations

The limitations of the current research can be evaluated as follows; because the research reached a limited number of participants, it could not be carried out through a sample group representing the healthy population in Turkey. The lack of a balanced distribution between the genders of participants and the fact that the number of female participants was greater than that of men also limited the study. Similarly, the fact that the age distributions of participants aged 18-65 was not equal limited the generalizability of the results to all age groups. In addition, looking at the educational status of the participants, it is seen that the majority have an undergraduate degree. This, in turn, may have brought some limitation to the study.

Another limitation of the research is that the scales used are based on self-report. Data collected through scales is limited to participants' responses. Participants may have tried to show themselves well. This, in turn, can be considered a limitation for the results of the study. The perceived parental attitudes scale-the child form is based on participants' recollection of childhood memories. In this case, participants may have had difficulty remembering and evaluating their memories.

REFERENCES

- Afat, N. (2013). Çocuklarda üstün zekanın yordayıcı olarak ebeveyn tutumları. *Hasan Ali Yücel Eğitim Fakültesi Dergisi*, 20, 155-168. <https://dergipark.org.tr/tr/pub/iuhayefd/issue/8798/109970>
- Ahrens, S., & Deffner, G. (1986). Empirical study of alexithymia: Methodology and results. *American Journal Of Psychotherapy*, 40(3), 430-447. <https://doi.org/ghzt>
- Altıntaş, T. (2019). Algılanan ebeveyn tutumlarının koşullu öz-değerdeki rolü ve depresyon ile ilişkisi (Master's thesis, Yakın Doğu Üniversitesi, Lefkoşa). Docs. <http://docs.neu.edu.tr/library/6789235295.pdf>
- Altunkol, F. (2017). *Bilişsel esneklik eğitim programının lise öğrencilerinin bilişsel esneklik ile algılanan stres düzeylerine ve stresle başa çıkma tarzlarına etkisi* (Master's thesis, Çukurova Üniversitesi, Adana). Yök Tez. <https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp>
- Asghari, M. S., & Besharat, M. A. (2011). The relation of perceived parenting with emotional intelligence. *Procedia-Social and Behavioral Sciences*, 30, 231–235. <https://doi.org/10.1016/j.sbspro.2011.10.046>
- Asıcı, E., & İkiz, F. (2015). Mutluluğa giden bir yol: Bilişsel esneklik. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, 1(35), 191-211. <https://bit.ly/3cJkDN1>
- Atadokht A., & Ahmadi Sh. (2021). Investigating the pattern of structural relationships of mobile phone dependence based on cognitive flexibility with the mediating role of alexithymia in students of mohaghegh ardabili university in 2020. *J Rafsanjan Univ Med Sci* 2021, 19 (11): 1179-1194. <http://journal.rums.ac.ir/article-1-5708-en.html>
- Arrindell, W. A., Sanavio, E., Aguilar, G., Sica, C., Hatzichristou, C., Eisemann, M., Kallai, J., van der Ende, J. (1999). The development of a short form of the EMBU1: Its appraisal with students in Greece, Guatemala, Hungary and Italy. *Personality and Individual Differences*, 27(4), 613–628. [https://doi.org/10.1016/S0191-8869\(98\)00192-5](https://doi.org/10.1016/S0191-8869(98)00192-5)

- Bagby, R. M., Parker, J. D. A., & Taylor, G. J. (1994). The twenty-item Toronto Alexithymia scale—I. Item selection and cross-validation of the factor structure. *Journal of Psychosomatic Research*, 38(1), 23–32. <https://doi.org/dp959x>
- Bağcı, T. (2008). *Üniversite öğrencilerinin aleksitimi düzeylerinin bazı değişkenlere göre incelenmesi* (Gazi Üniversitesi, Gazi Eğitim Fakültesi Örneği) (Master's thesis, Gazi Üniversitesi, Ankara]. 9lib. <https://bit.ly/3fTQoF3>
- Bakırcıoğlu, R. (2012). Duygu. *Ansiklopedik Eğitim ve Psikoloji Sözlüğü* (1. ed., p. 414).
- Balta, Ş. N. (2020). *Genç yetişkin bireylerin bilişsel esneklik düzeylerinin, ölüm kaygısı düzeyleri ve mutluluk düzeylerine etkisinin incelenmesi* (Master's thesis, İstanbul Gelişim Üniversitesi, İstanbul). Yök Tez. <https://bit.ly/3gapBDu>
- Barnett, R. C., Marshall, N. L., & Pleck, J. H. (1992). Adult son-parent relationships and their associations with sons' psychological distress. *Journal of Family Issues*, 13(4), 505-525. <https://doi.org/10.1177/019251392013004007>
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*, 11(1), 56-95. <https://doi.org/b9z>
- Berenbaum, H., & James, T. (1994). Correlates and retrospectively reported antecedents of alexithymia. *Psychosomatic Medicine*, 56(4), 353–359. <https://doi.org/ggqg>
- Berne, E. (1996). Principles of transactional analysis. *Indian Journal of Psychiatry* 38(3):154-159.
- Bilgin, M. (2009). Bilişsel esnekliği yordayan bazı değişkenler. *Çukurova Üniversitesi Eğitim Fakültesi Dergisi*, 36(3), 142-157.
- Borens, R., Grosse-Schulte, E., Jaensch, W., & Kortemme, K.-H. (1977). Is “alexithymia” but a social phenomenon ? *Psychotherapy and Psychosomatics*, 28(1-4), 193–198. <https://dx.doi.org/10.1159/000287063>
- Brown, S., Fite, P. J., Stone, K., & Bortolato, M. (2016). Research article: Accounting for the associations between child maltreatment and internalizing problems: The role of alexithymia. *Child Abuse & Neglect*, 52, 20–28. <https://doi.org/f8d4z2>
- Büyüköztürk, Ş. (2004). Sosyal Bilimler için Veri Analizi El Kitabı. Pegem A Yayıncılık.

- Cankardaş, S. (2019). Kadın ve erkeklerde olumsuz değerlendirilme korkusunun belirlenmesinde algılanan ebeveyn tutumları ve benlik saygısının rolü. *Psikoloji Çalışmaları*, 39(1), 79-97. <https://dx.doi.org/10.26650/SP2018-0022>
- Cheng, H., & Furnham, A. (2004). Perceived parental rearing style, self-esteem and selfcriticism as predictors of happiness. *Journal of Happiness Studies*, 5(1), 1–21. <https://doi.org/bbqkxb>
- Cooper, D. E., & Holmstrom, R. W. (1984). Relationship between alexithymia and somatic complaints in a normal sample. *Psychotherapy and psychosomatics*, 41(1), 20-24. <https://doi.org/10.1159/000287780>
- Cuzzocrea, F., Barberis, N., Costa, S., & Larcan, R. (2015). Relationship between alexithymia, parenting style, and parental control. *Psychological Reports*, 117(2), 580–596. <https://doi.org/10.2466/21.10.PR0.117c22z7>
- Çokluk, Ö., Şekercioğlu, G., & Büyüköztürk, Ş. (2012). *Sosyal bilimler için çok değişkenli istatistik spss ve lisrel uygulamaları* (2nd ed.). Pegem Akademi.
- Çuhadaroğlu, A. 2011. Bilişsel esnekliğin yordayıcıları (Doctoral thesis, Ankara Üniversitesi, Ankara). Yök Tez. <https://bit.ly/3uPep4w>
- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin*, 113(3), 487–496. <https://doi.org/bmm2f7>
- De M'Uzan, M. (1974). Psychodynamic mechanisms in psychosomatic symptom formation. *Psychotherapy and psychosomatics*, 23(1-6), 103–110. <https://doi.org/fnq4df>
- De Panfilis, C., Salvatore, P., Marchesi, C., Cazzolla, R., Tonna, M., & Maggini, C. (2008). Parental bonding and personality disorder: the mediating role of alexithymia. *Journal of Personality Disorders*, 22(5), 496–508. <https://doi.org/fsp6qm>
- De Tychey, C., Garnier, S., Lighezzolo-Alnot, J., Claudon, P., & Rebourg-Roesler, C. (2010). An accumulation of negative life events and the construction of

- alexithymia: A longitudinal and clinical approach. *Journal of Personality Assessment*, 92(3), 189–206. <https://doi.org/ff5h6g>
- Demirsu, Ö. (2018). *Üniversite öğrencilerinde algılanan ebeveyn tutumları ile sürekli kaygı düzeyleri arasındaki ilişkide psikolojik dayanıklılığın ve kaygı duyarlılığının aracı rolleri* (Master's thesis, Işık Üniversitesi, İstanbul). Yök Tez. <https://bit.ly/3gcrBLt>
- Dennis, J. P., & Vander Wal, J. S. (2009). The cognitive flexibility inventory: instrument development and estimates of reliability and validity. *Cognitive Therapy Research*, 34, 241–253. <https://doi.org/brn3zm>
- Denollet J., Nykliček I., Vingerhoets A.J. (2008) Introduction: Emotions, emotion regulation, and health. In: Vingerhoets A.J., Nykliček I., Denollet J. (eds) *Emotion Regulation*. Springer, Boston, MA. <https://doi.org/bgxxmh>
- Dereboy, İ. F. (1990). Aleksitimi: bir gözden geçirme. *Türk Psikiyatri Dergisi*, 1 (3), 157-165.
- Deveney, C. M., & Deldin, P. J. (2006). A preliminary investigation of cognitive flexibility for emotional information in major depressive disorder and non-psychiatric controls. *Emotion*, 6(3), 429–437. <https://doi.org/10.1037/1528-3542.6.3.429>
- Dirik, G., Yorulmaz, O., & Karancı, N. (2015). Çocukluk dönemi ebeveyn tutumlarının değerlendirilmesi: Kısaltılmış algılanan ebeveyn tutumları çocuk formu. *Türk Psikiyatri Dergisi*, 26(2), 123-130. <https://bit.ly/3gpM80z>
- Doğan Laçın, B. G. Y., & Yalçın, İ. (2018). Üniversite öğrencilerinde özyeterlilik ve stresle başa çıkma stratejilerinin bilişsel esnekliği yordama düzeyleri. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 34(2), 358-371. <https://bit.ly/3wsKCQS>
- Dökmen, Ü. (2000). *Yarına Kim Kalacak? Evrenle Uyumlaşma Sürecinde Varolmak Gelişmek Uzlaşmak*. Sistem Yayıncılık.
- Dunn, J., Brown, J. (1994). Affect expression in the family, children's understanding of emotions their interactions with others. *Merril-Palmer Quarterly*, 40, 120-137. <https://bit.ly/3vo23Av>

- Durak Batigün, A. D., & Büyükşahin, A. (2008). Aleksitimi: psikolojik belirtiler ve bağlanma stilleri. *Klinik Psikiyatri Dergisi*, 11(3), 105-114.<https://bit.ly/35lIUon>
- Erdem, H., & Eker, E. (2020). Examination of the level of alexithymia in adult individuals in terms of different demographic factors. *Psychology Research on Education and Social Sciences*, 1(2), 65-74.<https://dergipark.org.tr/tr/pub/press/issue/56531/738001>
- Epözdemir, H. (2012). Aleksitimi: Psikolojik bir semptom mu, yoksa bir kişilik özelliği mi? *Türk Psikoloji Yazıları*, 15 (30), 25-33.<https://bit.ly/3xAlgQb>
- Ergün, H. (2008). *14-18 yaş arası ergenler ve ebeveynlerinde aleksitimik özellikler, ebeveyn tutumları, bağlanma ve bağımlılık* (Master's thesis, Ankara Üniversitesi, Ankara). Yök Tez. <https://tez.yok.gov.tr/UlusalTezMerkezi/tezSorguSonucYeni.jsp>
- Fraenkel, W., Wallen, N. E., & Hyun, H. H. (2012). How to design and evaluate research in education (8th ed.). McGraw-Hill Book Company
- Freedman, M. B., & Sweet B. S. (1954). Some specific features of group psychotherapy and their implications for selection patients. *International Journal Of Group Psychotherapy*, 4, 355-368.<https://doi.org/10.1080/00207284.1954.11508548>
- Freyberger, H. (1977). Supportive psychotherapeutic techniques in primary and secondary alexithymia. *Psychotherapy and Psychosomatics*, 28 (1), 337-342. <https://doi.org/ccjrt7>
- Fukunishi, I., Kawamura, N., Ishikawa, T., Ago, Y., Sei, H., Morita, Y., & Rahe, R.H. (1997). Mothers' low care in the development of alexithymia: A preliminary study in japanese college students. *Psychological Reports*. 80, 143-146. <https://doi.org/fw9vw3>
- Geyik Koç, G. (2020). *Bilişsel esneklik ve psikolojik dayanıklılık ile stresle başa çıkma arasındaki ilişkinin incelenmesi* (Yayın No. 631281) [Yüksek Lisans tezi, Sakarya Üniversitesi]. Yök Tez. <https://bit.ly/3uUj05E>
- Ghadampour, E., Nazarpour Samsami, P., Amraei, B., Padervand, H., Soore, H. (2019). Compare cognitive flexibility, cognitive avoidance and alexithymia in male

- students with and without stuttering disorders. *Shenakht Journal of Psychology and Psychiatry*, 6 (5), 41-54. <https://doi.org/ggqk>
- Goleman, D. (2004). *Duygusal zekâ: Neden IQ'dan daha önemlidir?* (B., Seçkin Yüksel, Trans.) Varlık Yayınları. (Original work published 1995).
- Grabe, H. J., Frommer, J., Ankerhold, A., Ulrich, C., Gröger, R., Franke, G. H., Barnow, S., Freyberger, H. J., & Spitzer, C. (2008). Alexithymia and outcome in psychotherapy. *Psychotherapy and Psychosomatics*, 77(3), 189–194. <https://doi.org/dsh7hg>
- Grusec, J. E., & Davidov, M. (2007). Socialization in the family: The roles of parents. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (p. 284–308). The Guilford Press.
- Gunzelmann, T., Kupfer, J. Jrg, & Br[au]ml Jhler, E. (2002). Alexithymia in the elderly general population. *Comprehensive Psychiatry*, 43(1), 74–80. <https://doi.org/c547jr>
- Guttman, H., & Laporte, L. (2002). Alexithymia, empathy, and psychological symptoms in a family context. *Comprehensive Psychiatry*, 43(6), 448-455. <https://doi.org/b83x93>
- Güleç, H., Sayar, K., Güleç, M. Y., Köse, S., Çitak, S., Evren, C., & Borckardt, J. (2009). The Turkish version of the 20-Item Toronto Alexithymia Scale (TAS-20): Reliability, validity, and factorial structure. *Bulletin of Clinical Psychopharmacology*, 19(3), 214-220. <https://bit.ly/3iJ79os>
- Güleç, H., & Yenel, A. (2010). 20 Maddelik Toronto Aleksitimi Ölçeği Türkçe uyarlamasının kesme noktalarına göre psikometrik özellikleri. *Klinik Psikiyatri Dergisi*, 13(3), 108-112. <https://bit.ly/3zw9F7j>
- Gündüz, B. (2013). Emotional intelligence, cognitive flexibility and psychological symptoms in pre-service teachers. *Educational Research and Reviews*, 8(13), 1048-1056. <https://bit.ly/3gDBQst>
- Güzeltepe, S. (2017). Kamu personelinin bilişsel esneklik düzeylerinin psikolojik sözleşme rolleri açısından incelenmesi bir alan araştırması: Bakırköy Adliyesi

- (Master's thesis, İstanbul Aydın Üniversitesi, İstanbul). Yök Tez. <https://bit.ly/3z7bOX6>
- Hacıkeleşoğlu, H. (2020). *Ebeveyn tutumları ve kişilik özelliklerinin tanrı tasavvuru ile ilişkisi üzerine bir araştırma* (Doctoral thesis, Atatürk Üniversitesi, Ankara). Yök Tez. <https://bit.ly/3fWsFEx>
- Honkalampi, K., Hintikka, J., Tanskanen, A., Lehtonen, J., & Viinamäki, H. (2000). Depression is strongly associated with alexithymia in the general population. *Journal of Psychosomatic Research*, 48(1), 99–104. <https://doi.org/cqk6xh>
- Hoppe, K. D., & Bogen, J. E. (1977). Alexithymia in twelve commissurotomized patients. *Psychotherapy and Psychosomatics*, 28(1-4), 148–155. <https://doi.org/dgrnm2>
- Horney, K. (1952). The paucity of inner experiences. *The American Journal of Psychoanalysis*, 12(1), 3–9. <https://doi.org/bf4fvx>
- Hussain, S., & Ahmed, Z. (2014). Parental acceptance-rejection as predictor of alexithymia among students in Gilgit-Pakistan. *International Journal of Information and Education Technology*, 4(3), 285-288. <https://doi.org/ggqm>
- Jonassen, D. H., & Grabowski, B. L. (1993). Handbook of individual differences learning, and instruction. Routledge. <https://doi.org/10.4324/9780203052860>
- Joukamaa, M., Saarijärvi, S., Muuriaisniemi, M.-L., & Salokangas, R. K. . (1996). Alexithymia in a normal elderly population. *Comprehensive Psychiatry*, 37(2), 144–147. <https://doi.org/c8mb32>
- Kano, M., & Fukudo, S. (2013). The alexithymic brain: the neural pathways linking alexithymia to physical disorders. *BioPsychoSocial Medicine*, 7(1), 1-9. <https://doi.org/f4kj9s>
- Kano, M., Fukudo, S., Gyoba, J., Kamachi, M., Tagawa, M., Mochizuki, H., Itoh, M., Hongo, M., Yanai, K., 2003. Specific brain processing of facial expressions in people with alexithymia: an H2 15O-PET study. *Brain* 126, 1474– 1484. <https://doi.org/b32zxb>

- Karayol, M., & Doğar, Y. (2020). Examination of cognitive flexibility and social appearance anxiety levels of physical education and primary school teachers. *Asian Journal of Education and Training*, 6(2), 176-180.
<https://doi.org/ggqn>
- Karukivi, M., Joukamaa, M., Hautala, L., Kaleva, O., Haapasalo-Pesu, K. M., Liuksila, P. R., & Saarijärvi, S. (2011). Does perceived social support and parental attitude relate to alexithymia? A study in Finnish late adolescents. *Psychiatry Research*, 187(1-2), 254-260. <https://doi.org/dpvkqd>
- Kaya, M. (1997). Ailede anne-baba tutumlarının çocuğun kişilik ve benlik gelişimindeki rolü. *Ondokuz Mayıs Üniversitesi İlahiyat Fakültesi Dergisi*, 9(9), 193-204.
<https://bit.ly/3cNelfs>
- Kelman, N. (1952). Clinical aspects of externalized living. *The American Journal of Psychoanalysis*, 12(1), 15–23. <https://doi.org/c39c2c>
- Kench, S., Irwin, H. J. (2000). Alexithymia and childhood family environment. *Journal of Clinical Psychology*, 56 (6); 737–745. <https://doi.org/bdzd4f>
- Kıray, P. (2018). *Çocukluk çağı travmaları, algılanan sosyal destek ve algılanan anne baba tutumunun psikolojik sağlık ile arasındaki ilişki* (Master's thesis, Üsküdar Üniversitesi, İstanbul). Yök Tez. <https://bit.ly/3cnK72i>
- Kim, K., & Rohner, R. P. (2002). Parental warmth, control, and involvement in schooling. *Journal of Cross-Cultural Psychology*, 33(2), 127 -140.
<https://doi.org/f4b6rs>
- Koçak, R. (2002). Aleksitimi: kuramsal çerçeve, tedavi yaklaşımları ve ilgili araştırmalar. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 35(1-2), 183-212.<https://doi.org/ghzz>
- Koçak, R. (2003). Üniversite öğrencilerinde aleksitimi ve yalnızlığın bazı değişkenler açısından karşılaştırılması ve aralarındaki ilişkinin incelenmesi. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 11 (19), 15-24.<https://bit.ly/3xt3yPy>
- Kokkonen, P., Karvonen, J. T., Veijola, J., Läksy, K., Jokelainen, J., Järvelin, M.-R., & Joukamaa, M. (2001). Prevalence and sociodemographic correlates of alexithymia

- in a population sample of young adults. *Comprehensive Psychiatry*, 42(6), 471–476. <https://doi.org/cfqmxs>
- Kooiman, C. G., Spinhoven, P., Trijsburg, R. W., & Rooijmans, H. G. M. (1998). Perceived parental attitude, alexithymia and defense style in psychiatric outpatients. *Psychotherapy and Psychosomatics*, 67, 81–87. <https://doi.org/fdcd37>
- Kooiman, C. G., van Rees Vellinga, S., Spinhoven, P., Draijer, N., Trijsburg, R. W., & Rooijmans, H. G. (2004). Childhood adversities as risk factors for alexithymia and other aspects of affect dysregulation in adulthood. *Psychotherapy and Psychosomatics*, 73(2), 107-116. <https://doi.org/fcxfrs>
- Köroğlu, Ö. (2019). The relationship between public administration students' levels of alexithymia and communication skills. *Uluslararası Avrasya Sosyal Bilimler Dergisi*, 10(35), 203-225. <https://bit.ly/3iMZ8is>
- Krystal, H. (1979). Alexithymia and psychotherapy. *American Journal of Psychotherapy*, 33(1), 17–31. <https://doi.org/gftkzv>
- Krystal, H., Giller, E. L., & Cicchetti, D. V. (1986). Assessment of alexithymia in post-traumatic stress disorder and somatic illness: Introduction to a reliable measure. *Psychosomatic Medicine*, 48 (1), 84-94. <https://doi.org/ggqp>
- Laible, D. (2007). Attachment with parents and peers in late adolescence: Links with emotional competence and social behavior. *Personality And Individual Differences*, 43(5), 1185-1197. <https://doi.org/d35qmw>
- Lane, R. D., & Schwartz, G. E. (1987). Levels of emotional awareness: A cognitive development theory and its application to psychopathology. *American Journal of Psychiatry*, 144, 133-143. <https://doi.org/ggqq>
- Lane, R. D., Sechrest, L., & Riedel, R. (1998). Sociodemographic correlates of alexithymia. *Comprehensive psychiatry*, 39(6), 377-385. <https://doi.org/c9d4s8>
- Larsen, J. K., Brand, N., Bermond, B., & Hijman, R. (2003). Cognitive and emotional characteristics of alexithymia. *Journal of Psychosomatic Research*, 54(6), 533–541. <https://doi.org/dbxw9j>

- Lazarus, R. S. (1982). Thoughts on the relation between emotion and cognition. *American Psychologist*, 37, 1019-1024. <https://doi.org/dpx3fx>
- Lesser, I. M. (1981). A review of the alexithymia concept. *Psychosomatic Medicine*, 43 (6), 531-543. <https://doi.org/ggqr>
- Lesser, I. M. (1985). A critique of contributions to the alexithymia symposium. *Psychotherapy and Psychosomatics*, 44, 82-88. <https://doi.org/bxt7tn>
- Licht, M. H. (2000). Multiple regression and correlation. In L. G. Grimm & P. R. Yarnold (Eds), *Reading and understanding multivariate statistics*. American Psychological Association.
- Lumley, M. A., Mader, C., Gramzow, J., & Papineau, K. (1996). Family factors related to alexithymic characteristics. *Psychosomatic Medicine*, 58, 211-216. <https://doi.org/ggqs>
- Lumley, M. A., & Bazydlo, R. A. (2000). The relationship of alexithymia characteristics to dreaming. *Journal of Psychosomatic Research*, 48, 561-567. <https://doi.org/ffp293>
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent-child interaction. P. H. Mussen and E. M. Hetherington (Vol. Ed.), In *Handbook of child psychology: Socialization, personality, and social development* In (pp. 1-101). New York: Wiley.
- MacLean, P. D. (1949). Psychosomatic disease and the "visceral brain"; recent developments bearing on the Papez theory of emotion. *Psychosomatic Medicine*, 11, 338-353. <https://doi.org/ghkn87>
- Malooly, A. M., Genet, J. J., & Siemer, M. (2013). Individual differences in reappraisal effectiveness: The role of affective flexibility. *Emotion*, 13(2), 302-313. <https://doi.org/f4t9s7>
- Maltby, J., Day, L., McCutcheon, L. E., Gillett, R., Houran, J., & Ashe, D. D. (2004). Personality and coping: A context for examining celebrity worship and

- mental health. *British Journal of Psychology*, 95(4), 411–428.
<https://doi.org/cfdmvg>
- Martin, B. J., & Pihl, O. R. (1986). Influence of alexithymia characteristics on psychological and subjective stress responses in normal individuals. *Psychotherapy and Psychosomatics*, 45, 66-77. <https://doi.org/fw94zp>
- Martin, M. M., & Anderson, C. M. (1998). The cognitive flexibility scale: Three validity studies. *Communication Reports*, 11(1), 1-9. <https://doi.org/bj6bxc>
- Martin, M. M., & Rubin, R. B. (1995). A new measure of cognitive flexibility. *Psychological Reports*, 76(2), 623-626. <https://doi.org/b6chh8>
- Martin, M. M., Anderson, C. M., & Thweatt, K. S. (1998). Individuals' perceptions of their communication behaviors: a validity study of the relationship between the cognitive flexibility scale and the communication flexibility scale with aggressive communication traits. *Journal Of Social Behavior And Personality*, 13(3), 531-540. <https://bit.ly/3pYHUQG>
- Martin, M. M., Staggars, S. M., & Anderson, C. M. (2011). The relationships between cognitive flexibility with dogmatism, intellectual flexibility, preference for consistency, and self-compassion. *Communication Research Reports*, 28(3), 275-280. <https://doi.org/fhrjn4>
- Marty, P. & de M'Uzan, M. (1963). La pensée opératoire. *Revue Française de Psychanalyse*, 6, 197-207. <https://www.rfpsy.fr/la-pensee-operatoire/>
- Mason, O., Tyson, M., Jones, C., & Potts, S. (2005). Alexithymia: its prevalence and correlates in a British undergraduate sample. *Psychology and Psychotherapy: Theory, Research and Practice*, 78(1), 113-125. <https://doi.org/dnrw4t>
- Mattila, A. K., Salminen, J. K., Nummi, T., & Joukamaa, M. (2006). Age is strongly associated with alexithymia in the general population. *Journal of Psychosomatic Research*, 61(5), 629–635. <https://doi.org/cpqrc8>
- Mc Dougall, J. (1982). Alexithymia: a psychoanalytic viewpoint. *Psychotherapy and Psychosomatics*, 38, 81-90. <https://doi.org/btpd3q>

- Moriguchi, Y., Ohnishi, T., Lane, R. D., Maeda, M., Mori, T., Nemoto, K., Matsuda, H., Komaki, G. (2006). Impaired self-awareness and theory of mind: An fMRI study of mentalizing in alexithymia. *NeuroImage*, 32(3), 1472–1482.
<https://doi.org/dwzzw2>
- Nemiah, J. C. (1975). Denial revisited: Reflections on psychosomatic theory. *Psychotherapy and Psychosomatics*, 26(3), 140-147. <https://doi.org/d3ttnv>
- Nemiah, J. C. (1977). Alexithymia. *Psychotherapy and Psychosomatics*, 28(1-4), 199–206. <https://doi.org/10.1159/000287064>
- Nemiah, J. C., & Sifneos, P. E. (1970). Psychosomatic illness: A problem in communication. *Psychotherapy and Psychosomatics*, 18(1-6), 154–160.
<https://doi.org/cgbqth>
- Nemiah, J. C., Freyberger, H., & Sifneos, P. E. (1976). Alexithymia: A view of the psychosomatic process. In O. W. Hill (Ed.), *Modern Trends In Psychosomatic Medicine*, 3, 430-439. <https://bit.ly/2UbRDat>
- Oktay, B., & Durak Batıgün, A. (2014). Aleksitimi: Bağlanma, benlik algısı, kişilerarası ilişki tarzları ve öfke. *Türk Psikoloji Yazıları*, 17(33), 31. <https://bit.ly/3gyiaHQ>
- Önder, A., & Gülay, H. (2007). Ebeveyn kabul- red teorisi ve bireyin gelişimi açısından önemi. *Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi*, 21, 20-28. <https://bit.ly/3gBBZhv>
- Özer, K. (1994). Öfke, kaygı ve depresyon eğilimlerinin bilişsel alt yapısıyla ilgili bir çalışma. *Türk Psikoloji Dergisi*, 9(31), 12-25. <https://bit.ly/3vuM3Nh>
- Paez, D., Basebe, N., Voldoseda, M., Velasco, C., & Iraurgi, I. (1977). Confrontation: Inhibition, alexithymia and health. J.W. Pennebaker (Ed). *Emotion, Disclosure & Health*, D.C.: APA. <https://bit.ly/3cMTBED>
- Parker, J. D., Taylor, G. J., & Bagby, R. M. (1989). The alexithymia construct: Relationship with sociodemographic variables and intelligence. *Comprehensive Psychiatry*, 30(5), 434–441. <https://doi.org/c4psft>

- Parker, Jda., Bagby, R.M., Taylor, G.K. (1993). Factorial Validity Of The 20 İtem Toronto Alexithymia Scale. *European Journal Of Personality*, 7: 221-232.
<https://doi.org/d7vmfh>
- Parlar, H., & Özbuk, H. (2018). Anne baba tutumları ile çocuk utangaçlığı arasındaki ilişki. *Academic Platform Journal of Education and Change*, 1(1), 57-75.<https://bit.ly/3zAMMzY>
- Pasini, A., Chiaie, R. D., Seripa, S., & Ciani, N. (1992). Alexithymia as related to sex, age, and educational level: Results of the Toronto Alexithymia Scale in 417 normal subjects. *Comprehensive Psychiatry*, 33(1), 42–46. <https://doi.org/dfgs8s>
- Pellerone, M., Formica, I., Lopez, M. H., Migliorisi, S., & Granà, R. (2017). Relationship between parenting, alexithymia and adult attachment styles: A cross-national study in Sicilian and Andalusian young adults. *Mediterranean Journal of Clinical Psychology*, 5(2).<https://bit.ly/3q1CNPz>
- Perris, C., Jacobsson, L., Linndström, H., Knorrning, L., & Perris, H. (1980). Development of a new inventory for assessing memories of parental rearing behaviour. *Acta Psychiatrica Scandinavica*, 61(4), 265–274. <https://doi.org/ffppwk>
- Petrowski, K., Berth, H., Schmidt, S., Schumacher, J., Hinz, A., & Brähler, E. (2009). The assessment of recalled parental rearing behavior and its relationship to life satisfaction and interpersonal problems: a general population study. *BMC Medical Research Methodology*, 9(1). <https://doi.org/fmbh2d>
- Pirlot, G., & Corcos, M. (2012). Understanding alexithymia within a psychoanalytical framework. *The International Journal Of Psychoanalysis*, 93, 1403-1425.
<https://doi.org/f4hcwv>
- Rackley, B. (2007). *God image and early maladaptive schemas: A correlational study*. [Doctoral thesis, Regent University, Virginia Beach]. ProQuest.
<https://bit.ly/3x2dhfu>
- Rapee, R. (1997). Potential role of childrearing practices in the development of anxiety and depression. *Clinical Psychology Review*, 17(1), 47–67. <https://doi.org/bkfhmv>

- Reker, M., Ohrmann, P., Rauch, A. V., Kugel, H., Bauer, Dannlowski, U., Arolt, V., Heindel, W., Suslow, T. (2010). Individual differences in alexithymia and brain response to masked emotion faces. *Cortex*, 46(5), 658–667. <https://doi.org/d4jjcd>
- Roehling, P. V., & Robin, A. L. (1986). Development and validation of the Family Beliefs Inventory: A measure of unrealistic beliefs among parents and adolescents. *Journal of Consulting and Clinical Psychology*, 54(5), 693–697. <https://doi.org/b9p8bt>
- Rohner, R. P., Khaleque, A. ve Cournoyer, D. E. (2005). Parental acceptance-rejection: Theory, methods, cross-cultural evidence, and implications. *Ethos*, 33(3), 299–334. <https://doi.org/dwkm89>
- Romero-Martínez, Á., Lila, M., & Moya-Albiol, L. (2019). Alexithymic traits are closely related to impulsivity and cognitive and empathic dysfunctions in intimate partner violence perpetrators: New targets for intervention. *Applied Neuropsychology: Adult*, 1–9. <https://doi.org/dz2g>
- Ruesch, J. (1948). The infantile personality; the core problem of psychosomatic medicine. *Psychosomatic Medicine*, 10, 134–144. <https://doi.org/ggqw>
- Salminen, J. K., Saarijärvi, S., Äärelä, E., Toikka, T., & Kauhanen, J. (1999). Prevalence of alexithymia and its association with sociodemographic variables in the general population of finland. *Journal of Psychosomatic Research*, 46(1), 75–82. <https://doi.org/cb4mmj>
- Sapmaz, F., & Doğan, T. (2013). Bilissel esnekliğin değerlendirilmesi: Bilissel esneklik envanteri Türkçe versiyonunun geçerlik ve güvenirlik çalışmaları. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 46(1), 143-161. <https://doi.org/gh7t>
- Saral, E. (2018). *Yetişkinlerde cinsiyet algısı ile algılanan ebeveyn ilişkisinin ve çocukluk çağı ebeveyn tutumu ilişkilerinin incelenmesi* (Yayın No. 514288) [Yüksek Lisans tezi, Üsküdar Üniversitesi]. Yök Tez. <https://bit.ly/3zfPgUa>

- Schwartz, G.E. & Kline, J.P. (2002). Repression, emotional disclosure, and health: Theoretical, empirical, and clinical considerations. In *Emotion, Disclosure & Health* (3. ed., S. 177-193). <https://doi.org/bn3tvf>
- Sifneos, P. E. (1972). *Short – term psychotherapy and emotional crisis*. Cambridge: Harward University Press. <https://bit.ly/2T3Vm9z>
- Sifneos, P. E. (1973). The prevalence of “alexithymic” characteristics in psychosomatic patients. *Psychotherapy and Psychosomatics*, 22, 255-262. <https://doi.org/cw8c5t>
- Sifneos, P. E. (1988). Alexithymia and its relationship to hemispheric specialization, affect and creativity. *Psychiatric Clinics of North America*, 11(3), 287-292. <https://doi.org/ggqx>
- Sifneos, P. E., Apfel, S.R., & Frankel, F. H. (1977). The phenomenon of alexithymia. *Psychotherapy And Psychosomatic*, 28, 47-57. <https://doi.org/fgkm2q>
- Sirait, V. D. (2019). *Hubungan antara alexithymia dan fleksibilitas kognitif pada mahasiswa psikologi* (Undergraduate thesis, Universitas Sanata Dharma, Yogyakarta). Repository. <https://bit.ly/3pr1G74>
- Someya, T., Uehara, T., Kadowaki, M., Tang, S. W., & Takahashi, S. (1999). Characteristics of perceived parenting styles in Japan using the EMBU scale. *Acta Psychiatrica Scandinavica*, 100(4), 258–262. <https://doi.org/dqnxps>
- Soyyigit, Z. S. (2019). *Gençlerin sosyal sorumluluk çalışmalarına gönüllü katılımlarıyla algılanan ebeveyn tutumları, motivasyon ve iyi oluş arasındaki ilişkinin incelenmesi* (Master’s thesis, Marmara Üniversitesi, İstanbul). Yök Tez. <https://bit.ly/3fSNpg5>
- Spiro, R. J., Vispoel, W. P., Schmitz, J. G., Samarapungavan, A., & Boerger, A. E. (1987). *Knowledge acquisition for application: Cognitive flexibility and transfer in complex content domains*. In B. K. Britton & S. M. Glynn (Eds.), *Psychology of reading and reading instruction. Executive control processes in reading* (p. 177–199). Lawrence Erlbaum Associates, Inc. <https://bit.ly/2TEqNY1>

- Stevens, A.D. (2009). *Social problem -solving and cognitive flexibility: Relations to social skills and problem behavior of at -risk young children* [Doctoral thesis, Seattle Pacific University, Seattle]. ProQuest. <https://bit.ly/3prXofJ>
- Stoudemire, A. (1991). Somatothymia. *Psychosomatics*, 32(4), 365–381. <https://doi.org/dq2mk9>
- Sucu, B. T. (2020). *Üniversite öğrencilerinin sosyal problem çözme becerilerinin algılanan anne-baba tutumu ve bilişsel esneklik düzeyleri açısından incelenmesi* (Yayın No. 627968) [Yüksek Lisans tezi, Maltepe Üniversitesi]. Yök Tez. <https://bit.ly/3vWgUDz>
- Sümer, N., Gündoğdu Aktürk, E., & Helvacı, E. (2010). Anne-baba tutum ve davranışlarının psikolojik etkileri: Türkiye’de yapılan çalışmalara toplu bakış. *Türk Psikoloji Yazıları*, 13(25), 42-59. <https://bit.ly/35sERqq>
- Şahin, A.R. (1992). Peptik ülserli hastalarda aleksitimik özellikler. *Türk Psikiyatri Dergisi*, 3 (1), 26-30.
- Şaşıoğlu, M., Gülol, Ç., & Tosun, A. (2013). Aleksitimi kavramı/The concept of alexithymia. *Psikiyatri GÜNCEL Yaklaşımlar*, 5(4), 507-527. <https://doi.org/gh7s>
- Şirin Ayva, A. B. (2018). *Macera terapisi temelli grupla danışmanlığın üniversite öğrencilerinde bilişsel esneklik ve belirsizliğe tahammülsüzlüğe etkisi* (Doctoral thesis, Marmara Üniversitesi, İstanbul). Yök Tez. <https://bit.ly/3gaW3FX>
- Taylor, G. J. (1984). Alexithymia concept, measurement and implications for treatment. *American Journal Of Psychiatry*, 141(6), 725-732. <https://doi.org/ggq2>
- Taylor, G.J. (2000). Recent development in alexithymia theory and research. *Canadian Journal Of Psychiatry*, 45, 134-142. <https://doi.org/gffk8p>
- Taylor, G. J., & Bagby, M. R. (1988). Measurement of alexithymia recommendations. *Psychiatric Clinics of North America*, 11(3), 351-366. <https://doi.org/ggq3>
- Taylor, G. J., & Bagby, M. R. (2012). The alexithymia personality dimension. *Oxford Handbooks Online*, 1-51. <https://doi.org/dz2k>

- Taylor, G. J., Bagby, R. M., & Parker, J. D. (1991). Alexithymia construct, a potential paradigm for psychosomatic medicine. *The Academy of Psychosomatic Medicine*, 32 (2), 153-163. <https://doi.org/fdsnc2>
- Tepeli Temiz, Z. (2018). Bir sınıflandırma çalışması: aleksitimik belirtiler ve bağlanma örüntüleri. *Medeniyet Araştırmaları Dergisi*, 3(5), 21-42. <https://bit.ly/3gtVOH9>
- Thomasgard, M., Metz, W. P., Edelbrock, C., & Shonkoff, J. P. (1995). Parent-child relationship disorders. Part I. Parental overprotection and the development of the parent protection scale. *Journal of Developmental & Behavioral Pediatrics*, 16(4), 244-250. <https://doi.org/dvkjxn>
- Thorberg, F. A., Young, R. M., Sullivan, K. A., & Lyvers, M. (2011). Parental bonding and alexithymia: A meta-analysis. *European Psychiatry*, 26(3), 187–193. <https://doi.org/fn6gsv>
- Türk, M. (1992). *Üniversite öğrencilerinde aleksitimik özellikler ile ruh sağlığı arasındaki ilişki* [Unpublished master's dissertation]. Ege Üniversitesi, İzmir. Yök Tez. <https://bit.ly/3cLReSx>
- Upshur, C. C. (1991). Mothers' and fathers' ratings of the benefits of early intervention services. *Journal of Early Intervention*, 15(4), 345–357. <https://doi.org/cxhb58>
- Uzun, D. (2019). *Patolojik endişenin yordanmasında algılanan ebeveyn tutumları, kişilik özellikleri, üstbilişler ve belirsizliğe tahammülsüzlük arasındaki ilişkilerin incelenmesi* (Master's thesis, Dokuz Eylül Üniversitesi, İzmir). Yök Tez. <https://bit.ly/2TBe6xc>
- Üzümcü, B., & Müezzini, E. E. (2018). Öğretmenlerin bilişsel esneklik ve mesleki doyum düzeyinin incelenmesi. *Sakarya University Journal of Education*, 8(1), 8-25. <https://doi.org/gh7p>
- Van Der Kolk, B. A. (2018). Beden kayıt tutar travmanın iyileşmesinde beyin zihin beden. (N. Cihanşümül Maral, Trans.) Say Yayınları. Open Book. (Original work published 2014).

- Van der Kolk, B. A., & Fisler, R. (1994). Childhood abuse and neglect and loss of selfregulation. *Bulletin of the Menninger Clinic*, 58(2), 145-168. <https://bit.ly/2UaBO3Q>
- Von Rad, M. (1984). Alexithymia and symptom formation. *Psychotherapy and Psychosomatics*, 42(1-4), 80–89. <https://doi.org/fq52k5>
- Way, I., Yelsma, P., Van Meter, A. M., & Black-Pond, C. (2007). Understanding alexithymia and language skills in children: Implications for assessment and intervention. *Language Speech and Hearing Services in Schools*, 38(2), 128. <https://doi.org/cj48mh>
- Wu, C.-W., Chen, W.-W., & Jen, C.-H. (2020). Emotional Intelligence and Cognitive Flexibility in the Relationship Between Parenting and Subjective Well-Being. *Journal of Adult Development*. <https://doi.org/ggq4>
- Yavuzer, H., Köknel, Ö., Kulaksızoğlu, A., Ayhan, H., Dodurgalı, A., & Ekşi, H. (2011). Çocuk ve ergen eğitiminde anne baba tutumları. Türkyılmaz Catic, N (Ed.), *Yaygın anne baba tutumları* (pp. 11-31). Timaş Yayınları.
- Zdankiewicz-Ścigała, E., Sikora, J., & Ścigała, D. K. (2019). Parental attitudes and susceptibility to impulsive aggression. The mediation role of alexithymia. *Psychologia Wychowawcza*, 106-125. <https://bit.ly/3zvVwHf>

APPENDICES

Appendix 1: Personal Information Form

1. Cinsiyetiniz?

- ☐ Kadın
- ☐ Erkek

2. Yaşınız? (Sayıyla belirtiniz)

.....

3. Eğitim durumunuz? (Halen okuyorsanız son olarak mezun olduğunuz okul türünü seçiniz)

- ☐ İlköğretim
- ☐ Lise
- ☐ Lisans
- ☐ Lisansüstü

4. Medeni durumunuz?

- ☐ Bekar
- ☐ Evli

Appendix 2: Twenty-item Toronto Alexithymia Scale (TAS-20)

Türkçe TAÖ-20 Türkçe Toronto Aleksitimi Ölçeği

Lütfen aşağıdaki maddelerin sizi ne ölçüde tanımladığını işaretleyiniz.
Hiçbir zaman (1),....., Her zaman (5) olacak şekilde bu maddelere puan veriniz.

	Hiçbir zaman	Nadiren	Bazen	Sık sık	Her zaman
1. Ne hissettiğimi çoğu kez tam olarak bilemem.	1	2	3	4	5
2. Duygularım için uygun kelimeleri bulmak benim için zordur.	1	2	3	4	5
3. Bedenimde doktorların bile anlamadığı duygular oluyor.	1	2	3	4	5
4. Duygularımı kolayca tanımlayabilirim.	1	2	3	4	5
5. Sorunları yalnızca tanımlamaktansa onları çözümlemeyi yeğlerim.	1	2	3	4	5
6. Keyfim kaçtığımda, üzgün mü, korkmuş mu yoksa kızgın mı olduğumu bilemem.	1	2	3	4	5
7. Bedenimdeki duygular çoğu kez kafamı karıştırır.	1	2	3	4	5
8. Neden öyle sonuçlandığını anlamaya çalışmaksızın, işleri olurluna bırakmayı yeğlerim.	1	2	3	4	5
9. Tam olarak tanımlayamadığım duygularım var.	1	2	3	4	5
10. İnsanların duygularını tanıması zorunludur.	1	2	3	4	5
11. İnsanlar hakkında ne hissettiğimi tanımlamak benim için zordur.	1	2	3	4	5
12. İnsanlar duygularım hakkında daha çok konuşmamı isterler.	1	2	3	4	5
13. İçimde ne olup bittiğini bilmiyorum.	1	2	3	4	5
14. Çoğu zaman neden öfkeli olduğumu bilmem.	1	2	3	4	5
15. İnsanlarla, duygularından çok günlük uğraşları hakkında konuşmayı yeğlerim.	1	2	3	4	5
16. Psikolojik dramalar yerine eğlence programları izlemeyi yeğlerim.	1	2	3	4	5
17. İçimdeki duyguları yakın arkadaşlarıma bile açıklamak bana zor gelir.	1	2	3	4	5
18. Sessizlik anlarında bile kendimi birisine yakın hissedebilirim.	1	2	3	4	5
19. Kişisel sorunlarımı çözerken duygularımı incelemeyi yararlı bulurum.	1	2	3	4	5
20. Film ya da tiyatro oyunlarında gizli anlamlar aramak, onlardan alınacak hazzı azaltır.	1	2	3	4	5

Appendix 3: Abbreviated Perceived Parental Attitudes Scale Child Form (EMBU-C)

Aşağıdaki ankette çocukluğunuz ile ilgili bazı sorular yer almaktadır. Anketi doldurmadan önce aşağıdaki yönergeyi lütfen dikkatle okuyunuz:

1. Anketi doldururken, anne ve babanızın size karşı olan davranışlarını nasıl algıladığınızı hatırlamaya çalışmanız gerekmektedir.
2. Her bir soru için anne ve babanızın size karşı olan davranışlarına uygun seçeneği ayrı ayrı işaretleyiniz.

1. Anne ve babam, nedenini söylemeden bana kızarlardı ya da ters davranırlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

2. Anne ve babam beni överlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

3. Anne ve babamın yaptıklarım konusunda daha az endişeli olmasını isterdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

4. Anne ve babam, bana hak ettiğimden daha çok fiziksel ceza verirlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

5. Eve geldiğimde, anne ve babama ne yaptığımın hesabını vermek zorundaydım.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

6. Anne ve babam ergenliğimin uyarıcı, ilginç ve eğitici olması için çalışırlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

7. Anne ve babam, beni başkalarının önünde eleştirirlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

8. Anne ve babam, bana bir şey olur korkusuyla başka çocukların yapmasına izin verilen şeyleri yapmamı yasaklardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

9. Anne ve babam, her şeyde en iyi olmam için beni teşvik ederlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

10. Anne ve babam davranışları ile örneğin üzgün görünerek, onlara kötü davrandığım için kendimi suçlu hissetmememe neden olurlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

11. Anne ve babamın bana bir şey olacağına ilişkin endişeleri abartılıydı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

12. Benim için bir şeyler kötü gittiğinde, anne ve babamın beni rahatlatmaya ve yüreklendirmeye çalıştığını hissedirdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

13. Bana ailenin 'yüz karası' ya da 'günah keçisi' gibi davranılırdı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

14. Anne ve babam, sözleri ve hareketleriyle beni sevdiklerini gösterirlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

15. Anne ve babamın, erkek ya da kız kardeşimi(lerimi) beni sevdiklerinden daha çok sevdiklerini hissedirdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

16. Anne ve babam, kendimden utanmama neden olurlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

17. Anne ve babam, pek fazla umursamadan, istediğim yere gitmeme izin verirlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

18. Anne ve babamın, yaptığım her şeye karıştıklarını hissedirdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

19. Anne ve babamla aramda sıcaklık ve sevecenlik olduğunu hissedirdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

20. Anne ve babam, yapabileceklerim ve yapamayacaklarımla ilgili kesin sınırlar koyar ve bunlara titizlikle uyarlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

21. Anne ve babam, küçük kabahatlerim için bile beni cezalandırırlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

22. Anne ve babam, nasıl giyinmem ve görünmem gerektiği konusunda karar vermek isterlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

23. Yaptığım bir şeyde başarılı olduğumda, anne ve babamın benimle gurur duyduklarını hissederdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4



Appendix 4: Cognitive Flexibility Inventory (CFI)

Aşağıda insanların karşılaştıkları olaylara ilişkin duygu düşünce ve davranışlarını ifade eden cümleler yer almaktadır. Bu ifadelerin size uygun oluş derecesine göre (1) <i>Hiç uygun değil</i> (2) <i>Uygun değil</i> , (3) <i>Biraz uygun</i> , (4) <i>Uygun</i> , (5) <i>Tamamen uygun</i> seçeneklerinden birisini işaretleyiniz.		Hiç uygun değil	Uygun değil	Biraz uygun	Uygun	Tamamen uygun
1	Olay ve durumları değerlendirmede iyiyimdir.	1	2	3	4	5
2	Zor durumlarla karşı karşıya kaldığımda karar vermekte güçlük çekerim.	1	2	3	4	5
3	Bir konuda karar vermeden önce birçok seçeneği göz önünde bulundururum.	1	2	3	4	5
4	Zor durumlarla karşılaştığım zaman, kontrolümü kaybediyor gibi hissedirim.	1	2	3	4	5
5	Zor durumlara pek çok farklı açılardan bakmak hoşuma gider.	1	2	3	4	5
6	Bir davranışın nedenleri konusunda karara varmadan önce ek bilgiler ararım.	1	2	3	4	5
7	Zor durumlarla karşılaştığımda o kadar stresli olurum ki, sorunu nasıl çözeceğimi düşünemem.	1	2	3	4	5
8	Olayları karşımdaki kişilerin bakış açılarından da görmeye çalışırım.	1	2	3	4	5
9	Zor durumlarla baş edebilmek için önümde farklı birçok seçeneğin olması benim için sıkıntı vericidir.	1	2	3	4	5
10	Kendimi diğer insanların yerine koyarak onları anlamada iyiyimdir.	1	2	3	4	5
11	Zor durumlarla karşılaştığımda tam olarak ne yapacağımı bilemem.	1	2	3	4	5
12	Zor durumlara değişik açılardan bakmak önemlidir.	1	2	3	4	5
13	Bir zorlukla karşılaştığımda nasıl davranacağımı ilgili olarak pek çok seçeneği göz önünde bulundururum.	1	2	3	4	5
14	Herhangi bir duruma çoğu kez farklı açılardan bakarım.	1	2	3	4	5
15	Yaşamda karşılaştığım güçlüklerle baş etmede yetenekliyim.	1	2	3	4	5
16	Davranışların nedenlerini anlamaya çalışırken bütün olası gerçekleri ve bilgileri göz önünde bulundururum.	1	2	3	4	5
17	Zor durumlarda bir şeyleri değiştirme konusunda kendimi güçsüz hissedirim.	1	2	3	4	5
18	Zor bir durumla karşılaştığımda durur ve çözüm için çeşitli yollar düşünürüm.	1	2	3	4	5
19	Bir sorunla karşılaştığım zaman sorunu çözebilmek için birden fazla yol olduğunu düşünürüm.	1	2	3	4	5
20	Zor durumlarla ilgili harekete geçmeden önce pek çok seçeneği değerlendiririm.	1	2	3	4	5