PREDICTION OF PARENTING STYLES FROM CHILD AND MATERNAL TEMPERAMENTAL CHARACTERISTICS

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ABSTRACT

PREDICTION OF PARENTING STYLES FROM CHILD AND MATERNAL TEMPERAMENTAL CHARACTERISTICS

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The purpose of the current study is to predict parenting styles from child and maternal temperamental characteristics in the scope of Goodness of Fit Theory. Participants were the mothers and teachers of 3 and 4 year-old children recruited from childcare centres in the low, middle and high class communities in Ankara. Mothers completed the scales assessing child temperament, adult temperament andparenting attitudes. Teachers completed the child temperament questionnaire. Three sets of hierarchical multiple regression analysis were performed for the study. In the first one, interactions between child and mother temperamental characteristics based on mother reports were tested after individual temperamental characteristics were added. In the second one, based on the reports of teachers, the same interactions were tested. In the last set of regression analysis, the interactions within child temperamental characteristics was tested. Significant relations were found in three sets of regression analyses.

Keywords: Child Temperament, Adult Temperament, Parenting, Emotional Maltreatment

ÖZ

ÇOCUĞUN VE ANNENİN MİZAÇ ÖZELLİKLERİNDEN EBEVEYNLİK STİLLERİNİN YORDANMASI

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Bu çalışmanın amacı uyuşma düzeyi kuramı çerçevesinde çocuk ve anne mizaç özelliklerinden ebeveynlik stillerini yordamaktır.Katılımcılar Ankara'daki düşük, orta ve yüksek sosyoekonomik düzeydeki bölgelerde bulunan çocuk yuvalarına devam eden 3-4 yaş grubundaki çocukların anneleri ve öğretmenlerinden oluşmaktadır. Anneler çocuk mizacını, yetişkin mizacını ve ebeveynlik tutumlarını değerlendiren ölçekleri doldurmuşlardır. Öğretmenler de çocuk mizaç ölçeğini doldurmuşlardır. Çalışmada, 3 grup hiyerarşik regresyon analizi yapılmıştır. Annelerden gelen ölçekler kullanılarak, birinci analiz grubunda, anne ve çocuk mizaç özellikleri analize tek başlarına girildikten sonra bu özellikler arasındaki etkileşimler test edilmiştir. İkinci analiz grubunda aynı etkileşimler öğretmenlerden gelen anketlere göre test edilmiştir. En son yapılan regresyon analizi grubunda ise çocuk mizaç özellikleri arasındaki etkileşimler test edilmiştir. Üç analiz grubunda da anlamlı ilişkiler bulunmuştur.

Anahtar kelimeler: Çocuk Mizacı, Yetişkin Mizacı, Ebeveynlik, Duygusal İstismar

To My Parents Ayşe & Ali

and

To My Beloved Husband Seyit

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INTRODUCTION

1.1 General Introduction

Every child is different from one another and perceives world through his/her own behaviour style or temperament. Behaviour style means that each child responds to the same environment or situation differently (e.g., teething) (Kristal, 2005). The term temperament shows relative stability and biological base; however, it is not independent of the environment (Bates, Schermerhorn, & Petersen, 2012). Specifically, temperament not only affects children's reactions to the environment but also affects the different responses children elicit from the environment. For example, same parent may react differently to a child who cries when placed in a car seat than a child who smiles. Thus, parenting can vary based on child's temperament (Gallagher, 2002). Besides child temperamental characteristics, maternal personality characteristics may also influence parenting (Belsky, 1984). For example, when a less active parent is compared to a more active parent, both of them show different parenting towards the active child (Kristal, 2005). That is, children's reactions to the environment, especially to parenting are due to their temperaments (Kristal, 2005) as well as maternal personality (Belsky, 1984). In sum, child temperament and maternal personality /temperament alone or by interacting with each other may shape parenting characteristics (Belsky, 1984; Kendler, Sham & Maclean, 1997; Thomas & Chess, 1977).

Therefore, the aim of the current study is to examine the relationship between child temperament, mothers' temperament and their parenting styles. To this end, in the following chapters, first child then adult temperamental characteristics and theories will be examined. Subsequently, Goodness of Fit theory taking the interaction between child and maternal temperamental characteristics into account will be explored. Finally, parenting styles will be discussed.

1.2 Child Temperament

Temperament is an innate characteristic of a child that determines his approach to and experience in life. For instance, while some children approach novel

objects with no hesitation others find it difficult each time (Kristal, 2005); while some children have a tendency to stay in the background, others are extravert; while some are hardly in a bad psychological state, others are easily annoyed; while some react in an aggressive manner, others respond more gently (Pauw, & Mervielde, 2010). Thus, children's differential responses to environment could arise from their different temperamental characteristics (Kristal, 2005). Despite the consensus over relative stability and biological base of temperament among temperament theorists (Bates, Schermerhorn, & Peterson, 2012; Goldsmith et al, 1987), four different theories emerged to define temperament and explain the structure of it. In the following section, definitions of temperament and these four temperament theories will be described.

1.2.1 Definitions of temperament

There are several definitions of temperament by different theorists. For example, Thomas and Chess (1977), the pioneers of temperament literature, conceptualized temperament as behavioural style or behaviour's stylistic component (Goldsmith, Buss, Plomin, Rothbart, Thomas, Chess, Hinde & McCall, 1987). These researchers have particularly focused on the individual differences in the way an individual behaves (Thomas & Chess, 1977). Another definition by Buss and Plomin (1984) is that temperament is formulated as a set of inherited personality traits emerging early in life -. Besides these definitions, Rothbart (1981) defined temperament as individual differences in reactivity and self-regulation, while, particularly Goldsmith focused on emotions and explained this term as individual differences in the expression of primary emotions (Goldsmith et al, 1987).

Although temperament is defined in different ways in various temperament theories, there are already some common definitions of temperament. For example, temperament is defined as the cluster of innate characteristics, which specify a child's own behavioural style and how he or she approaches and responds to the world. In addition, temperament explains the behavioural style children have and specifies the typical behaviours for each child (Kristal, 2005). Another common definition is that temperament is composed of relatively consistent fundamental inclinations, with which a person is genetically endowed and which underpin and regulate the expression of activity, reactivity, emotionality, and sociability

(Goldsmith et al., 1987).The temperamental characteristics of children are recognizable early in development to parents, primary care providers, child pediatricians, psychologists, and to anyone in interaction with children (Pauw & Mervielde, 2010).

Primary components of temperament appear in early life, and biological factors strongly affect them (Goldsmith et al, 1987; Strelau, 1987). That is, both genetics and environment have a significant impact on child's temperament while it is shaped (Molfose & Molfose, 2000). As a child gets older, environment and experience increasingly affect expression of temperament (Goldsmith et al, 1987). In other words, temperament is pertinent to maturation and experience as well as biological base (van den Akker, Deković, Prinzie and Asscher, 2010). In sum, the manifestation and development of temperament involve the interaction between biological factors and social environment over time (Bornstein & Cote, 2009).

1.2.2 Theories of temperament

Four different theories defined temperament focusing on similar and different aspects. All theories accept that the dimensions of temperament imply behavioural tendencies rather than discrete behavioural acts. In addition, they all acknowledge the biological underpinnings and continuity of temperament. Yet, theorists claim that complete continuity can be seen in main constructs and only the expression of temperament is modifiable. The substrates of temperament have a dynamic form, which is believed to be responsible for continuity (Goldsmith et al, 1987).

The main point of divergence among these temperament theories is that each theory proposes a different framework for temperament. In other words, theorists differ in the degree of emphasis on behavioural style, the relation of temperament to emotions, relative stability, and inheritance. In terms of dimensions, although different theorists reach a consensus on the activity level and emotionality, they do not support any other suggested dimensions (Goldsmith et al, 1987).

Although there are four different temperament theories in literature, in the current study rather than adopting one of them and using the dimensions of that theory, different dimensions will be selected from different theories to assess child

temperament.In the following section, these four different temperament theories will be explored more in detail.

Thomas and Chess: The theory of temperament by Thomas and Chess focused on the behavioural tendencies in order to explain temperament by questioning "how", "what" and "why" of behaviour (Goldsmith et al., 1987). According to this theory, temperament is different from ability which is related to *what* of behaviour and also from motivation which explains *why* of behaviour. It is actually related to *how* of behaviour (Thomas, & Chess, 1977). Although children or adults may possess the same motivation and a similar level of ability for a specific task or social activity, they may be obviously dissimilar regarding how they carry out tasks, and their motor activity, intensity and quality of mood, ease of adaptability, persistence, or degree of distractibility in the process of functioning. The dissimilar features for each child would constitute dimensions of temperament (Goldsmith et al., 1987). The domains of temperament are as follows:

1. Regardless of being an infant, older child, adolescent or adult, temperament is an independent psychological attribute. It can neither be classified as secondary to nor derived from other attributes such as cognition, arousal, motivation or emotionality.
2. Temperament must differ from motivation, abilities and personality all the time.
3. Temperament, which can be viewed as a dynamic factor that mediates and forms the impact of the environment on the individual's psychological structure, is always expressed as a reaction to external stimulus, opportunity, expectation or demand (Goldsmith et al., 1987).

Thomas and colleagues, as pioneers in temperament literature, conducted New York Longitudinal Study (NYLS) starting from 1956. Based on the data from NYLS, they identified nine categories, namely rhythmicity of biological functions, activity level, approach to or withdrawal from new stimuli, adaptability, threshold of responsiveness, quality of mood, intensity of reaction, distractibility, and attention span/persistence. In addition, three temperamental patterns, which are easy, difficult, and slow-to-warm-up temperament, were designated (Thomas, Chess & Birch, 1968; Thomas & Chess, 1977; Goldsmith et al., 1987).

Among the nine categories determined by Thomas, Chess and Birch (1968), the first dimension of temperament is *activity level* which refers to the degree, process, and frequency of motor actions like reaching, crawling and walking. The second dimension is *rhythmicity* which is based on the level of rhythmicity or perpetuation of regular biological activities in a repetitive way (e.g., rest and activity, sleeping and waking). The third one*, approach or withdrawal*, characterizes the first response of a child to any novel stimulus such as food, people, and toys. The fourth temperament dimension is *adaptability*, which refers to a child's responses to novel or changed conditions. The fifth dimension, *intensity of reaction* is related to the energy level of response regardless of the course. *Threshold of responsiveness*, as the sixth dimension, reflects to the degree of external stimulation which is required to recall recognizable reaction. The seventh dimension, *quality of mood,* exhibits the quantity of pleasant, happy, friendly acts as opposed to unpleasant, unhappy, and unfriendly acts. The *distractibility* dimension, on the other hand, points to the degree of being affected by environmental stimuli that can hinder or change the direction of the continuing behaviour. As the last dimension of temperament, *attention span and persistence*, subsumes two interrelated categories. While attention span refers to the duration of a specific activity that a child performs, the other subcategory, persistence, refers to the child's continual activity in spite of the impediments to its perpetuation.

Buss and Plomin: The theory of temperament by Buss and Plomin centred on two identifying characteristics of temperament. First, according to these researchers, the traits (temperamental domains) are originally genetic as the other inherited psychological dispositions (e.g. intelligence). Secondly, the traits distinguish temperament from other clusters of both inherited and acquired personality traits that manifest themselves in infancy, especially during the first year of life (Goldsmith et al., 1987).

Buss and Plomin formulated five criteria in determining which personality traits should be called as temperament. These criteria are inheritance, stability during development over a period of time, presence in adulthood, adaptiveness of the organism and presence in animals. In addition, they proposed four main traits which form temperament (Buss & Plomin, 1975). The first one is *emotionality* that refers to distress. This dimension ranges from lack of emotional response such as being too

patient to uncontrolled excessive emotional responses. Crying, tantrums, difficulty in being soothed, a low threshold for the aversive stimuli that trigger distress and intense activation of the sympathetic division of the autonomic nervous system are among the high extreme reactions. Emotional arousal and, to a lesser extent, behavioural arousal are included in emotionality. The second main trait that forms temperament is *activity* which primarily comprises tempo and vigor. Within this dimension, there are two extreme ends which are lethargy and hypomanic push of energetic behaviour so that individuals diversify from one another. This dimension includes behavioural arousal, especially increased amplitude and rate of responses. This type of behavioural arousal is not the same as the physiological and experiential arousal which occurs in emotionality. The third main trait is *sociability* that reflects the preference for being with others instead of being alone. Seeking to share activities, receiving attention from others, and being involved in the back-and-forth responsivity that defines social interaction are the needs for sociable individuals (Goldsmith et al., 1987).The last main trait is *impulsivity* that refers to the inclination to react instantly instead of preventing a response (Buss & Plomin, 1975). However, the researchers excluded impulsivity from the theory as it was not clear whether impulsivity was inherited or not (Buss & Plomin, 1984).

According to Buss and Plomin (1975), temperamental characteristics stem primarily from the genes, and aforementioned temperamental characteristics will exhibit more stability through time than most personality traits. In other words, emotionality, sociability, and activity lay the foundation for later personality, and they are also three essential temperamental characteristics, without which an older child or adult cannot be thoroughly described (Goldsmith et al., 1987).

Goldsmith: Goldsmith puts forward two criteria for temperament. The first one is *inclusion criteria*, which proposes that temperament is emotional in nature, it determines individual differences and it points to behavioural tendencies. According to these criteria, temperament is indexed by the expressions of emotion. The second one is *exclusion criteria,* which proposes that temperament excludes cognitive or perceptual factors. That is, temperament is identified with the expression of emotions and emotional arousal instead of equally significant receptive aspects which are related to cognitive factors. Individual differences in the capability to perceive, decode and feel others' emotional expressions are complementary elements for

temperament. Both these receptive differences and temperament play essential roles in social interactions, and affect personality. In conclusion, Goldsmith claims that temperamental characteristics shape the emotional base of some personality traits through such factors as cognitive skills (Goldsmith et al, 1987).

Rothbart: Similar to other temperament theorists, Rothbart suggests that individual differences are relatively stable and substantially biological (Rothbart & Derryberry, 1981). In her temperament theory, there are two major constructs. The first one is reactivity which refers to the excitability or arousability of behavioural, endocrine, autonomic and central nervous system response and this response is evaluated through threshold, latency, intensity, rise time, and recovery time. The second construct is self-regulation which is related to attention, approach, avoidance and inhibition processes. Additionally, self-regulation enables reactivity modulation either by enhancing or inhibiting (Goldsmith et al., 1987).

In order to assess infant temperament, Rothbart (1986a) conducted a longitudinal study with 46 infants at 3, 6, and 9 months of age and investigated six dimensions of temperament which are activity level, smiling and laughter, distress to limitations, fear, soothability and vocal activity in terms of conceptual overlap and stability. Soothability was excluded from subsequent analyses as it showed no stability. Then, Infant Behavior Questionnaire (IBQ) was developed based on the remaining five dimensions. Based on the IBQ as well as developmental literature, Rothbart proposed several major dimensions that covered the aforementioned five dimensions (Goldsmith et al., 1987). The first dimension is *negative reactivity,* which is displayed through the experience of distress, expression of distress and behavioural and attentional avoidance. The second dimension is *positive reactivity,* and it is exhibited through the experience and expression of positive affect, and behavioural and attentional approach. While smiling, laughter and orientation toward objects reflect positive reactivity, fear and distress to limitations reflect negative reactivity. The third dimension of temperament is *behavioural inhibition*. It comes into prominence with unfamiliar or intense stimuli, begins during the second half of the first year and is maintained during the preschool years. Fear is also related to behavioural inhibition as well as to negative reactivity. Lastly, *the capacity through effort to focus and shift attention* is the potential fourth dimension and it starts developing by the end of the first year of life.

Upon assessing temperament in infants, Rothbart and her colleagues expanded their model in different age groups such as preschool children (Rothbart, Ahadi, Hershey & Fisher, 2001), toddlers (Putnam, Gartstein & Rothbart, 2006), and adults (Evans & Rothbart, 2007). Depending on these studies, the structure of temperament and lower order scales (e.g. fear) can be formulated in at least three major dimensions, namely Negative Affect, Surgency, and Effortful Control, independent of the age group (Rothbart & Bates, 2006, as cited in Mervielde & Pauw, 2012). To illustrate, The Children's Behavior Questionnairre (Rothbart, Ahadi, Hershey & Fisher, 2001) with 15 primary temperamental characteristics presented Negative Affect (anger/frustration, discomfort, fear, sadness, and soothability), Surgency (activity level, impulsivity, high-intensity pleasure, and shyness) , and Effortful Control (attentional focusing, inhibitory control, low-intensity pleasure, and perceptual sensitivity).

To sum up, all theories have different dimensions about temperament, but they all accept that temperament has a biological basis and relative stability, and also it interacts with the environment (Goldsmith et al., 1987). Therefore, it can be suggested that child temperament is an important factor to understand adult temperament and/or personality due to its interaction with the environment (Rothbart, Ahadi & Evans, 2000), which will be explored in the following chapter.

1.3 Adult Temperament and Personality

1.3.1 The relationship between adult temperament and personality

Although individual differences in traits are exhibited by people throughout life, these traits are called either as "temperament" or as "personality" (Shiner & Deyoung, 2011). In other words, the paradigm of individual differences is shared by both temperament and personality theories (Strelau, 1987).

As mentioned in the literature previously, temperament is biologically-based (Rothbart, Ahadi & Evans, 2000) so, it shows stability over time and across situations (Prior, Sanson, Smart & Oberklaid, 2000). It affects and is affected by each individual's experience. In other words, there is a bi-directionality between temperament and each person's experience. Due to this bi-directionality, personality

is seen as one of the outcomes of this relationship by some researchers (Rothbart, Ahadi & Evans, 2000).

Similar to the relationship between temperament and the environment, Caspi (1998, p.312) asserted with an emphasis on the relationship between personality and environment that "Personality traits are thus organizational constructs; they influence how individuals organize their behaviour to meet environmental demands and new developmental challenges." On the basis of this notion, it cannot be said that the difference between temperament and personality is rigid and firm (McCrae et al., 2000). In other words, temperament and personality can be viewed as comprehensively convergent structures (Goldsmith et al., 1987). Also, temperament is seen both as the initial structure of personality (Digman & Shmelyov, 1996; Prior et al., 2000) and as the primary element to understand the personality construct (Digman, & Shmelyov, 1996; Rothbart et al., 2000). It is even a detailed biological plan (Prior et al., 2000). Nevertheless, personality is a more detailed development because it is combined with the impact of experiences and learning in time so as to develop a more mature, expanded characteristics and individual style (Prior et al., 2000). Personality traits are developed depending on the maturation as well as the interaction with the environment (Goldsmith et al., 1987). As a result, it can be said that adult personality traits arise from temperamental characteristics (Rothbart et al., 2000) since temperament enables a fundamental biological root in the development of personality (Goldsmith et al., 1987).

Evans and Rothbart (2007) view temperament as a sub-domain of personality. In a convergent manner, the temperament theorists accept that temperament is a component of personality (Goldsmith et al., 1987). Yet, personality lies beyond temperament since personality involves specific cognitions, beliefs and values (Evans & Rothbart, 2007). The current notion is that temperament subsumes dispositional attentional processes (e.g., effortful control) (Rothbart & Bates, 2006, as cited in Evans & Rothbart, 2007) excluding specific cognitions (Evans & Rothbart, 2007). That is, a much wider range of individual differences are involved in personality than temperament (Shiner & Deyoung, 2011). However, temperament has an impact on specific cognitions. For example, a temperamentally fearful person has a tendency to develop pessimistic attitudes about the future. Nevertheless, the domains of temperament and personality remain distinguishable (Evans & Rothbart,

2007). In sum, temperament and personality complement each other because they are not completely dissimilar and entirely irrelevant (Pauw, Mervielde & Leeuwen, 2009).

Based upon the aforementioned relationship between temperament and personality, Evans and Rothbart (2007) suggested an Adult Temperament Model in parallel with Big Five model of personality. In the following section, this model which is going to be used in this study will be described.

1.3.2 Adult temperament model

Although temperament and personality are seen as overlapping structures, (Goldsmith et al., 1987), no studies have yet established the adult temperament structure except the study carried out by Evans and Rothbart (2007). They explored the hierarchical relationships among lower level conceptually created constructs of temperament like fear, and the associations between temperament constructs (e.g. negative affect) and the lexical Big Five model of personality. They suggested a structure of adult temperament model which is associated with the personality models (Evans & Rothbart, 2007). As the Big Five and five-factor model (FFM) constructs are markedly correlated (McCrae & John, 1992), Evans and Rothbart (2007) usually refer to the model as the Big Five/FFM. The five-factor model of personality is a hierarchical pattern of personality traits consisting of five primary dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience (McCrae & John, 1992). Therefore, Evans and Rohtbart (2007) developed a five-factor adult temperament model with the factors labelled as Extraversion/Surgency, Affiliativeness, Effortful Control, Negative Affect, and Orienting-Sensitivity. Then, they tested the relationship between the temperament model they developed and Big Five, and found that adult temperament reflects remarkable convergence with the Big Five. As a result, adult temperament model, which is relevant to the models of personality traits, emerged (Evans & Rothbart, 2007).

Each of the five dimensions of adult temperament model has sub-dimensions. *Negative affect* as the first dimension of adult temperament is associated with potentially aversive stimuli. This dimension includes scales evaluating the aspects of both aggressive negative affect (frustration, aggression control, and social anger) and

non-aggressive negative affect (fear, discomfort, and sadness). The second dimension, *Extraversion/Surgency,* is related to potentially appetitive stimuli and positive affect. This domain includes scales assessing sociability, high intensity pleasure, and positive affect. The third dimension, *Effortful Control,* includes inhibitory control, activation control and effortful attention. *Orienting Sensitivity*, as the fourth dimension, contains general perceptual sensitivity, associative sensitivity and affective perceptual sensitivity. Lastly, *Affiliativeness* dimension involves concern for others. This dimension contains emotional empathy, empathic guilt, and social closeness (Evans & Rothbart, 2007).

According to Evans and Rothbart (2007), adult temperament dimensions and five-factor model of personality are related to each other. For example, Big Five Neuroticism was associated positively with the Negative Affect and negatively with the Effortful Control dimension of adult temperament. Moreover, while Extraversion dimension of adult temperament and Big Five Extraversion were positively related to each other, adult temperamental Effortful Control was associated positively with the Big Five Conscientiousness. Lastly, Orienting Sensitivity correlated with the Intellect/Openness, and Affiliativeness correlated with the Big Five Agreeableness.

1.3.3 The relationship between child temperament and adult temperament/personality

The literature on the relationship between child temperament and adult personality traits is limited. However, certain personality traits were found to be related to some temperament dimensions in previous studies. For example, Extraversion dimension of personality was related to Approach (Prior et al., 2000) and Surgency dimensions of child temperament (Grist & McCord, 2010). Additionally, Conscientiousness dimension of personality was associated with Persistence (Prior et al., 2000) and Effortful Control of child temperament (Grist & McCord, 2010). Moreover, Neuroticism dimension of personality was correlated with Negative Affect in temperament (Grist & McCord, 2010). Based on these findings, corresponding dimensions of the child and maternal temperamental characteristics (see table 1.1) that were used in the present study are given.

Table 1.1 Corresponding dimensions of the child and maternal temperamental characteristics

Maternal temperamental characteristics	Child temperamental characteristics
Negative affect	Reactivity
Effortful control	Persistence
Extraversion/surgency	Approach
Orienting sensitivity	Perceptual sensitivity
	Soothability

In the following section, Goodness of fit theory will be mentioned in terms of the relationship between child temperament and environment, especially parents.

1.4 Goodness of Fit Theory

Early approaches (e.g., psychoanalytic and behaviourist theories) suggested that parents had an overwhelming impact on children (Harris, 1995). On the other hand, child temperament may influence parents in terms of parenting styles or practices (Kiff, Lengua & Zalewski, 2011). Therefore, Clark and colleagues (Clark, Kochanska & Ready, 2000) emphasized the bidirectional relationship between parent and child.

1.4.1 The bidirectional relationship between parent and child

In general, childrearing refers to all the interactions between parents and children to encourage the child's development (Sears, Maccoby & Levin, 1957; Brooks, 2004). Besides, it's a continual process (Sears, Maccoby & Levin, 1957), not a one way process in which mother or father affects the child in time (Brooks, 2004). The interactions subsume not only parents' caretaking and training behaviour but also their attitudes, values, interests, and beliefs. Additionally, interactions between parents and children prepare children, deliberately or unintentionally, for continuation of their lives (Sears, Maccoby & Levin, 1957), and also these interactions alter all people who contribute to this process (Brooks, 2004). Childrearing behaviour also changes as children grow older because of alterations in the developmental demands and capabilities of them (Bigner, 2010).

Both child and parent are unique individuals (Brooks, 2004). The core element of parent-child relationship is that parent or child affects each other in a perpetually developing duration of interaction. Pre-established parental personality style designate and specify the parent's attitudes and behaviour toward the child (Thomas & Chess, 1977). Temperament and gender of parents also influence parenting (Brooks, 2004). Likewise, children bring their personal needs, gender, birth order, temperament and developmental patterns into childrearing (Brooks, 2004). They do not respond to childrearing behaviours passively. In fact, children shape the behaviour of mother or father towards them (Hoghughi & Long, 2004). Thus, parents' behaviour is affected by children, and it affects children in turn (Brooks, 2004). At this point, it is also said that inclinations of parental behaviour comes from primary personality characteristics. Overall, personality characteristics are employed in interactions subsuming childrearing (Hoghughi & Long, 2004). Metsäpelto and Pulkkinen (2003) asserted that research has not paid enough attention to the consistent relationship between individual differences in thoughts, feelings, behaviour, and child care quality. Similarly, they emphasize the necessity of scrutinizing into parents' personality traits to examine the association between parenting and parental personality.

As a result, beyond parental characteristics or children's characteristics alone, interactions between them are important to determine the parenting style (Clark, Kochanska & Ready, 2000). In the following section, the interaction between child and environment will be explained within the scope of Goodness of Fit Theory.

1.4.2 Defining Goodness of Fit

Interactionist viewpoint suggests that temperament cannot be considered on its own (Thomas & Chess, 1977; Kristal, 2005). That is, temperament must not be considered only by itself ignoring the environment where it is expressed (Kristal, 2005). Because behaviour is the part of the interaction between the individual and the environment, child responds to the environment and the environment reacts to the child in turn. Therefore, there is a bidirectional relationship between individual and environment, and temperament must constantly be considered within the interaction context (Kristal, 2005) taking individual's capabilities, motivations, opportunities and external stress, and environmental circumstances including child's reaction into

account. Likewise, parent's response towards the child and parenting practices and attitudes cannot be sufficiently assessed without simultaneously taking temperament and its impact on the parent into account (Thomas, Chess, 1977).

"The goodness-of-fit" concept has been defined by researchers as the opportunities, expectations and demands of the environment which are in conformity with the temperament and other characteristics of child. In accordance with this harmony between child and environment, it is probable that optimal development would occur (Thomas & Chess, 1977; Goldsmith et al., 1987). In other words, healthy development largely relied on the "goodness of fit" between temperament and environment. Psychological development of the child which occurs neither by temperament alone nor by the environment alone is consistent with this notion. In other words, interaction between child temperament and environmental experiences, expectations and requests influences whether the development would be normal or abnormal. In contrast, discrepancies and dissonance between environment and child induce "poorness of fit". Hence, distorted development and maladaptive functioning occur (Thomas & Chess, 1977). Instead of "goodness of fit" and "poorness of fit", some researchers prefer using the concepts of "match" and "mismatch". To illustrate,Buss and Plomin (as cited in Goldsmith et al., 1987) apply the terms of matches and mismatches between individual and environment. These concepts involve social environment. In line with this, if a match occurs between parent and child in high activity or high sociability, there is a probability that the child may remain at the high extreme of these dimensions. It also provides a happier relationship between parent and child. A match between parent and child regarding low emotionality leads to satisfaction. On the other hand, if parent and child are high in emotionality, excessive stress and tension can emerge (Goldsmith et al., 1987).

In addition, some researchers (Lerner, 1983; Lerner, Lerner & Zabski, 1985) tested the goodness of fit model. To illustrate it, Lerner (1983) investigated that whether temperament provides adolescents' better adaptation when temperament matched with contextual demands than mismatched. In addition, Lerner et al. (1985) examined that whether children would display more positive functioning when children's temperament fitted demands or expectations of teachers than not fitted. Unlike the aforementioned studies, Abrams (2004) employed the goodness of fit theory to reveal how infant and parent's temperament relate to the quality of mother-

infant dyadic interaction. When parents are sensitive and responsive towards their children's needs, goodness of fit happens. Besides, if there is a mismatch between children's temperamental characteristics and parents' response to the child, poorness of fit occurs. In the present study, similar to the Abrams's (2004) study, goodness of fit theory was taken to reveal how maternal and child temperamental characteristics relate to the parenting behaviour because goodness of fit concept is seen as the most important in relationship between children and significant adults (e.g., parent, teacher, child care provider) (Kristal, 2005). Since children's responses to similar environments vary, a good or poor fit may occur because of the adults's reactions to the responses. Therefore, if adults are aware of a child's responses to a specific situation, they can modify their behaviour towards the child. Then, they may establish good fit and positive interactions with their children (Kristal, 2005). Thomas and Chess (1980) assert that development is dynamic and affected by the interaction of individual capabilities and the environment (as cited in Kirkendall, 1981). As temperament is circumstantially embedded, normal and pathogenic periods do not rely on temperament alone. Thomas and colleagues (1968) emphasize the importance of the environment for the temperament by the following quotation:

> *"In themselves, temperamental attributes are neither good nor bad. Whether a given temperamental trait of a child meets with approval or disapproval, results in praise or criticism, or proves convenient or inconvenient to adults and peers can depend upon its appropriateness to the situations in which it is expressed and upon the degree to which its manifestations corresponds to the value judgments of others." (p. 100).*

According to Kristal (2005), parents must take into account their own temperamental characteristics associated with their children's temperamental characteristics. Chess and Thomas (1987) stated that the psychological development of a child is not specified only by parents' behavioural style but also children's. However, it is determined by the congruence or incongruence between parents' and child's temperamental characteristics. Goodness-of-fit requires working in *give-and-take* manner with temperament, not in an *opposed* to it manner by striving to alter it. This concept asserts that parents should understand the context where behaviour manifests itself. Discovering the ways which fit best with a specific child makes life easier. In terms of poorness of fit, the interaction between opposite dimensions of temperament does not constantly lead to the poorness of fit. For instance, a child with low energy may strive with a teacher who has similar temperamental

characteristics, which is problematic while reaching less assertive and active children who do not express their needs. Parents' temperament sometimes prevents creating good fit. For instance, a parent with low sensitivity in temperament may have trouble recognizing the child's vague behavioural clues so this situation leads to difficulty for the parents to react properly to the child, especially when the child does not make his/her needs known (Kristal, 2005).

In the next section, parenting concept will be described in terms of the importance and impact on children or child development.

1.5 Parenting

According to Thomas and Chess (1977), all psychological theories, regardless of the differences between them, accept essential importance of the parents or parent substitutes for the development of children in early life. Understanding and adhering to the rules and roadmaps which manage interpersonal interactions are important for close relationships like parent-child relationship. This essential socialization function is provided by parents who are liable for teaching children formative lessons regarding socio-emotional and behavioural patterns that are suitable for their cultural context. Parents often provide this type of information to children rather explicitly by setting limits for them (Wolfe & McIsaac, 2011).

As parenting is an essential factor in child development (Thomas & Chess, 1977), researchers suggested and explained components of parenting styles, and based on these components, different classifications of parenting styles were formulated.

1.5.1 Components of parenting styles

Parenting styles were categorised and defined by various researchers (Becker, 1964; Collins, Maccoby, Steinberg, Hetherington & Bornstein, 2000; Maccoby & Martin, 1983; Sears et al., 1957; Skinner, Johnson & Snyder, 2005). For example, in the early studies (Becker, 1964; Sears et al., 1957), there was an inclination to classify discipline techniques under two important categories. The first one is "power-assertive" discipline that includes physical punishment, yelling, shouting, forceful orders, and threats. The second one is "love-oriented" discipline that includes expression of disappointment, isolation, love withdrawal, contingent giving

of affection, and reasoning (Maccoby & Martin, 1983). Collins and colleagues (2000) suggested that love's provision and limits are the key components of positive childrearing methods. These dimensions are called responsiveness and demandingness/control. Responsiveness reflects the awareness of parents about the child's individuality (Darling & Steinberg, 1993), the level of acceptance and sensitivity which parents express to the child (Wolfe & McIsaac, 2011). On the other hand, demandingness denotes the parent's willingness (Darling & Steinberg, 1993), the clarity of parent's expectations from the child as well as the supervisory and disciplinary strategies used to meet these expectations (Wolfe & McIsaac, 2011). Similar to responsiveness and demandingness/control, warmth (acceptance) versus hostility (rejection) is seen as the domain of childrearing methods by some researchers (Becker, 1964; Skinner, Johnson & Snyder, 2005). Warmth is often associated with acceptance, and it comprises the expression of affection, love, appreciation, kindness, and regard. It refers to emotional availability, support and genuine caring. The expression of warmth and involvement is observed not only when a child seeks comfort but also during the process of parent–child interactions based on teaching or discipline. The opposite of warmth is rejection or hostility. When parents actively dislike their children, they reject them. Rejection refers to aversion, hostility, harshness, over-reactivity, irritability, and explosiveness. It also subsumes overt communication of negative feelings for the child (e.g., criticism, derision, disapproval). In case of the child's attempts for help and attention, the reaction can be in the form of parental rejection or parent may initiate rejection irrespective of child's behaviour (Skinner, Johnson & Snyder, 2005).

Based on the intensity of these components and the relationship between them, researchers asserted different classifications of parenting styles.

1.5.2 Different classifications of parenting styles

Darling and Steinberg (1993) differentiate parenting styles like authoritarian from parenting strategies like spanking. They assert that parenting styles represent parent-child interactions across a great number of situations, but parenting practices are determined by domain specific definition

Baumrind (1966) categorizes parenting styles as authoritative, authoritarian, and permissive styles based on the models of parental control which involve levels of

support and control. The first dimension is authoritative style which presents the optimum relationship. Authoritative parents approach the child in a logical and issue-oriented manner. Verbal give-and-take is encouraged. The rationale behind the rules is shared by parents, and also parents ask their children why they object to obey a certain rule. In this way, parents exert firm control over their children regarding parent-child divergence, but they do not impose constraints on children. They both reflect their viewpoints and respect the child's individuality.

As the second dimension, the authoritarian parents strive to form, control and assess the child's acts and attitudes in conformity with a set of standard behaviour. Obedience is an important morality for authoritarian parents. If the child's behaviour and beliefs are in conflict with the parents' thoughts of right behaviour, parents opt for punitive and power-oriented acts to restrain the self-will. Authoritarian parents do not respect their children's individuality, so they restrain the autonomy of the children. Additionally, parents in this category believe that what parents say should be acknowledged by the children to be right. That is, verbal give-and-take is discouraged by these parents.

The last dimension is permissive parenting style in which parents present few limitations to a child. They tend to act in a non-punitive, acceptant and affirmative way to the child's impulses, requests and actions. Permissive parents are less demanding towards their children in terms of the responsibility for the household. The parents offer themselves as a source to use whenever the child wants to. The children do not take their parents as a model and also do not regard them as an active agent to change and form their on-going and future behaviour.

Expanding on Baumrind's typology (1966), Maccoby and Martin (1983) formulated four parenting styles based on the responsiveness and demandingness dimensions. These four types of parenting are authoritative, authoritarian, indulgent and neglectful. Although Baumrind (1966) describes "permissive" type, Maccoby and Martin (1983) specify two different types of permissive parenting, namely indulgent and neglectful (Darling & Steinberg, 1993). While authoritative parenting style is formed of high control and high warmth, authoritarian parenting style is composed of high control and low warmth. Authoritative parents are accepting, responsive, and child-centred but also demanding and controlling. Moreover, they

show bidirectional communication. Although authoritarian parents are demanding and controlling like authoritative parents, they are also rejecting, unresponsive, and parent-centred, and also they show power assertive behaviour. Within indulgent and neglectful parenting styles, both include low control, but indulgent parenting style includes high warmth, whereas neglectful parenting style consists of low warmth. Furthermore, both are undemanding and low in control attempts. However, they differ from each other at responsiveness dimension because indulgent parents are accepting, responsive, child-centred; yet, neglectful parents are rejecting, unresponsive and parent-centred. In addition, neglectful parents show ignoring, indifferent and uninvolved behaviour towards the children (Maccoby & Martin, 1983).

Besides these negative parenting styles, emotional maltreatment with respect to interactions between children and their parents leads to some harmful effects on children (Glaser, 2002). Thus, addition to all these classifications of parenting styles, emotional maltreatment must be explained considering the relationship between caregiver and child.

1.5.3 Emotional maltreatment in the context of parent-child relationships

Child maltreatment is a comparatively prevalent experience in a child's life (Glaser, 2008). When compared to other forms (e.g. physical maltreatment) of child maltreatment, psychological or emotional maltreatment appears to be more common and more destructive in children's development (Hart & Brassard, 1987). As far as maltreatment is concerned, Glaser (2002) does not distinguish between the terms "emotional" and "psychological" as cognition and affect influence each other in turn, and so they are not independent of each other. Thus, these terms will be used interchangeably in the current study as well.

Although there is no consensus on the definition of psychological maltreatment (McGee & Wolfe, 1991), several researchers attempted to define psychological or emotional maltreatment within overlaps among definitions (Glaser, 2002, 2008; Iwaniec, 2006; Wolfe & McIsaac, 2011). McGee and Wolfe (1991) in their review article discussed the definitions of psychological maltreatment, and they suggested a conceptual explanation for the concept. According to the researchers (Glaser, 2002; McGee &Wolfe, 1991), psychological maltreatment refers to the interaction between

the maltreating parent and the child with particular vulnerabilities. Moreover, interactions, actual or potential, are harmful as they result in damage to the child's development and emotional/psychological health (Glaser, 2002), and they are developmentally inappropriate (Glaser, 2008) and inconsistent (Glaser, 2002, 2008; Myers, 2011). Instances of emotional maltreatment involves the use of intense criticism (Iwaniec, 2006; Wolfe & McIsaac, 2011), denigration (Iwaniec,2006) and verbal harassment (Iwaniec, 2006; Wolfe & McIsaac, 2011), hostility and rejection (Glaser, 2008; Iwaniec, 2006), negative attributions and misattributions to the child (Glaser, 2002;2008), use of unacceptable disciplinary techniques, and absence of physical or verbal affection toward the child (Wolfe & McIsaac, 2011), lack of warmth and sense of belonging (Iwaniec, 2006), emotional unavailability, unresponsiveness and neglect (Glaser, 2008), failure to yield developmentally appropriate stimulation/opportunities to the child (Wolfe & McIsaac, 2011;) failure to promote the child's socialization (Glaser, 2002;2008) , using the child for the fulfilment of adult needs, failure to recognize and acknowledge the child's individuality and psychological boundary (Glaser, 2002; 2008), lack of supervision and provision (Glaser, 2008), exposure to familial violence, and similar trauma-stimulating experiences directly or indirectly induced by parents (Wolfe & McIsaac, 2011). Therefore, cumulative, painful, degrading and confusing experiences which parent frequently caused without compensatory protective relationship result in emotional harm for children. In addition, in order to call such behaviours as emotionally abusive, they must be repeated and maintained in the course of time throughout the entire relationship, not only in a particular condition (Glaser, 2002; Iwaniec, 2006).

Beyond these definitions, there is a remarkable debate about whether emotional maltreatment should include ill-treatment behaviour by parents or the outcomes for the child, and whether both ill-treatment behaviour and the outcomes for the child should be present in the description of emotional maltreatment (Glaser, 2002). McGee and Wolfe (1991) were interested in the meaning of "psychological" and they similarly focused on whether the term "psychological" refers to the caregiver's behaviour or its effects on the child. Eventually, they were concerned on the parental acts which include at least potential harm.

Additionally, definition of ill-treatment does not require the intention to harm the child (Glaser, 2008; Iwaniec, 2006) as some caretakers do not notice that the behaviour which they exhibit is damaging for the child. For example, parents usually are not aware that overprotection and unrealistic expectations are harmful to the child (Iwaniec, 2006) because of unrealistic expectations that result in parent-child relationship problems and child maltreatment (Iwaniec, Larkin & McSherry, 2007). Unrealistic expectations of maltreating mothers were shown by experimental studies as well *(*Azar, Robinson, Hekimian & Twentyman, 1984; Azar & Rohrbeck, 1986). For example, when abusive mothers were compared to non-abusive control mothers, they were found to exhibit unrealistic expectations more than control mothers (Azar & Rohrbeck, 1986). Moreover, another study involving abusive, neglectful and control mothers found that abusive and neglectful mothers showed unrealistic expectations more than control mothers did *(*Azar et al., 1984). These research findings and the notion which is related to the harmful effects of unrealistic expectations on children may be illustrated with an example. Although a child is not ready to perform a certain task, he/she is expected to perform it by abusive parents. If the child does not fulfil the expectations of abusive parents, he/she is perceived as not attempting to obey, and so punished for disobedience to an order. Therefore, as parents are not satisfied with the performance of the child because of their unrealistic expectations, they exhibit harmful behaviour such as criticism, depriving the child of affection and threats towards the child. At this point, emotionally harmful parenting begins due to unrealistic expectations from the child, and this type of parenting may lead to adamage in the child (Iwaneic et al., 2007).

Furthermore, McGee and Wolfe (1991) characterize emotional maltreatment with respect to verbal or nonverbal parent communication excluding physical contact. According to some researchers, the definition should include omission and commission as well (Glaser, 2002; Iwaniec, 2006) excluding physical contact (Glaser, 2002). In terms of excluding or including physical acts in the category of psychological maltreatment, Hart and Brassard (1991) assert that psychological maltreatment cannot be sufficiently measured without physical acts as physical and psychological circumstances are seen as interactive and interdependent. Hart and Brassard (1991) also employed psychological abuse and neglect classifications to form a sufficient operational definition of psychological maltreatment. They determined the following five subdimensions of psychological maltreatment, which

are in line with American Professional Society on the Abuse of Children (1995) and with some aspects of other studies (Glaser, 2002; Iwaniec, 2006; Wolfe & McIsaac, 2011).

1) *Spurning* is a kind of verbal hostility subsuming rejection and hostile degradation. It also involves using derogatory names towards the child, stigmatizing the child as worthless, and humiliating the child in public.

2) *Terrorizing* includes threats of physical hurting, killing, or abandoning the child, committing violence against the child or child's loved ones, and leaving the child neglected.

3) *Isolating* refers to the active isolation of a child, confining, and setting illogical limitations on interaction with peers or adults outside the family.

4) *Exploiting/corrupting* includes modelling antisocial and inappropriate behaviours, permitting deviant acts or beliefs.

5) *Denying emotional responsiveness* involves ignoring a child's efforts to interact and failing in reacting to a child with affection. Parents ignore the child, so they are not available for the child when he/she needs.

These subtypes enable to picture the psychological maltreatment. It is evident that there is a strong relationship between abuse and neglect in child maltreatment. However, Burgess and Conger (1978) examined abusive, neglectful, and control families to reveal if they differ from each other in terms of parent-child interactions. Their study showed that compared to the parents in the control group, neglectful parents displayed more excessive negativity and lower rate of positive interactions. Moreover, when abusive parents were compared to control parents, they showed lower rates of verbal and physical behaviour. In addition, unlike abusive and control groups, neglectful parents made more requests from their children and met the needs of their children at the minimum level. Therefore, neglectful parents are found as the most negative parents. Bousha and Twetyman (1984) also found similar results in their study. Compared to abusive and control groups, fewest mother-child interactions were found in the neglectful group. Abusive mothers showed fewer interactions than control mothers. They also showed higher levels of physical and verbal aggression than both neglectful and control mothers. In addition, excessive

isolation was found in neglectful parents since they were distanced from the environment. Therefore, Bousha and Twetyman (1984) asserted that overall rate of parent-child interactions is a key factor to distinguish between these mothers from each other and to determine the characteristics of the dysfunctional parenting or abusive and neglectful parents.

On the basis of those studies, both abusive and neglectful parenting styles probably have negative effects on the child development (Bousha & Twetyman, 1984) despite differences between abusive and neglectful families (Bousha & Twetyman, 1984; Burgess & Conger, 1978). Thus, abusive and neglectful or maltreating patterns of parent-child interactions were characterized as parenting styles (Glaser, 2011; Wolfe & McIsaac, 2011). In the next section, the maltreating parenting styles that were placed on a continuum model with the other types of parenting styles will be examined.

1.5.4 Childrearing styles related to emotional maltreatment

Wolfe and McIsaac (2011) suggested a continuum model within the scope of positive/healthy, poor/dysfunctional and emotionally abusive/neglectful parenting styles. In terms of caregiver–child interactions, there is a continuum varying from wholly satisfactory to very harmful (Glaser, 2011).

At the child-centred end of this continuum lies the more appropriate and healthy patterns of parenting styles which enhance child development. Child's development is encouraged by competent caretakers in a variety of ways. Demands and expectations of these types of parents fit in with the child's needs and capabilities (Wolfe, 1991).

Poor parenting styles are in the middle of this continuum. Poor childrearing styles such as permissive parenting include parental styles that do not have a balance between responsiveness and demandingness/control (Wolfe, Jaffe & Crooks, 2006)**.** Greater degrees of irresponsible and possibly harmful childcare are provided within this type of parenting style (Wolfe & McIsaac, 2011).

At the other end of this continuum, emotionally abusive and neglectful parenting styles are seen (Wolfe & McIsaac, 2011). In these parenting styles, primary caregiver or attachment figure is almost always the "abuser". Emotional abuse might be displayed by both parents, or one parent does not maltreat the child, but cannot

protect the child, either (Glaser, 2002). Parents' or caregivers' abusive or neglectful behaviours referring to an emotional maltreatment have resulted in or could result in serious behavioural, emotional (Glaser, 2002; 2008), cognitive, or mental difficulties (Glaser, 2002). That is, emotional abuse is considered as a long-term crisis in the child's life. Difficulties which are observed in the children seem to pave the way for dysfunctional cognitive and emotive processing, which leads to maladaptive functioning in development (Iwaniec, 2006). The extent of emotional maltreatment includes childrearing styles that ignore the basic needs and dependency status of children. This type of childrearing methods or specific behaviour towards the child is consistent with most descriptions of child emotional maltreatment. They reflect harsh, insensitive, and ineffective patterns of parenting (Wolfe & McIsaac, 2011).

According to Brassard and Donovan (2006), emotionally abusive childrearing methods involve excessive and continuous criticism and denigration (Brassard & Donovan, 2006; Myers, 2011), and terrorizing and repeated blaming, insults, and threats against children by their caregivers. Emotionally neglectful parenting methods involve obvious indifference and inattentiveness to a child's developmental or special needs (Brassard & Donovan, 2006). Neglect includes failure to meet the children's material, physical, social and emotional needs. For instance, children's needs for comfort, support, help or attention do not concern neglecting parents (Rohner, Khaleque & Cournoyer, 2009). In a sense, parents do not meet the child's basic needs, after which neglect occurs (Dubowitz et al., 2005). Moreover, neglectful parents are responsive and demanding at a low level as this type of parenting stems rationally from the intersection of the dimensions of demandingness and responsiveness (Darling & Steinberg, 1993). The operational definition of emotional neglect also includes lack of maternal warmth and responsiveness toward the child or lack of consistency and predictability in the environment of the child, especially in the disciplinary issues context (Harrington, Black, Starr & Dubowitz, 1998). As the "psychological neglect" or unresponsive parenting is difficult to measure, McGee and Wolfe (1991) suggested that neglectful parenting can be characterized by the absence of positive parental attention.

As mentioned earlier, poor parenting and emotionally maltreating parenting are in different points on the continuum. Yet, there is no clear-cut distinction between poor parenting and emotionally maltreating parenting styles because of the etiology

and impact on the child (Wolfe & McIsaac, 2011). Even though both childrearing styles share many similarities, emotional maltreatment differs from poor/dysfunctional parenting because emotional maltreatment includes chronic, severe, and escalating pattern.

The literature suggests that parenting styles are affected not only by individual characteristics (e.g. personality disturbance) but also important situational factors (e.g. unmanageable stress) (Wolfe & McIsaac, 2011). In the following section, factors which influence parenting styles will be explained.

1.6 Factors Predicting Parenting Styles

Based on Belsky's process model (1984), parental functioning has three determinants, which are parental factors (e.g. personality) (Belsky, 1984; Kendler, Sham & McLean, 1997), contextual sources-stress and support, and child temperament (Belsky, 1984; Kendler, Sham & McLean, 1997) in order of importance (Belsky, 1984). Similar to the process model, Maccoby and Martin (1983) point out that child abuse within the scope of parenting has multiple determinants. Pre-existing child characteristics (Friedrich & Einbender, 1983; Maccoby & Martin, 1983), pre-existing parental characteristics or both may activate child abuse patterns, and little is enough to perpetuate the abuse patterns once initiated (Maccoby & Martin, 1983). In addition to child abuse, child temperament also plays a direct role in emotional neglect (Harrington et al., 1998). Moreover, social context including social networks, marital relations (Belsky, 1984; Kendler, Sham & McLean, 1997), occupational experiences (Belsky, 1984), and family characteristics such as perceived family functioning, family support and stressfulness of events have effects on parenting (Harrington et al., 1998). While social context and parents' developmental histories affect parenting by influencing parental personality (Belsky, 1984), family context is indirectly associated with emotional neglect by influencing the mother's perception about child temperament (Harrington et al., 1998). In addition, support may lead to improvement in positive parenting by decreasing the amount of stressors and depression in parents (Lyons et al., 2005). Besides, mental illness, families with single parent, parental substance abuse, domestic violence (Glaser, 2008), personality disorder (Glaser, 2008; Spinetta & Rigler, 1972), and experienced childhood physical abuse (Berlin et al., 2011) are

claimed to be risk factors for parenting, specifically predicting emotional maltreatment. The rest of the factors predicting parenting are psychopathology and religious values of parents (Kendler, Sham & McLean, 1997).

As literature suggests, there are several factors to influence parenting styles. In the current study, child and mother temperamental characteristics alone and their interaction with each other will be examined in predicting parenting styles. For this reason, research on the relationship between these variables will be reviewed.

1.6.1 The relationship between child temperament and parenting

A number of studies have been carried out about the relationship between child temperament and parenting (Clark, Kochanska & Ready, 2000; Harrington, Black, Starr & Dubowitz, 1998; Paulussen-Hoogeboom, Stams, Hermanns & Peetsma, 2007; Porter, Hart, Yang, Robinson, Olsen, Zeng, Olsen & Jin, 2005; van den Akker, Deković, Prinzie & Asscher 2010). However, while some of them focus on the relationships between temperament clusters (e.g., difficult) and parenting (Harrington et al., 1998; van den Akker et al., 2010), some are interested in the relationships between dimensions of temperament (e.g., emotionality) and parenting (Clark et al., 2000). To illustrate, according to Harrington and colleagues (1998), emotional neglect was predicted by difficult child temperament. However, Ganiban and colleagues' (2011) study investigated the degree to which child temperamental characteristics influence parenting during adolescence. They found that parents' negativity increased when children had high negative emotionality and sociability. In the study of Porter and colleagues (2005), parents in the United States and People's Republic of China were compared considering the similarities and differences between child temperament and parenting styles. Child activity was associated with more authoritative and less authoritarian parenting in the Chinese sample. There was a positive association between child emotionality and authoritarian parenting in both China and the United States. Lastly, child sociability was negatively associated with cross-gender patterns of authoritarian parenting in the US sample. On the other hand, lower sociability in daughters was associated with authoritarian parenting in the Chinese sample.

On the basis of the results of these studies, one of the main aims of the current study is to examine the relationship between child temperamental characteristics and parenting styles.

1.6.2 The relationship between adult temperament/personality and parenting

Although there is no data available investigating the relationship between parent temperament and parenting, there are a number of studies about the relationship between parental personality and parenting (Bornstein, Hahn & Haynes, 2011;Coplan, Reichel & Rowan, 2009; de Haan, Prinzie & Deković, 2009; Huver, Otten, Vries & Engels, 2010; Metsäpelto & Pulkkinen, 2003; Prinzie, Stams, Deković, Reijntjes, Albert & Belsky, 2009;). Although personality and temperament in adulthood are viewed as overlapping structures (Goldsmith et al., 1987), research on personality as the predictive link of parenting will be reviewed here.

As mentioned previously, Belsky (1984) offered a theoretical model to present the determinants of parenting, and she claimed that parental personality is the most essential determinant of parenting. Verhoeven and colleagues (2007) conducted a study by adopting Belsky's (1984) process model. In their study, parental characteristics were found to be the most important variable contributing to parenting behaviour, followed by contextual and child characteristics in order of importance. With regard to maternal personality, the parent who had high scores of Openness to Experience, Extraversion, Conscientiousness as well as low Neuroticism would show the healthiest parenting. Accordingly, it was emphasized that maternal personality had significance in the research related to parenting (Bornstein, Hahn & Haynes, 2011).

According to some research studies, higher levels of Agreeableness were related to more support (Huver et al., 2010; Verhoeven et al., 2007;) and high warmth (de Haan et al., 2009; Prinzie et al., 2009), more positive discipline (Verhoeven et al., 2007) and behavioural control (Prinzie et al., 2009), low over-reactivity (de Haan et al., 2009) and authoritative parenting (Huver et al., 2010) in parents. Highly agreeable parents also behaved towards their children in a less detached and less negatively affective manner (Belsky, Crnic and Woodworth, 1995). Additionally, higher levels of Openness to Experience were associated with more warmth and behavioural control (Prinzie et al., 2009) as well as Agreeableness.

Higher levels of Conscientiousness were associated with more warmth and behavioural control (Prinzie et al., 2009) and being structured (Verhoeven et al., 2007) in parents. Conscientiousness dimension of personality was also linked to greater parent responsiveness (e.g., being sensitive to the signals of child, offering suitable support and comfort). Thus, responsive childrearing was exhibited easily owing to some characteristics of conscientiousness (e.g., being intentional, selfless, having positive affection in social interactions (Clark, Kochanska & Ready 2000).

High Neuroticism was associated with negative and intrusive parenting, and less affectively positive (Belsky et al., 1995; Clark et al., 2000), sensitive, and cognitively stimulating parenting (Belsky et al., 1995). In contrast, low Neuroticism was associated with more warmth and behavioural control (Prinzie et al., 2009). Additionaly, contradictory results were found regarding the relationship between Emotional Stability and parenting. For example, while emotionally stable parents were more likely to show support and to be more structured (Verhoeven et al., 2007), less emotionally stable parents were more likely to be authoritative (Huver et al., 2010) and to use more psychological control (Verhoeven et al., 2007).

Extraversion dimension of personality, on the other hand, was associated with low over-reactivity, high warmth (de Haan et al., 2009), behavioural control (Prinzie et al., 2009), and supportiveness (Huver et al., 2010). This dimension fell under adaptive childrearing (Clark et al., 2000) and authoritative parenting (Huver et al., 2010). Extraverted parents were found to be more affectively positive, sensitive, and cognitively stimulating considering the interactions with their sons (Belsky et al., 1995).

Depending on the predictive value of personality for parenting styles, the second aim in the current study is to examine the relationship between parental temperamental characteristics and parenting styles.

1.6.3 The impact of the interaction between parental personality and child temperament on parenting styles

Some studies have focused on the impact of the interaction between parental personality and child temperament on parenting styles (Clark, Kochanska & Ready 2000; Coplan, Reichel & Rowan 2009; Karreman, van Tuijl, van Aken, Deković, 2008) as well as the unique effects of parental personality, child temperament, and

contextual factors on parenting dimensions during toddlerhood (Verhoeven et al., 2007).

Considering parent-child interaction, Clark, Kochanska and Ready (2000) asserted that interaction between maternal personality and child temperament predicted parenting behaviour. They found that mothers with low levels of perspective taking (empathy) were more likely to use high levels of power assertion when child had high levels of negative emotionality. In addition, while mothers with high extraversion were more likely to use high power assertion with high child negative emotionality, mothers with high extraversion were more likely to use low power assertion with low child negative emotionality. Similarly, Coplan, Reichel and Rowan (2009) explored the relationship between child temperament, maternal personality and parenting, focusing on emotions within the goodness of fit theory (Thomas & Chess, 1977). Coplan et al. (2009) pointed out that child temperament moderated the relationship between mothers' personality traits and parenting practices. When child's shyness was high and mother's neuroticism was high, mothers were more likely to exhibit high over-protective parenting. Besides, when child's emotional dysregulation was high and mother's agreeableness was low, mothers were more likely to show harsh/coercive parenting. Moreover, Karreman et al. (2008) explored the relationship between parental personality and parenting with the moderating effect of pre-schoolers' effortful control in a Dutch community sample. They reported that besides weak to modest relations between personality and parenting, child temperament moderated the relationship between parental personality and parenting. Specifically, fathers' neuroticism and extraversion were significantly and positively related to positive control and negative control respectively, but only when children's levels of effortful control are low.

Thus, the third aim of this study is to examine the interaction between child and adult temperament with an emphasis on its impact on parenting styles.

1.6.4 The impact of the interaction between child temperamental characteristics on parenting styles

As mentioned earlier, the research to date has tended to focus on the interaction between child temperament and other variables such as parenting styles and parental characteristics. However, far too little attention has been paid to investigate the relationship between child temperament and parenting styles with the moderating

role of child temperamental characteristics. To illustrate, Ghera and colleagues (2006) investigated the relationship between infant negativity and maternal sensitivity with the moderating role of perceived infant soothability, and they found that infant negative temperament (negative reactivity) was significantly and positively related to maternal sensitivity for highly soothable infants. However, infant negative temperament (negative reactivity) was significantly and negatively related to maternal sensitivity for the less soothable infants.

1.7 Research purpose and hypotheses

The primary objective of the current study was to examine the relationships between child temperament (approach, reactivity, perceptual sensitivity, soothability and persistence) maternal temperamental characteristics (effortful control, negative affect, extraversion and orienting sensitivity) and parenting styles (authoritative, authoritarian, permissive, over-protective and emotionally maltreating). In the current study, child temperament scale was composed of dimensions from Short Temperament Scale for Children (Prior, Sanson & Oberklaid, 1989), Colorado Child Temperament Scale (Rowe & Plomin, 1977) and Child Behaviour Questionnaire (Rothbart, Ahadi, Hershey & Fisher, 2001). Furthermore, maternal temperament was measured by Adult Temperament Questionnaire (Evans & Rothbart, 2007). This study was designed to address the gap in the literature since no research to date has investigated the relationships between child temperament, mother temperament and parenting styles within the scope of goodness-of-fit theory. In addition to the parenting styles which are identified by Baumrind (1966, 1971), and Maccoby and Martin (1983), and emotionally maltreating parenting (Brassard & Donovan, 2006; Wolfe & McIsaac, 2011) will be included in this study. Although in general "1) Child temperamental characteristics are expected to be associated with parenting styles; 2) Maternal temperamental characteristics are expected to be associated with the parenting styles; 3) Interaction between child and maternal temperament is expected to be associated with parenting styles; and 4) The interaction between child temperamental characteristics is expected to be associated with parenting styles" are the expected relations of the present study, there are only few specific hypothesis that could be made based on the literature. Rest of the tested specific relations will be exploratory. The following four hypotheses are proposed:

1) In the literature, child negative reactivity was related to low authoritative parenting (Coplan et al., 2009), high power assertion (Clark et al., 2000), high authoritarian (Porter et al., 2005), and high restrictive parenting (Paulussen-Hoogeboom, Stams, Hermanns & Peetsma, 2007). Thus, in the present study, child reactivity is expected to predict negative parenting styles such as authoritarian.

In the literature, sociability was found to be negatively associated with authoritarian parenting (Porter et al., 2005). However, Ganiban et al., (2011) asserted that sociable children may express their impulsive or angry tendencies through interactions with others, which in turn may elicit parental negativity. Since there are contradictory results about the relations between sociability and parenting behaviour, in the present study direction of the relationship between child approach and parenting behaviours can't be predicted.

In the literature, soothability dimension was reversed and examined as emotion dysregulation. Then, emotion dysregulation (reverse of soothability) was found to be negatively associated with authoritative parenting (Coplan et al., 2009). Thus in the present study, soothability is expected to predict authoritative parenting positively.

Persistence may be classified as a subscale of effortful control (Rueda, 2012). Although there are some studies examining the relationship between effortful control and parenting (Kiff et al., 2011) or the moderating role of effortful control in the relation of parental personality and parenting (Karreman et al., 2008), there is no available study to examine the relationship between child's persistence and parenting. Thus, this dimension will be explored as well as child's perceptual sensitivity and child's approach.

2) Maternal temperamental characteristics are expected to be associated with the parenting styles. Unlike parental temperament, there are several studies about the relations of parental personality and parenting styles. Thus, these studies will guide to proposed hypotheses. For example, high neuroticism was associated with negative and intrusive parenting, and less affectively positive (Belsky et al., 1995; Clark et al., 2000), less sensitive, and less cognitively stimulating parenting (Belsky et al., 1995). In contrast, low Neuroticism was associated with more warmth and behavioural control (Prinzie et al., 2009). In line with the literature, maternal negative affect is

expected to be related to less warm, but intrusive parenting like authoritarian parenting.

For high conscientiousness which was highly correlated with effortful control (Evans & Rothbart, 2007), it was associated with more warmth and behavioural control (Prinzie et al., 2009) and being structured (Verhoeven et al., 2007), greater parent responsiveness (e.g., being sensitive to the signals of child, offering suitable support and comfort) (Clark, Kochanska & Ready 2000). Therefore, effortful control is expected to predict authoritative parenting.

In terms of extraversion, it was associated with low over-reactivity, high warmth (de Haan et al., 2009), behavioural control (Prinzie et al., 2009), and supportiveness (Huver et al., 2010). Thus, in the present study extraversion is expected to predict authoritative parenting style.

Lastly, higher levels of Openness to Experience which was correlated with high orienting sensitivity (Evans & Rothbart, 2007), were associated with more warmth and behavioural control (Prinzie et al., 2009). Therefore, in the present study, orienting sensitivity is expected to predict authoritative parenting.

3) Interactions between child and mother temperament are expected to be associated with parenting styles. This study will be the first to examine the relationship between child temperament, parent temperament and parenting styles in the scope of goodness-of-fit theory. In addition, there is not much research about the interactions between maternal and child temperamental characteristics. As mentioned previously, in the prediction of parenting only in few studies examined the interaction between maternal and child temperamental characteristics (Clark et al., 2000; Coplan et al., 2009; Karreman et al., 2008). In line with Coplan et al.'s study (2009), interaction between maternal negative affect and approach is expected to predict over protective parenting. Based on the study of Clark et al. (2000), interaction between extraversion and reactivity is expected to predict power assertive parenting such as authoritarian parenting. Based on the Karreman et al.'s study (2008), interaction between maternal negative affect and child persistence is expected to predict authoritative parenting. In addition, interaction between maternal extraversion and child persistence is expected to predict negativity.

4) The interaction between child temperamental characteristics is expected to be associated with parenting styles. There is only one study (Ghera et al., 2006)

related to this hypothesis. The role of infant soothability in the relation of infant negativity and maternal sensitivity was examined. Infant negativity was significantly positively related to maternal sensitivity when infant soothability was high and significantly negatively related to maternal sensitivity when infant soothability was low. In line with, the interaction between reactivity and soothability is expected to predict sensitive parenting. The rest of the interaction will be explored.

CHAPTER 2

ADAPTATION OF ADULT TEMPERAMENT QUESTIONNAIRE

2.1 Participants

Adult temperament questionnaire was distributed to community sample of 340 individuals in Ankara to adapt the scale into Turkish, but 293 participants responded to the scale. Before factor analysis, accuracy of data entry and missing values were examined. 24 cases were deleted as these cases had missing values more than 5% of subjects' data for Adult Temperament Questionnaire. Then, mean replacement was done to treat the rest of the missing data. After data cleaning, the sample size reduced to 269 cases with 126 women (51.7 %), 139 men (46.8 %), and 4 (1.5 %) individuals did not reported gender. Participants' age ranged from 17 to 73 years (M=28.22, SS=8.66). In terms of education level, 8 (3 %) participants had primary school education, 7 (2.60 %) participants completed secondary school, 61 (22.70%) of them were graduated from high school, 6 (2.20%) participants were graduated from college, 149 (55.40%) of them were graduated from university, 24 (8.90%) of participants had master degree, and finally 10 (3.70%) of them had a Ph.D. degree. 4 (1.5 %) cases did not report the education level.

2.2 Measures

Adult Temperament Questionnaire-short form (ATQ): "*The Adult Temperament Questionnaire*" (ATQ) was adapted by Evans and Rothbart (2007) from the Physiological Reactions Questionnaire (Derryberry and Rothbart, 1988). The dimensions of the "*Adult Temperament Questionnaire"* are ***Negative Affect*** (e.g., I become easily frightened), ***Effortful Control*** (e.g., I am often late for appointments), ***Extraversion/Surgency*** (e.g., I usually like to talk a lot), and ***Orienting Sensitivity*** (e.g., I often notice mild odors and fragrances). While the general constructs (negative affect; effortful control; extraversion/surgency; orienting sensitivity) point to factor scales, the sub-constructs (fear, sadness, discomfort, frustration, inhibitory control, activation control, attentional control, sociability, high pleasure, positive affect, neutral perceptual sensitivity, affective perceptual sensitivity, associative sensitivity) point to scales. Internal consistencies were .81, .78, .75, 85 in Evans and

Rothbart's study (2007). There are 77 items in ATQ and it is a 7-point Likert type scale ranging from 1 (extremely untrue) to 7 (extremely true). 26 items are related to *negative affect*, 19 items are associated with *effortful control*, 17 items are related to *extraversion/surgency*, and 15 items are measuring *orienting sensitivity*.

2.3 Procedure

Firstly, application was made to METU Ethic committee for approval of the study. The translation and back translation of the questionnaire were made in order to obtain Turkish version of the Adult Temperament Questionnaire. The questionnaire was translated to Turkish by the researcher. Then, items were checked by an undergraduate student in psychology and lexical meaning and semantic context were checked by associate professor in psychology. Afterwards, the back translation was made by the author's supervisor, and original form of the scale was compared with the back translation of the scale. For some items original authors of the scale was consulted. Then, copies of the Adult Temperament Questionnaire were distributed to participants. All the participants signed the informed consent forms.

2.4 Factor and Reliability Analyses of ATQ

2.4.1 Factor Analyses of ATQ

In the current study, factorability of the items was investigated with Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Barlett's test of sphericity. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was found .70, values of .60 and above were recommended for good factor analysis (Tabachnick & Fidell, 2007). Barlett's test of sphericity was also significant (χ^2=2224.409, df=741, p=.000). Although required sample size should include at least 300 participants for good factor analysis (Comrey, 1973; Tabachnick & Fidell, 2007), KMO statistic showed that the sample size of 269 was adequate for performing factor analysis.

Exploratory factor analysis with varimax rotation was conducted for 77 items-of ATQ with a number of 269 participants. Additionally, principal components extraction was used for data reduction. For interpretation utility, the factor analysis was suppressed to .30.

After performing factor analysis, relevant structure was not extracted based on the subscales (e.g., fear) of the questionnaire. Thus, analysis was forced to four factors and was performed based on the items instead of the subscales. The results of the analysis pointed that four factors accounted for the 31.82 % of the total variance. As presented in Table 7.1., the results of principle component analyses with varimax rotation showed that 11 items were loaded under factor 1. Thus, first factor was composed of 11 items and named as *negative affect.* It explained 9.03% of the total variance with eigenvalue of 3.83. Loadings on this factor ranged from .32 to .62. In the original scale, negative affect included 26 items. However, in this study, 1 item cross loaded, 8 items loaded irrelavently to the factor and 6 items did not load to any factors. Therefore, 15 items were eliminated from this factor.

The second factor was composed of 9 items and named as *extraversion*. This factor with eigenvalue of 3.77 explained 8.10% of the total variance. Loadings on this factor ranged from .41 to .65. In addition, although item 3 had high loadings (over .30) on both the first and second factor, it was included in the second factor since it had higher loading and conceptually was congruent with the second factor. In the original scale, extraversion included 17 items. However, in this study, 8 items loaded irrelavently to the factor. Therefore, 8 items were eliminated from this factor.

The third factor consisted of 11 items and named as *orienting sensitivity***.** It explained 7.49% of the total variance with eigenvalue of 2.69. Although item 33 had high loadings (over .30) on both the second and third factor, it was included in the third factor since it had higher loading, and was conceptually congruent with the third factor. Loadings on this factor ranged from .33 to .63. In the original scale, orienting sensitivity included 15 items. However, in this study, one item loaded irrelavently to the factor, 3 items did not load to any factors. Therefore, 4 items were eliminated from this factor.

The last factor included 8 items and named as *effortful control*. This factor with eigenvalue of 2.13 explained 7.22% of the total variance. Loadings on this factor ranged from .39 to .66. In the original scale, effortful control included 19 items. However, in this study, 6 items loaded irrelavently to the factor, 5 items did not load to any factors. Therefore, 11 items were eliminated from this factor.

Totally, one item cross loaded on two factors, it was not retained in the study. 14 items were excluded from analysis because they did not load on any of the factors. Moreover, 23 items were eliminated because they loaded factors irrelevatly (see appendix A)

Table 2.1 Four-factor varimax rotated loadings of the 39 items for adults (N= 269)

	NA	E/S	OS	EC
Loud noises sometimes scare me.	,618			
Sometimes, I feel a sense of panic or terror for no apparent reason.	,611			
I become easily frightened.	,598			
Sometimes minor events cause me to feel intense sadness.	,581			
I sometimes feel sad for longer than an hour.	,535			
When I hear of an unhappy event, I immediately feel sad.	,514			
When I am enclosed in small places such as an elevator, I feel uneasy.	,494			
Looking down at the ground from an extremely high place would make me feel uneasy.	,449			
Whenever I have to sit and wait for something (e.g., a waiting room), I become agitated.	,412			
I find certain scratchy sounds very irritating.	,386			
I find it very annoying when a store does not stock an item that I wish to buy.	,316			
I would not enjoy a job that involves socializing with the public (reverse).		,654		
I usually like to spend my free time with people.		,622		
I rarely enjoy socializing with large groups of people (reverse).		,613		
I like conversations that include several people.		,559		
I usually like to talk a lot.		,516		
It takes a lot to make me feel truly happy (reverse).		,510		
I rarely ever have days where I don't at least experience brief moments of intense happiness.		,465		
I would probably not enjoy a fast, wild carnival ride (reverse).		,424		
Sometimes minor events cause me to feel intense happiness.	,343	,407		
I tend to notice emotional aspects of paintings and pictures.			,633	
I am often aware how the color and lighting of a room affects my mood.			,563	
I am often consciously aware of how the weather seems to affect my mood.			,545	
I'm often aware of the sounds of birds in my vicinity.			,532	
I sometimes seem to understand things intuitively.			,531	
I am rarely aware of the texture of things that I hold (reverse).			,468	
Without applying effort creative ideas sometimes present themselves to me.			,427	
I rarely notice the color of people's eye (reverse).		,305	,409	
I often notice mild odors and fragrances.			,389	
Barely noticeable visual details rarely catch my attention (reverse).			,345	
When I am listening to music, I am usually aware of subtle emotional tones.			,328	

Table 2.1 continued Four-factor varimax rotated loadings of the 39 items for adults (N= 269)

	NA	E/S	OS	EC
I usually finish doing things before they are actually due (for example, paying bills, finishing homework, etc.).				,661
If I think of something that needs to be done, I usually get right to work on it.				,635
It is easy for me to inhibit fun behavior that would be inappropriate.				,538
It is easy for me to hold back my laughter in a situation when laughter wouldn't be appropriate.				,500
When interrupted or distracted, I usually can easily shift my attention back to whatever I was doing before.				,445
I often make plans that I do not follow through with (reverse).				,417
I am often late for appointments (reverse).				,402
I can easily resist talking out of turn, even when I'm excited and want to express an idea.				,387

Note: Abbreviations: NA; Negative Affect, E/S; Extaversion/Surgency, OS; Orienting Sensitivity, EC; Effortful Control.

2.4.2 Reliability Analyses of ATQ

Reliability analyses were conducted for the four factors of the ATQ. Cronbach's alfa coefficients for the negative affect, extraversion, orienting sensitivity and effortful control were .73, .71, .69, and .65 respectively, indicating moderate consistencies. Items' item total correlations were between .23 and .49 for negative affect, between .26 and .52 for extraversion, between .23 and .43 for orienting sensitivity, and between .21 and .52 for effortful control.

CHAPTER 3

MAIN STUDY

METHOD

3.1 Participants

205 children aged 36 to 62 months and their mothers participated in this study. All of the children were recruited from the 48 child care centres in different regions (Ayrancı, Aydınlıkevler, Balgat, Batıkent, Beşevler, Çayyolu, Dikmen, Esat, Emek, Eryaman, Etimesgut, Etlik, Keçiören, Kızılay, Gaziosmanpaşa, Oran, Ümitköy, Sincan, Yenimahalle, Yüzüncüyıl, Sokullu, See Appendix B) of Ankara.

The total sample consisted of 205 children whose age range differed from 36 to 62 months with an average of 50.00 months (SD= 5.76). There were 105 girls (M= 49.87 months, SD=6.03) and 100 boys (M= 50.14 months, SD=5.49).

Mothers' ages ranged from 23 to 50 years (M= 34.39 SD= 4.57). 124 families had one child, 66 families had two children, 6 families had three children, and 2 families had four children. 3 (1.5%) of the mothers had primary school education, 2 (1 %) mothers completed secondary school, 42 (20.5%) mothers were graduated from high school, 27 (13.2 %) mothers were graduated from college, 97 (47.3%) of them were graduated from university, 24 (11.7%) of mothers had a master degree, and finally 10 (4.9%) of mothers had a Ph.D. degree. In addition, 1 (0.5%) of the mothers perceived herself at low socioeconomic status, 3 (1.5 %) of the mothers perceived themselves at low- middle socioeconomic status, 118 (57.6%) of the mothers perceived themselves at middle socioeconomic status, 75 (36.6%) of the mothers perceived themselves at high-middle socioeconomic status, 8 (3.9%) of the mothers perceived themselves at high socioeconomic status.

Table 3.1 Parent's demographic characteristics (N= 205)

	Mothers
Age (Mean; SD)	34.39; 4.57
Perceived SES (%)	
Low	1(0.5%)
Low-middle	3(1.5%)
Middle	118(57.6%)
High-middle	75(36.6%)
High	8(3.9%)
Education level (%)	
Primary school	3(1.5%)
Secondary school	2(1%)
High School	42(20.5%)
College	27(27%)
University	97(47.3%)
Master	24(11.7%)
PhD.	10(4.9%)

3.2 Measures

Demografic scale (see appendix C) was included in the study. Children's temperament was measured by "*Short Temperament Scale for Children*" *(*Prior, Sanson & Oberklaid, 1989), one dimension of *"Colorado Child Temperament Scale*" (Rowe & Plomin, 1977), and one dimension of "*Child Behaviour Qestionnaire"* (Rothbart, Ahadi, Hershey & Fisher, 2001) that were completed both by mothers and teachers. For the assessment of adult temperament, "*Adult Temperament Questionnaire-short form*" (Evans & Rothbart, 2007*)* and for the assessment of parenting behaviours, *Parent Attitude Scale* (Demir and Şendil, 2008) and 10 items from *Turkish version of Parental Acceptance Rejection Questionnaire* (Anjel & Erkman, 1993) were used.

3.2.1 Child temperament

Short Temperament Scale for Children (STSC): The scale was developed by Prior, Sanson, & Oberklaid (1989) to assess the temperamental characteristics of children. This scale includes 30 items. Parents assess how often the child displays the behaviour identified on each item. Turkish version of the scale was adapted by Kumru, Sayıl, and Yağmurlu (2006) using translation and back-translation technique. This scale is composed of four subscales: ***approach*** (e.g., "Çocuğum ilk defa tanıştığı çocuklara karşı utangaçtır."), ***persistence*** (e.g., "Çocuğum, yeni bir işe geçmeden önce başlamış olduğu işini tamamlamayı sever."), ***reactivity*** (e.g., "Çocuğum bir işle uğraşırken, üzüldüğü ya da canı sıkıldığında, onu yere atar, ağlar,

kapıları çarpar.") and ***rhythmicity***. Each item is rated on a 6-point Likert Type scale. 6-point Likert Type scale was transformed to 5-point Likert Type scale ranging from 1 (almost never the case) to 5 (almost always the case) (Baydar et al, 2008). Internal consistencies were .66, .75, .51, 75 respectively in Baydar et al's study (2008), but in the current study they were found as .75 for approach, .81 for persistence, .73 for reactivity, excluding rhythmicity because it was not used in this study.

Colorado Child Temperament Scale (CCTI): The scale was formed to measure temperamental characteristics of children 1-6 years of age (Rowe, & Plomin, 1977). The scale includes six subscales that are ***sociability***, ***soothability***, ***attention-span***, and ***emotionality***, ***reaction to food*** and ***activity***. Only the ***soothability*** (e.g., Ne zaman ağlamaya başlasa dikkatini kolayca başka şeylere yönlendirebilir), subscale of the Colorado Child Temperament Scale (CCTI) was used in the current study. Internal consistency of soothability was .73 (Rowe, & Plomin, 1977), in the present study it was .69.

Lastly, ***perceptual sensitivity*** dimension of temperament was taken from Child Behaviour Questionnaire (Rothbart, Ahadi, Hershey, & Fisher, 2001). It was translated into Turkish. In this study, some minor changes were made on few items of the scale for teachers. For example, word the "parents" were changed to word "other people" for teachers (e.g., "Anne-babası dış görünüşünü değiştirdiğinde yorum yapar." was changed to "Birisi dış görünüşünü değiştirdiğinde yorum yapar.") and "home" in the mother form was changed to "kindergarten" in the teacher form. Internal consistency of perceptual sensitivity was .77 (Rothbart, Ahadi, Hershey, & Fisher, 2001) in the present study it was.70.

To sum up, a scale was generated to assess the child temperament with the dimensions of approach, persistence, reactivity, soothability and perceptual sensitivity (see appendix D)

3.2.2 Adult temperament

Adult Temperament Questionnaire-short form (ATQ): This scale was adapted into Turkish by researchers to use in the current study (see appendix E). According to factor analysis results, 39 items remained and four factors were extracted, namely ***negative affect, effortful control, extraversion/surgency,*** *and* ***orienting sensitivity***.

As mentioned previously, internal consistencies were .73, .65, .71, .69 in the adaptation study of Adult Temperament Questionnaire into Turkish, and .79, .59, .73, and .66 in the main study, respectively. The detailed information about the factor structure was explained in the chapter 2.

3.2.3 Parenting styles

Parent Attitude Scale (PAS): This scale was developed by Demir and Şendil (2008) to examine the childrearing behaviour of parents who have children between the ages of 2 and 6. It is a 5-point Likert type scale ranging from 1 (it is never like that) to 5 (it is always like that). High points from the scale refer to the attitude style which is defined by that dimension. The scale consists of 43 items and four dimensions that are ***authoritative*** (e.g., Çocuğumun kişisel görüşlerine saygı gösteririm.), ***authoritarian*** (e.g., Çocuğum yanlış bir şekilde davrandığında ona bağırırım.), ***permissive*** (e.g., Çocuğumu şımartırım.), and ***overprotective*** (e.g., Çocuğumu, kendisi için zor olabilecek işlerden korurum.) parenting. Internal consistencies were .83, .76, .75, .74, respectively, in Demir and Şendil's study (2008), and in the current study they were found as .84, .78, .64, .79, respectively. The first three dimensions of the scale were conceptually chosen from Baumbrind (1966, 1971, 1995) and Maccoby and Martin (1983). Demir and Şendil added the last dimension to reflect the parenting behaviour of Turkish parents suggested by some studies.

In the current study, three scales which are Childhood Trauma Questionnaire (Şar, Öztürk & İkikardeş, 2012), The Turkish version of Parental Acceptance Rejection Questionnaire (Anjel & Erkman, 1993) and Emotional Abuse Scale were compared conceptually in terms of the items. Some items of Childhood Trauma Questionnaire (Şar et al., 2012) and the Turkish version of Parental Acceptance Rejection Questionnaire (Anjel & Erkman, 1993) were similar to the items of the Emotional Abuse Scale (Kars, 1999). In a study conducted by Uslu, Kapçı, Yıldırım and Öney (2010), it was found that Recognition of Emotional Maltreatment Scale (Uslu et al., 2010) were moderately correlated to Parental Acceptance Rejection Questionnaire (PARQ) in a Turkish sample that supports convergent validity. The aforementioned study may support that emotional maltreatment can be assessed with items from the Turkish version of Parental Acceptance Rejection Questionnaire (Anjel & Erkman, 1993). Additionally, items of the Turkish version of Parental

Acceptance Rejection Questionnaire (Anjel & Erkman, 1993) were clearer than other mentioned scales. Therefore, 9 items were included into the study to measure ***emotionally maltreating parenting*** (α=.64) with hostility (e.g., Çocuğumla alay ederim), neglect-indifference (e.g., Çocuğuma sanki orada yokmuş gibi davranırım), and rejection (e.g. Çocuğum yanlış davrandığında onu utandırmaya veya suçlu hissettirmeye çalışırım) dimensions of parenting practices from the Turkish version of Parental Acceptance Rejection Questionnaire (Anjel & Erkman, 1993), 2 items from the Emotional Abuse Scale (Kars, 1999), and one item was written by researchers. In addition, hostility, neglect-indifference, and rejection dimensions of the Turkish version of Parental Acceptance Rejection Questionnaire (Anjel & Erkman, 1993) were overlapping with the dimensions of emotionally maltreating parenting (see introduction chapter).As a result 12 items were used to assess emotionally maltreating parenting. However, two items ("Çocuğumu hiç doğurmamış olmayı dilerim", "Çocuğumu gerçekten sevip sevmediğimden şüphe ediyorum.") were excluded from the study since they did not work. Therefore, 10 items remained to measure emotionally maltreating parenting style. In addition, one of the 10 items was the warmth dimension and it was included as reverse item in this study (e.g., Çocuğumun görüşlerine saygı duyarım ve açıkça söylemesi için onu cesaretlendiririm). In the current study, to facilitate the understanding of some items, minor changes were made in terms of lexical meaning. For example, item "Beni dövmek, öldürmek ve terk etmekle tehdit eder." was changed to parent-report form of the item that is "Çocuğumu dövmek, öldürmek veya terk etmekle tehdit ederim."

As a result, parenting styles were examined with the Parent attitude scale and 10 items from the Turkish version of Parental Acceptance Rejection Questionnaire (see appendix F)

3.3 Procedure

Firstly, application was made to METU Ethic committee for approval of the study and the committee approved the study. Then, to collect the data, several childcare centres were contacted by phone. Then, 51 of them agreed to participate in this study, but mothers in 3 child care centres did not complete any of the scales. Therefore, total number of childcare centres dropped to 48.

Totally, 340 consent forms were sent to parents via child care centre administrators, for each class approximately 5 or 6 children were targeted since teachers were to be asked to complete the child temperament questionnaires. Mothers who signed the inform consent form were given child temperament, adult temperament and parenting attitudes questionnaires to respond. Then, pre-school teachers were asked to complete child temperament questionnaire for children whose mothers already had returned the questionnaires. All completed questionnaires collected through child care centre administrators.

3.4 Data Cleaning

Before the main analyses of mother reported temperament and parenting styles, accuracy of data entry and missing values were examined. Five cases were deleted as these cases had missing values more than %5 of their data for Adult Temperament Questionnaire. Then, mean replacement was performed for the rest of the missing values which were less than %5 of subjects' data. Additionally, item 46 ("Çocuğumu hiç doğurmamış olmayı dilerim.") and item 48 ("Çocuğumu gerçekten sevip sevmediğimden şüphe ediyorum.") of Parent Attitude Scale were excluded from the data as they were rated as 1 by all of the subjects.

After data cleaning, composite scores of each subscale were constituted from measures. Then, univariate and multivariate outliers were examined. Any multivariate and substantial univariate outlier was not detected. Therefore, 205 cases remained in data for mother reports of all measures. Additionally, no skewness and kurtosis were found in data.

Before main analysis of teacher reports, accuracy of data entry and missing values were examined. Item6, item8 and item 14 were excluded from the data as these items had missing values more than %5 of the responses. These items may not be understood or not suitable for teachers to complete the scale (e.g., item6: Alışveriş yaparken, oyuncak ya da şeker istediğinde, onun yerine başka bir şeyi kolayca kabul eder). 27 cases were not included in the study because they did not complete the scales. Then, mean replacement was performed for the missing values less than %5 to treat the missing data. Therefore, 178 cases remained in data for teacher reports of child temperament.

CHAPTER 4

RESULTS

In this section firstly, descriptive statistics and then bivariate correlations will be presented. Secondly, three sets of hierarchical regression analyses which were conducted to predict parenting styles from child and parent temperamental characteristics will be reported. In the first and second sets, hierarchical regression analyses to predict parenting styles from child temperamental characteristics, parent temperamental characteristics and their interactions based on the mother and teacher reports will be given respectively. In the third set, hierarchical regression analyses to predict parenting styles from child temperamental characteristics and their interactions will be presented.

4.1 Descriptive statistics

Descriptive analyses of child temperamental characteristics, mother temperamental characteristics and parenting styles are shown in the table 4.1. Mean score of four temperamental characteristics except for reactivity showed that children tend to have higher scores on the dimensions of temperament. Moreover, mean scores of mother temperamental characteristics indicated that mothers have higher scores on each temperamental characteristic.

Table 4.1 Descriptive statistics for child temperament, mother temperament and parenting styles (N=205)

	Min.	Max	Mean	SD
Child temperamental characteristics				
Approach	1,57	5,00	3,33	,70
Perceptual sensitivity	2,55	4,91	3,99	,49
Soothability	1,80	4,60	3,42	,63
Persistence	1,14	5,00	3,34	,65
Reactivity	1,22	4,78	2,61	,61
Mother temperamental characteristics				
Negative affect	1,45	7,00	4,36	,98
Effortful control	3,25	7,00	5,59	,72
Extraversion	1,67	7,00	5,29	,89
Orienting sensitivity	3,36	6,91	5,43	,71
Parenting styles				
Authoritative	3,47	5,00	4,48	,34
Authoritarian	1,00	3,00	1,93	,42
Over-protective	1,88	5,00	3,51	,65
Permissive	1,40	3,70	2,62	,42
Emotionally maltreating	1,00	2,30	1,30	,29

4.2 Correlation analyses

Bivariate correlation analysis was performed in order to investigate the relationship between child temperament, adult temperament, and parenting styles.

4.2.1Correlations between demographic variables and parenting styles

Bivariate correlation analyses between demographic variables and parenting styles showed that over-protective parenting was negatively correlated with age of mother (r = -.24, p<.01), education level of mother (r = -.41, p<.01) and socioeconomic status (r = -.18, p<.01). Similarly, emotionally maltreating parenting was negatively correlated with education level of mother (r = -.20, p<.01) and socioeconomic status (r = -.23, p<.01).

4.2.2 Correlations between child temperamental characteristics

According to bivariate correlation analysis, persistence was positively correlated with approach (r = .16, p<.05), perceptual sensitivity (r = .21, p<.01), and soothability (r = .20, p<.01). Reactivity negatively correlated with approach (r = -.29, p<.01), persistence (r = -.53, p<.01) and soothability (r = -.28, p<.01). Additionally, soothability was related to approach in a positive way (r = .31, p<.01).

4.2.3 Correlations between maternal temperamental characteristics

Effortful control and extraversion negatively correlated with negative affect (r = -.21, p<.01, r = -.23, p<.01, respectively), but positively correlated with orienting sensitivity (r = .19, p<.01, r = .16, p<.05, respectively).

4.2.4 Correlations between child and maternal temperamental characteristics

Child's approach negatively correlated with mother's negative affect (r = -.21, p<.01), but positively correlated with mother's extraversion (r = .20, p<.01). Child's perceptual sensitivity positively correlated with mother's orienting sensitivity (r = .36, p<.01), and child's soothability was positively correlated with mother's extraversion (r = .24, p<.01). There is also significant relationship between child's persistence and mother's effortful control, extraversion, orienting sensitivity in a positive way (r = .14, p<.05, r = .17, p<.05, r = .15, p<.05, respectively). Lastly,

child's reactivity positively correlated with mother's negative affect (r = .25, p<.01), and negatively correlated with mother's effortful control (r = -.15, p<.01), extraversion (r = -.19, p<.05), and orienting sensitivity (r = -.16), p<.05).

4.2.5 Correlations between parenting styles

Authoritative parenting style negatively correlated with authoritarian (r =.-.35, p<.01) and emotionally maltreating parenting (r = -.32, p<.01). Over-protective parenting is significantly related to permissive parenting in a positive way (r = .14, p<.05). Lastly, authoritarian and maltreating parenting were correlated each other in a positive way (r = .63, p<.01).

4.2.6 Correlations between parenting styles and both child and maternal temperamental characteristics

According to bivariate correlation analysis, there were significant correlations between parenting styles and both child and mother temperamental characteristics.

4.2.6.1 Correlation between parenting styles and child temperamental characteristics

Positively significant relationship was found between authoritative parenting and child's perceptual sensitivity (r = .31, p<.01) and soothability (r = .22, p<.01). Authoritarian parenting negatively correlated with perceptual sensitivity (r = -.19, p<.01), soothability (r = -.15, p<.05), persistence (r = -.19, p<.01), and positively correlated with reactivity (r = .27, p<.01). Permissive parenting negatively correlated with both soothability (r = -.16, p<.01) and persistence (r = -.24, p<.01). Over-protective parenting negatively correlated with approach (r = -.15, p<.05), but positively correlated with reactivity (r = .16, p<.05). As the last relations, emotionally maltreating parenting negatively correlated with persistence (r = -.16, p<.05), but positively correlated with reactivity (r = .20, p<.01).

4.2.6.2 Correlation between parenting styles and maternal temperamental characteristics

Authoritative parenting positively correlated with effortful control (r = .31, p<.01), extraversion (r = .29, p<.01), orienting sensitivity (r =.26, p<.01), but

negatively correlated with negative affect (r =-.18, p<.05). Besides, authoritarian parenting positively correlated with negative affect (r = .28, p<.01) and negatively correlated with both effortful control (r = -.31, p<.01) and orienting sensitivity (r = -.20, p<.01). Both effortful control and extraversion were related to permissive parenting in a negative way (r = -.15, p<.05, r = -.14, p<.05). Over-protective parenting positively correlated with negative affect (r = .36, p<.01) and negatively correlated with extraversion (r = -.21, p<.01) and orienting sensitivity (r = -.16, p<.05). Lastly, there is a positive correlation between emotionally maltreating parenting and negative affect (r = .26, p<.01)

Table 4.2 Pearson Product-Moment correlation between all variables

Correlations																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.Child's gender	1	-0,03	-0,01	-,16*	0,05	-,14*	-0,10	-0,03	0,07	0,08	-0,02	-0,09	-0,06	0,01	-0,02	0,03	-0,07	0,10
2.Age	-	1	,18**	,17*	,23**	-0,11	0,03	-0,04	-0,09	-,20**	0	0,01	-0,04	0,06	0,01	-,24**	-0,004	-0,10
3.Education Level	-	-	1	,30**	0,01	-0,05	-0,04	-,15*	-0,06	-,19**	-0,10	0,05	0,10	0,08	-0,13	-,41**	0,04	-,20**
4.Ses	-	-	-	1	0,02	-0,004	0,05	,16*	-,16*	-,20**	0,04	,22**	0,03	0,07	-0,13	-,18**	-0,04	-,23**
5.Approach	-	-	-	-	1	0,07	,31**	,16*	-,29**	-,21**	0,02	,20**	0,08	0,13	-0,07	-,15*	-0,10	0,04
6.Perceptual Sensitivity	-	-	-	-	-	1	0,07	,21**	0,03	0,04	0,09	0,13	,36**	,31**	-,19**	0,11	-0,02	-0,10
7.Soothability	-	-	-	-	-	-	1	,20**	-,53**	-0,07	0,12	,24**	0,08	,22**	-,15*	-0,03	-,16*	-0,01
8.Persistence	-	-	-	-	-	-	-	1	-,28**	-0,05	,14*	,17*	,15*	0,12	-,19**	0,07	-,24**	-,16*
9.Reactivity	-	-	-	-	-	-	-	-	1	,25**	-,15*	-,19**	-,16*	-0,12	,27**	,16*	0,12	,20**
10.Negative Affect	-	-	-	-	-	-	-	-	-	1	-,21**	-,23**	-0,06	-,18**	,28**	,36**	0,14	,26**
11.Effortful Control	-	-	-	-	-	-	-	-	-	-	1	0,03	,19**	,31**	-,31**	0,04	-,15*	-0,13
12.Extraversion	-	-	-	-	-	-	-	-	-	-	-	1	,16*	,29**	-0,09	-,21**	-,14*	-0,07
13.Orienting Sensitivity	-	-	-	-	-	-	-	-	-	-	-	-	1	,26**	-,20**	-,16*	-0,10	-0,07
14.Authoritative	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-,3**	-0,08	-0,11	-,32**
15.Authoritarian	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0,05	0,10	,63**
16.Over-Protective	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	,14*	0,05
17.Permissive	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0,10
18.Emotionally Maltreating	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

4.3 Regression analyses

In the present study, relations between maternal temperamental characteristics, child temperamental characteristics and parenting styles were investigated. Child's temperament was assessed by mothers and teachers separately. Therefore, for each outcome variable (for each parenting style) two sets of hierarchical regression analyses were conducted based on mothers' and teachers' reports of child temperamental characteristics when the interactions between child and maternal temperament were tested. In addition, for each outcome variable one set of hierarchical regression analyses were performed when the interactions among the child temperamental characteristics were tested. In these regression analyses, final steps of the equations in which interaction terms between temperamental characteristics of the child and mother were entered, and also interaction terms between child temperamental characteristics, were varied.

In two sets of the regression analyses in the first step, mothers' age and education level were entered as control variables, in the second step perceived socioeconomic status was entered in order to test whether socioeconomic status was influential above the effects of maternal education level, in the third step child temperamental characteristics and in the fourth step maternal temperamental characteristics were entered into the equation. In the final step interaction terms were entered. Since there were many possible interactions to calculate between child and maternal temperamental characteristics, one of the child temperamental characteristic was taken and interactions of that dimension with all maternal temperamental characteristics were calculated. For example, for approach; negative affect* approach, effortful control *approach, extraversion*approach, orienting sensitivity*approach. Thus, for each child temperamental characteristic (approach, perceptual sensitivity, soothability, persistence and reactivity) this was repeated and separate analyses were carried out.

4.3.1. Regression analyses in predicting different parenting styles from mother's perceptions of child temperament

4.3.1.1. Predicting authoritative parenting style

In predicting authoritative parenting style five separate hierarchical regression analyses were carried out. In each of these analyses in the final step, one of the child temperamental characteristics was taken as a moderator variable.

In the first step, age and education level of the mother were entered into equation, but they did not account for significant amount of variation in authoritative parenting scores (R^2= .01, *F* (2,202) =.87, *ns*). Socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in authoritative parenting scores, (ΔR^2= .001, ΔF (1,201) = .30, *ns*). In the 3rd step, child temperamental characteristics were entered into the equation, there was significant change in R^2 (ΔR^2= .15, ΔF (5,196) =6.76, p <.001). In step 4, maternal temperamental characteristics were entered into the equation, they significantly added to the amount of variation explained in authoritative parenting (ΔR^2= .12, ΔF (4,192) =8.26, p <.001). In the final step, interaction terms were added into the equation, however there wasn't a significant change in R^2 in any of the five regression analyses where one of the child temperamental characteristic was a moderator; approach (ΔR^2= .02, ΔF (4,188) =1.06, ns), perceptual sensitivity (ΔR^2= .02, ΔF (4,188) =1.07, ns), soothability (ΔR^2= .01, ΔF (4,188) =.48, ns), persistence (ΔR^2= .02, ΔF (4,188) =.10, ns) and reactivity (ΔR^2= .01, ΔF (4,188) =.84, ns). However, all variables in the fifth step significantly predicted authoritative parenting style in each regression analysis (see table 4.3).

Table 4.3 Hierarchical Regression Analysis in Predicting Authoritative Parenting Style: Approach and Perceptual Sensitivity as moderators

		Approach							Perceptual Sensitivity						
	Predictors	R	R^2	F	ΔF	B	SE	B	R	R^2	F	ΔF	B	SE	β
Step1	Age					.01	.01	.09					.004	.01	.06
	Education level	**.09**	**.01**	**.87**	**.87**	**.03**	**.02**	**.09**	**.09**	**.01**	**.87**	**.87**	**.02**	.02	**.08**
Step2	Ses	**.10**	**.01**	**.68**	**.30**	**-.02**	**.04**	**-.04**	**.10**	**.01**	**.68**	**.30**	**-01**	**.04**	**-.02**
Step3	Approach					-.01	.03	-.01					.002	.03	.004
	Perceptual sensitivity					.16	.05	.23***					.18	.05	.26***
	Soothability					.09	.04	.17*					.08	.04	.15*
	Persistence					.01	.04	.02					-.01	.04	-.02
	Reactivity	**.40**	**.16**	**4,52*** **	**6.76*** **	**.05**	**.04**	**.09**	**.40**	**.16**	**4,52*** **	**6.76*** **	**.04**	.04	**.07**
Step4	Negative affect					-.02	.02	-.07					-.02	.02	-.06
	Effortful control					.12	.03	.25***					.12	.03	.25***
	Extraversion					.08	.03	.22**					.08	.03	.20**
	Orienting sensitivity	**.53**	**.28**	**6,21*** **	**8.26*** **	**.04**	**.03**	**.09**	**.53**	**.28**	**6,21*** **	**8.26*** **	**.04**	.03	**.08**
Step5	N.affect***approach***					-.001	.03	-.003							
	E.control ****approach***					-.02	.05	-.03							
	Extraversion****approach***					.03	.03	.07							
	O.sensitivity****approach***	**.54**	**.30**	**4,93*** **	**1.06**	.06	.04	**.10**							
	N.affect****sensitivity***												-.07	.05	-.09
	E.control ****sensitivity***												-.04	.06	-.04
	Extraversion****sensitivity***												-.03	.05	-.05
	O.sensitivity****sensitivity***								**.54**	**.30**	**4,93*** **	**1.07**	.09	.06	**.10**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.3 continued. Hierarchical Regression Analysis in Predicting Authoritative Parenting Style: Soothability and Persistence as moderators

		Soothability							Persistence						
	Predictors	R	R^2	F	ΔF	B	SE	B	R	R^2	F	ΔF	B	SE	β
Step1	Age					.004	.01	.06					.004	.01	.05
	education level	**.09**	**.01**	**.87**	**.87**	**.03**	**.02**	**.10**	**.09**	**.01**	**.87**	**.87**	**.03**	**.02**	**.09**
Step2	Ses	**.10**	**.01**	**.68**	**.30**	**-.03**	**.04**	**-.05**	**.10**	**.01**	**.68**	**.30**	**-.02**	**.04**	**-.04**
Step3	Approach					.003	.03	.01					.01	**.03**	.02
	Perceptual sensitivity					.17	.05	.24***					.16	.05	.23***
	Soothability					.09	.04	.16*					.09	.04	.17*
	Persistence					-.001	.04	-.003					-.002	.04	-.003
	Reactivity	**.40**	**.16**	**4,52*** **	**6.76*** **	**.04**	**.04**	**.07**	**.40**	**.16**	**4.52*** **	**6.76*** **	**.04**	**.04**	**-.07**
Step4	Negative affect					-.03	.02	-.07					-.03	.02	-.09
	Effortful control					.12	.03	.25***					.12	.03	.27***
	Extraversion					.09	.03	.23***					.08	.03	.21**
	Orienting sensitivity	**.53**	**.28**	**6,21*** **	**8.26*** **	**.04**	**.03**	**.07**	**.53**	**.28**	**6.21*** **	**8.26*** **	**.04**	**.03**	**.08**
Step5	N.affect* ***soothability***					.03	.04	.05							
	E.control * ***soothability***					-.04	.05	-.05							
	Extraversion* ***soothability***					.03	.04	.06							
	O.sensitivity* ***soothability***	**.54**	**.29**	**4.73*** **	**.48**	**-.001**	**.05**	**-.001**							
	N.affect* ***persistence***												-.03	.03	-.06
	E.control * ***persistence***												-.09	.05	-.12[c]
	Extraversion* ***persistence***												.001	.03	-.003
	O.sensitivity* ***persistence***								**.54**	**.30**	**4.91*** **	**.10**	**-.01**	**.05**	**-.01**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. [c] p<.08. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.3 continued Hierarchical Regression Analysis in Predicting Authoritative Parenting Styles: Reactivity as moderator

		Reactivity						
	Predictors	R	R^2	F	ΔF	B	SE	B
Step1	Age					.004	.01	.05
	Education level	**.09**	**.01**	**.87**	**.87**	**.03**	**.02**	**.09**
Step2	Ses	**.10**	**.01**	**.68**	**.30**	**-.02**	**.04**	**-.04**
Step3	Approach					.003	.03	.01
	Perceptual sensitivity					.17	.05	. 24***
	Soothability					.09	.04	. 17*
	Persistence					.003	.04	.01
	Reactivity	**.40**	**.16**	**4.52*** **	**6.76*** **	**.04**	**.04**	**.07**
Step4	Negative affect					-.03	.02	-.07
	Effortful control					.11	.03	.24***
	Extraversion					.08	.03	. 21**
	Orienting sensitivity	**.53**	**.28**	**6.21*** **	**8.26*** **	**.03**	**.03**	**.07**
Step5	N.affect***reactivity***					.05	.04	.09
	E.control * ***reactivity***					.06	.05	.07
	Extraversion***reactivity***					-.03	.04	-.05
	O.sensitivity***reactivity***	**.54**	**.29**	**4.85*** **	**.84**	**.02**	**.06**	**.02**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

4.3.1.1.1. Approach as a moderator

When approach was a moderator in the final step of the regression analysis, child's perceptual sensitivity (β=.23, p <.001) and soothability (β=.17, p <.05); mother's effortful control (β=.25, p <.001) and extraversion (β=.22, p <.01) significantly and positively predicted authoritative parenting style. These findings suggested that when children had high scores of perceptual sensitivity and soothability, mothers were more likely to show high authoritative parenting style. Similarly, mothers who had high scores of effortful control and extraversion were more likely to exhibit high authoritative parenting style. None of the interactions individually predicted authoritative parenting style.

4.3.1.1.2. Perceptual Sensitivity as a moderator

When perceptual sensitivity was a moderator in the final step of the regression analysis, child's perceptual sensitivity (β=.26, p <.001) and soothability (β=.15, p

<.05); mother's effortful control (β=.25, *p* <.001) and extraversion (β=.20, *p* <.01) significantly and positively predicted authoritative parenting style. None of the interactions individually predicted authoritative parenting style.

4.3.1.1.3. Soothability as a moderator

When soothability was a moderator in the final step of the regression analysis, child's perceptual sensitivity (β=.24, *p* <.001) and soothability (β=.16, *p* <.05); mother's effortful control (β=.25, *p* <.001) and extraversion (β=.23, *p* <.001) significantly and positively predicted authoritative parenting style. None of the interactions individually predicted authoritative parenting style.

4.3.1.1.4. Persistence as a moderator

When persistence was a moderator in the final step of the regression analysis, child's perceptual sensitivity (β=.23, *p* <.001) and soothability (β=.17, *p* <.05); mother's effortful control (β=.27, *p* <.001) and extraversion (β=.21, *p* <.01) significantly and positively predicted authoritative parenting style.

Moreover, interaction between effortful control and persistence was approaching significance in predicting authoritative parenting (β=-.12, *p* = .08). Simple slope analysis was conducted to detect which aspects of the relations were significant. For children with high persistence maternal effortful control levels did not make a difference to their authoritative parenting behaviours. However, when child's persistence was low and mother's effortful control was high, mothers were more likely to show high authoritative parenting style. Similarly, when child's persistence was low and mother's effortful control was low, mothers were less likely to exhibit authoritative parenting (see figure 1).

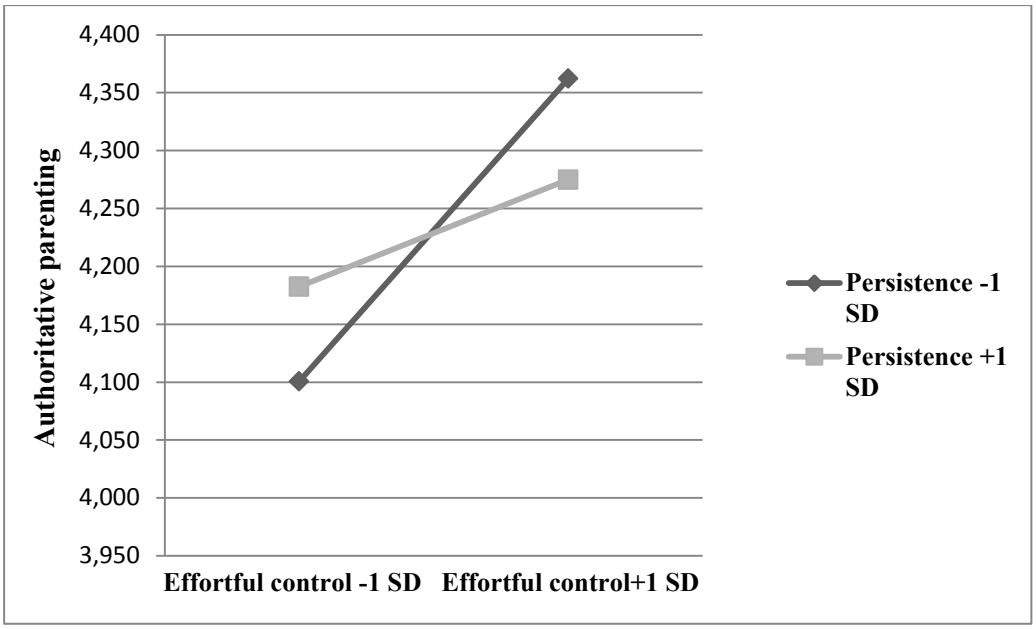

Figure 1 Interaction graph of child's persistence and mother's effortful control in predicting authoritative parenting

4.3.1.1.5 Reactivity as a moderator

When reactivity was a moderator in the final step of the regression analysis, child's perceptual sensitivity (β=.24, p <.001) and soothability (β=.17, p <.05); mother's effortful control (β=.24, p <.001) and extraversion (β=.21, p <.01) significantly and positively predicted authoritative parenting style. None of the interactions individually predicted authoritative parenting style.

4.3.1.2 Predicting authoritarian parenting style

Regression analyses were run to predict authoritarian parenting style. In step 1, education level and age of mother did not account for significant amount of variation in authoritarian parenting (R^2= .02, F (2,202) =1.72, ns.). In step 2, socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in authoritarian parenting scores, (ΔR^2= .01, ΔF (1,201) =1.93, ns.). In step 3, child temperamental characteristics were entered into the equation, there was significant change in R^2 (ΔR^2= .11, ΔF (5,196) =4.99 p <.001). In step 4, maternal temperamental characteristics were entered into the equation, they significantly added to the amount of variation explained in authoritarian parenting (ΔR^2= .10, ΔF (4,192) =6.24, p <.001). In the final step, interaction terms were introduced to the equation but there wasn't a significant change in R^2 in any of the

five regression analyses where one of the child temperamental characteristic was a moderator; approach (ΔR^2= .003, ΔF (4,188) =.17, ns), perceptual sensitivity (ΔR^2= .03, ΔF (4,188) =1.70, ns), soothability, (ΔR^2= .01, ΔF (4,188) =.73, ns), persistence (ΔR^2= .03, ΔF (4,188) =1.97, ns) and reactivity (ΔR^2= .01, ΔF (4,188) =.70, ns). However, all variables in the last step significantly predicted authoritarian parenting style in each regression analysis (see table 4.4).

Table 4.4 Hierarchical Regression Analysis in Predicting Authoritarian Parenting Style: Approach and Perceptual Sensitivity as moderators

		Approach							Perceptual sensitivity						
	Predictors	R	R^2	F	ΔF	B	SE	B	R	R^2	F	ΔF	B	SE	β
Step1	Age					.01	.01	.06					.01	.01	.06
	Education level	**.13**	**.02**	**1.72**	**1.72**	**-.04**	**.03**	**-.12**	**.13**	**.02**	**1.72**	**1.72**	**-.04**	**.03**	**-.12**
Step2	Ses	**.16**	**.03**	**1.79**	**1.93**	**-.02**	**.05**	**-.03**	**.16**	**.03**	**1.79**	**1.93**	**.003**	**.05**	**-.004**
Step3	Approach					.02	.04	.03					.02	.04	.04
	Perceptual sensitivity					-.13	.06	-.15*					-.12	.06	-.13[a]
	Soothability					-.02	.06	-.03					-.02	.05	-.04
	Persistence					-.06	.05	-.09					-.07	.05	-.10
	Reactivity	**.37**	**.14**	**3.86*** **	**4.99*** **	**.11**	**.06**	**.15[b]**	**.37**	**.14**	**3.86*** **	**4.99*** **	**.11**	**.06**	**.15[a]**
Step4	Negative affect					.09	.03	.20**					.09	.03	.20**
	Effortful control					-.13	.04	-.21**					-.13	.04	-.22***
	Extraversion					.02	.03	.05					.02	.03	.04
	Orienting sensitivity	**.49**	**.24**	**4.93*** **	**6.24*** **	**-.03**	**.04**	**-.05**	**.49**	**.24**	**4.93*** **	**6.24*** **	**-.04**	**.04**	**-.06**
Step5	N.affect***approach***					.02	.04	.04							
	E.control ***approach***					.04	.06	.04							
	Extraversion***approach***					.01	.04	.01							
	O.sensitivity***approach***	**.49**	**.24**	**3.67*** **	**.17**	.02	.06	.02							
	N.affect***sensitivity***												.01	.06	.01
	E.control ***sensitivity***												.15	.08	.12[a]
	Extraversion***sensitivity***												-.11	.06	-.13[b]
	O.sensitivity***sensitivity***								**.51**	**.26**	**4.17*** **	**1.70**	**.07**	**.08**	**.06**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysi

Table 4.4 continued. Hierarchical Regression Analysis in Predicting Authoritarian Parenting Style: Soothability and Persistence as moderators

		Soothability							Persistence						
	Predictors	R	R^2	F	ΔF	B	SE	β	R	R^2	F	ΔF	B	SE	β
Step1	Age					.01	.01	.08					.01	.01	.07
	Education level	**.13**	**.02**	**1.72**	**1.72**	**-.05**	**.03**	**-.14[a]**	**.13**	**.02**	**1.72**	**1.72**	**-.05**	**.03**	**-.14***
Step2	Ses	**.16**	**.03**	**1.79**	**1.93**	**-.02**	**.05**	**-.02**	**.16**	**.03**	**1.79**	**1.93**	**-.03**	**.05**	**-.05**
Step3	Approach					.02	.04	.03					.02	.04	.02
	Perceptual sensitivity					-.14	.06	-.16*					-.24	.06	-.17*
	Soothability					-.02	.05	-.03					-.03	.05	-.03
	Persistence					-.06	.05	-.10					-.06	.05	-.10
	Reactivity	**.37**	**.14**	**3.86*** **	**4.99*** **	**.11**	**.06**	**.16***	**.37**	**.14**	**3.86*** **	**4.99*** **	**.20**	**.06**	**.15[b]**
Step4	Negative affect					.08	.03	.20**					.09	.03	.21**
	Effortful control					-.13	.04	-.22**					-.23	.04	-.22***
	Extraversion					.02	.03	.05					.03	.03	.03
	Orienting sensitivity	**.49**	**.24**	**4.93*** **	**6.24*** **	**-.03**	**.04**	**-.04**	**.49**	**.24**	**4,93*** **	**6.24*** **	**-.03**	**.04**	**-.05**
Step5	N.affect* ***soothability***					.05	.05	.07							
	E.control * ***soothability***					.02	.07	.02							
	Extraversion* ***soothability***					.02	.05	.03							
	O.sensitivity* ***soothability***	**.50**	**.25**	**3.86*** **	**.73**	**.09**	**.06**	**.09**							
	N.affect* ***persistence***												-.05	.04	-.09
	E.control * ***persistence***												.000	.07	-.000
	Extraversion* ***persistence***												-.10	.04	-.17*
	O.sensitivity* ***persistence***								**.52**	**.27**	**4.26*** **	**1.97**	**.08**	**.07**	**.08**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.4 continued. Hierarchical Regression Analysis in Predicting Authoritarian Parenting Styles: Reactivity as moderator

	Predictors	R	R^2	F	ΔF	B	SE	B
Step1	Age					.01	.01	.06
	Education level	**.13**	**.02**	**1.72**	**1.72**	**-.04**	**.03**	**-.12**
Step2	Ses	**.16**	**.03**	**1.79**	**1.93**	**-.02**	**.05**	**-.03**
Step3	Approach					.02	.04	.02
	Perceptual sensitivity					-.14	.06	-.16*
	Soothability					-.01	.05	-.02
	Persistence					-.06	.05	-.09
	Reactivity	**.37**	**.14**	**3.86*** **	**4.99*** **	**.10**	**.06**	**.14**
Step4	Negative affect					.09	.03	.20**
	Effortful control					-.12	.04	-.21**
	Extraversion					.03	.03	.06
	Orienting sensitivity	**.49**	**.24**	**4,93*** **	**6.24*** **	**-.04**	**.04**	**-.06**
Step5	N.affect* ***reactivity***					-.02	.05	-.03
	E.control * ***reactivity***					.03	.07	.03
	Extraversion* ***reactivity***					-.04	.05	-.06
	O.sensitivity* ***reactivity***	**.50**	**.25**	**3,85*** **	**.70**	**-.09**	**.07**	**-.09**

*p<.05. ** p<.01. *** p<.001. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

4.3.1.2.1. Approach as a moderator

When approach was moderator in the final step of the regression analysis, child's perceptual sensitivity negatively and significantly (β=-.15, p <.05), but reactivity positively and marginally significantly (β=.15, p =.07) predicted authoritarian parenting. Similarly, mother's negative affect positively (β=.20, p <.01) and effortful control negatively and significantly (β=-.21, p <.01) predicted authoritarian parenting style. These findings suggested that when children had low scores of perceptual sensitivity and high scores of reactivity, mothers were more likely to show high authoritarian parenting style. Additionally, mothers who had high scores of negative affect and low scores of effortful control were more likely to show high authoritarian parenting style. None of the interactions individually predicted authoritarian parenting style.

4.3.1.2.2. Perceptual Sensitivity as a moderator

When perceptual sensitivity was a moderator in the final step of the regression analysis, child's perceptual sensitivity negatively (β=-.13, p =.06) and reactivity positively (β=.15, p =.06) but both of them marginally predicted outcome variable. While mother's negative affect positively (β=.20, p <.01) effortful control negatively (β=-.22, p <.001) predicted authoritarian parenting, style. In addition, two interaction terms marginally significantly predicted authoritarian parenting. One of them was between effortful control and perceptual sensitivity (β=.12, p =.06). When child's perceptual sensitivity was high, mother's effortful control levels did not matter. However when child's perceptual sensitivity was low and mother's effortful control was high, mothers were less likely to exhibit authoritarian parenting. When both child's perceptual sensitivity and mother's effortful control was low, mothers were more likely to exhibit high authoritarian parenting (see figure 2). The other interaction term was between extraversion and perceptual sensitivity (β=-.13, p =.07). However, simple slope analysis indicated that there was no significant line.

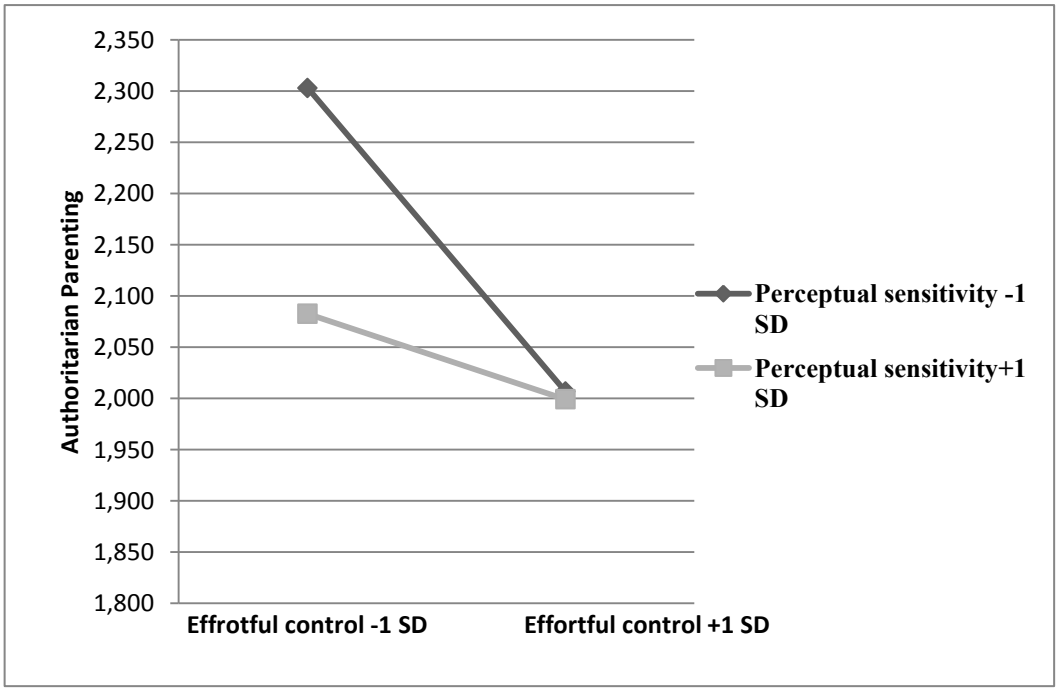

Figure 2 Interaction graph of child's perceptual sensitivity and mother's effortful control in predicting authoritarian parenting

4.3.1.2.3. Soothability as a moderator

When soothability was a moderator, education level of mother negatively but marginally significantly predicted authoritarian parenting (β=-.14, p =.06). Child's perceptual sensitivity negatively (β=-.16, p <.05) and reactivity positively (β=.16, p <.05), mother's negative affect positively (β=.20, p <.01) and effortful control negatively and significantly (β=-.22, p <.01) predicted authoritarian parenting style. None of the interactions individually predicted authoritarian parenting style.

4.3.1.2.4. Persistence as a moderator

When persistence was a moderator, education level of mother negatively and significantly predicted authoritarian parenting (β=-.14, p <.05). Child's perceptual sensitivity negatively (β=-.16, p <.05) and significantly; reactivity positively and marginally significantly (β=.15, p <.07) predicted authoritarian parenting. Mother's negative affect positively (β=.21, p <.01) and effortful control negatively (β=-.22, p <.001) predicted authoritarian parenting style.

In addition, interaction between extraversion and persistence was significant in predicting authoritarian parenting (β=-.17, p< .05). Simple slope analysis was performed to identify which aspects of the relations were significant and a graph was constructed to interpret interaction effect. Slope of the regression line showed that when child's persistence was high, mother's extraversion did not matter. However, when child's persistence was low and mother's extraversion was high, mothers were more likely to exhibit authoritarian parenting. When both child's persistence and mother's extraversion were low, mothers were less likely to exhibit authoritarian parenting (see figure 3)

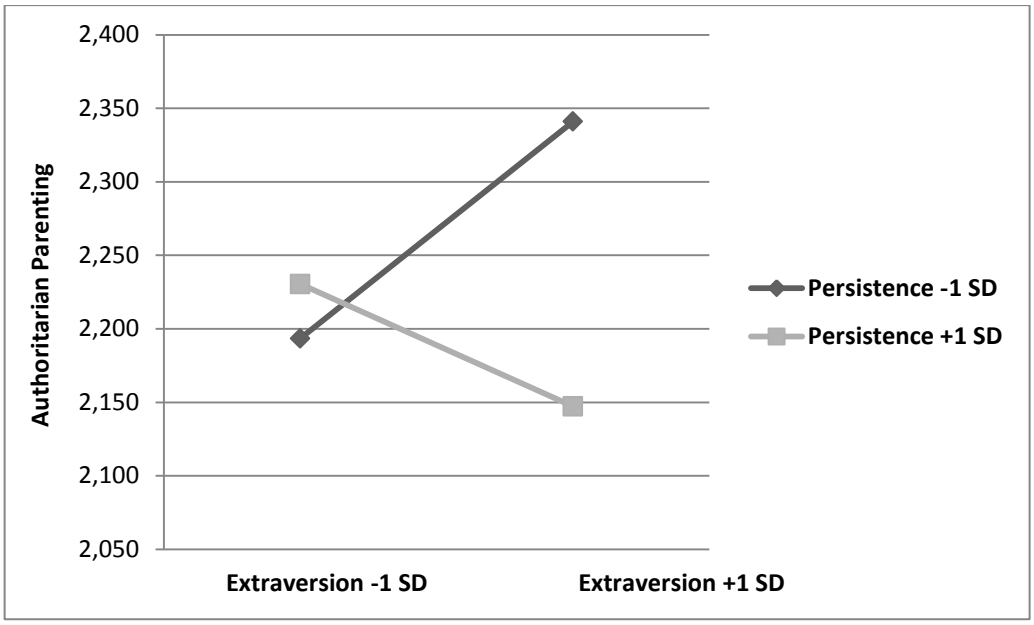

Figure 3 Interaction graph of child's persistence and mother's extraversion in predicting authoritarian parenting

4.3.1.2.5. Reactivity as a moderator

When reactivity was a moderator in the final step of the regression analysis, child's perceptual sensitivity negatively (β=-.16, p <.05) predicted authoritarian parenting. Mother's negative affect positively (β=.20, p <.01) and effortful control negatively (β=-.21, p <.01) predicted authoritarian parenting style. None of the interactions individually predicted authoritarian parenting style.

4.3.1.3 Predicting over-protective parenting style

Regression analyses were conducted to predict over-protective parenting style. In step 1, education level and age of mother significantly predicted over-protective parenting (R^2= .20, F (2,202) =24.51 p<001). Socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in over-protective parenting scores (ΔR^2= .002, ΔF (1,201) = .47, *ns*). In step 3, child temperamental characteristics were entered into the equation, there wasn't significant change in R^2 (ΔR^2= .03, ΔF (5,196) =1.52, *ns.*). In step 4, maternal temperamental characteristics were entered into the equation, they significantly added to the amount of variation explained in authoritative parenting (ΔR^2= .10, ΔF (4,192) =6.85, p <.001). In the final step, interaction terms were added into the equation there wasn't a significant change in R^2 in any of the five

regression analyses where one of the child temperamental characteristic was a moderator; approach (ΔR^2= .02, ΔF (4,188) =1.21, ns), perceptual sensitivity (ΔR^2= .01, ΔF (4,188) =.62, ns), soothability (ΔR^2= .01, ΔF (4,188) =.67, ns), persistence (ΔR^2= .004, ΔF (4,188) =.28, ns) and reactivity (ΔR^2= .003, ΔF (4,188) =.23, ns). Although individual predictors and interaction terms did not significantly contribute to the step which was entered into, all steps significantly predicted over-protective parenting style in each regression analysis (see table 4.5)

Table 4.5 Hierarchical Regression Analysis in Predicting Over-protective Parenting Style: Approach and Perceptual Sensitivity as moderators

		Approach							Perceptual sensitivity						
	Predictors	R	R^2	F	ΔF	B	SE	β	R	R^2	F	ΔF	B	SE	B
Step1	Age					-.02	.01	-.13*					-.02	.01	-.13[a]
	Education level	**.44**	**.20**	**24.51*** **	**24.51*** **	**-.15**	**.04**	**-.28*** **	**.44**	**.20**	**24.51**	**24.51*** **	**-.16**	**.04**	**-.30*** **
Step2	Ses	**.44**	**.20**	**16.45*** **	**.47**	**.02**	**.07**	**.02**	**.44**	**.20**	**16.45**	**.47**	**.01**	**.07**	**.01**
Step3	Approach					-.04	.06	-.04					-.04	.06	-.04
	Perceptual sensitivity					.18	.09	.14*					.21	.09	.16*
	Soothability					.03	.08	.03					.03	.08	.03
	Persistence					.05	.07	.05					.04	.07	.04
	Reactivity	**.48**	**.23**	**7.20*** **	**1.52**	**.05**	**.08**	**.04**	**.48**	**.23**	**7.20**	**1.52**	**.06**	**.08**	**.05**
Step4	Negative affect					.16	.04	.24***					.16	.04	.24***
	Effortful control					.07	.06	.08					.07	.06	.07
	Extraversion					-.09	.05	-.13*					-.09	.05	-.13*
	Orienting sensitivity	**.57**	**.32**	**7.66*** **	**6.85*** **	**-.17**	**.06**	**-.18** **	**.57**	**.32**	**7.66**	**6.85*** **	**-.15**	**.06**	**-.16***
Step5	N.affect* ***approach***					-.10	.06	-.11							
	E.control * ***approach***					.04	.09	.03							
	Extraversion* ***approach***					-.02	.06	-.02							
	O.sensitivity* ***approach***	**.58**	**.34**	**6.07*** **	**1.21**	**-.07**	**.08**	**-.06**							
	N.affect* ***sensitivity***												.003	.09	.002
	E.control * ***sensitivity***												.003	.12	.002
	Extraversion* ***sensitivity***												-.08	.09	-.06
	O.sensitivity* ***sensitivity***								**.58**	**.33**	**5,85**	**.62**	**.18**	**.12**	**.10**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.5 continued Hierarchical Regression Analysis in Predicting Over-protective Parenting Style: Soothability and Persistence as moderators

		Soothability							Persistence						
	Predictors	R	R^2	F	ΔF	B	SE	B	R	R^2	F	ΔF	B	SE	B
Step1	Age					-.02	.01	-.13*					-.02	.01	-.13*
	Education level	**.44**	**.20**	**24.51*** **	**24.51*** **	**-.15**	**.04**	**-.27*** **	**.44**	**.20**	**24.51*** **	**24.51*** **	**-.15**	**.04**	**-.28*** **
Step2	Ses	**.44**	**.20**	**16.45*** **	**.47**	**.002**	**.07**	**.002**	**.44**	**.20**	**16.45*** **	**.47**	**.004**	**.07**	**.004**
Step3	Approach					-.05	.06	-.06					-.04	.06	-.04
	Perceptual sensitivity					.20	.09	.15*					.18	.09	.14*
	Soothability					.05	.08	.05					.04	.08	.04
	Persistence					.06	.07	.06					.05	.07	.05
	Reactivity	**.48**	**.23**	**7.20*** **	**1.52**	**.05**	**.08**	**.04**	**.48**	**.23**	**7.20*** **	**1.52**	**.05**	**.08**	**.05**
Step4	Negative affect					.16	.04	.24***					.16	.05	.24***
	Effortful control					.07	.06	.07					.08	.06	.09
	Extraversion					-.08	.05	-.11					-.10	.05	-.13*
	Orienting sensitivity	**.57**	**.32**	**7.66*** **	**6.85*** **	**-.17**	**.06**	**-.18** **	**.57**	**.32**	**7.66*** **	**6.85*** **	**-15**	**.06**	**-.17***
Step5	N.affect* ***soothability***					.06	.07	.06							
	E.control * ***soothability***					.02	.09	.01							
	Extraversion* ***soothability***					.09	.07	.09							
	O.sensitivity* ***soothability***	**.58**	**.33**	**5,87*** **	**.67**	**-.08**	**.09**	**-.06**							
	N.affect* ***persistence***												.02	.06	.03
	E.control * ***persistence***												-.04	.10	-.03
	Extraversion* ***persistence***												.01	.06	.01
	O.sensitivity* ***persistence***								**.57**	**.33**	**5,73*** **	**.28**	**-.08**	**.10**	**-.05**

*p<.05. ** p<.01. *** p<.001. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.5 continued Hierarchical Regression Analysis in Predicting Over-protective Parenting Styles: Reactivity as moderator

		Reactivity						
	Predictors	R	R^2	F	ΔF	B	SE	B
Step1	Age					-.02	.01	-.12[b]
	Education level	**.44**	**.20**	**24.51*** **	**24.51*** **	**-.16**	**.04**	**-.29*** **
Step2	Ses	**.44**	**.20**	**16.45*** **	**.47**	**.01**	**.07**	**.004**
Step3	Approach					-.04	.06	-.04
	Perceptual sensitivity					.19	.09	.14*
	Soothability					.05	.08	.05
	Persistence					.06	.07	.06
	Reactivity	**.48**	**.23**	**7.20*** **	**1.52**	**.06**	**.08**	**.05**
Step4	Negative affect					.16	.05	.24***
	Effortful control					.06	.06	.07
	Extraversion					-.09	.05	-.13*
	Orienting sensitivity	**.57**	**.32**	**7.66*** **	**6.85*** **	**-.15**	**.06**	**-.17***
Step5	N.affect****reactivity***					.06	.07	.05
	E.control * ***reactivity***					.02	.10	.02
	Extraversion****reactivity***					-.02	.07	-.02
	O.sensitivity****reactivity***	**.57**	**.33**	**5,71*** **	**.23**	**.05**	**.10**	**.04**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

4.3.1.3.1. Approach as a moderator

When approach was a moderator in the final step of the regression analysis, mother's age (β=-.13, p <.05) and education level (β=-.28, p <.001) negatively and significantly predicted over-protective parenting. Child's perceptual sensitivity positively and significantly (β=.14, p <.05) predicted over-protective parenting. Mother's negative affect positively (β=.24, p <.001); extraversion (β=-.13, p <.05) and orienting sensitivity negatively (β=-.18, p <.01) predicted over-protective parenting style. First of all, when mother's age and education level were high, mothers were less likely to show over-protective parenting. Other findings suggested that when children had high scores of perceptual sensitivity mothers were more likely to show over-protective parenting style. Additionally, mothers who had high scores of negative affect; low scores of extraversion and orienting sensitivity were

more likely to show high over-protective parenting style. None of the interactions individually predicted over-protective parenting style.

4.3.1.3.2 Perceptual Sensitivity as a moderator

When perceptual sensitivity was a moderator in the final step of the regression analysis, mother's age negatively and marginally significantly (β=-.13, p =.06); education level negatively (β=-.30, p <.001) predicted over-protective parenting. Child's perceptual sensitivity positively (β=.16, p <.05) predicted over-protective parenting. Mother's negative affect positively (β=.24, p <.001); extraversion (β=-.13, p <.05) and orienting sensitivity negatively (β=-.16, p <.05) predicted over-protective parenting style. None of the interactions individually predicted over-protective parenting style.

4.3.1.3.3. Soothability as a moderator

When soothability was a moderator in the final step of the regression analysis, mother's age (β=-.13, p <.05) and education level (β=-.27, p <.001) negatively and significantly predicted over-protective parenting. Child's perceptual sensitivity positively and significantly (β=.15, p <.05) predicted over-protective parenting. Mother's negative affect positively and significantly (β=.24, p <.001), and orienting sensitivity negatively and significantly (β=-.18, p <.01) predicted over-protective parenting style. None of the interactions individually predicted over-protective parenting style.

4.3.1.3.4. Persistence as a moderator

When persistence was a moderator in the final step of the regression analysis, mother's age (β=-.13, p <.05) and education level (β=-.28, p <.001) negatively and significantly predicted over-protective parenting. Child's perceptual sensitivity positively and significantly (β=.14, p <.05) predicted over-protective parenting. Mother's negative affect positively (β=.24, p <.001); extraversion (β=-.13, p <.05) and orienting sensitivity negatively (β=-.17, p <.05) and significantly predicted over-protective parenting style. None of the interactions individually predicted over-protective parenting style.

4.3.1.3.5. Reactivity as a moderator

When reactivity was a moderator in the final step of the regression analysis, mother's age negatively and marginally significantly (β=-.12, p <.07) and education level negatively and significantly (β=-.29, p <.001) predicted over-protective parenting. Child's perceptual sensitivity positively and significantly (β=.14, p <.05) predicted over-protective parenting. Mother's negative affect positively (β=.24, p <.001); extraversion (β=-.13, p <.05) and orienting sensitivity negatively (β=-.17, p <.05) and significantly predicted over-protective parenting style. None of the interactions individually predicted over-protective parenting style.

4.3.1.4 Predicting permissive parenting style

Hierarchical regression analyses were conducted to predict permissive parenting style. In step 1, education level and age of mother did not significantly predict permissive parenting (R^2= .002, F (2,202) =.18, ns.). Socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in permissive parenting scores, (ΔR^2= .003, ΔF (1,201) = .63, *ns*). In step 3, child temperamental characteristics were entered into the equation, significant change existed in R^2 (ΔR^2= .07, ΔF (5,196) =2.95, p <.05). In step 4, maternal temperamental characteristics were entered into the equation, they did not significantly add to the amount of variation explained in permissive parenting (ΔR^2=.03, ΔF (4,192) =1.64, ns). In the fifth step, interaction terms were added into the equation, but none of the interactions were significant. Thus, analyses up to fourth step were reported in the table (see table 4.6). For all the moderators, persistence (β=-.22, p <.01) was significantly and negatively predicted permissive parenting.

Table 4.6 Hierarchical Regression Analysis in Predicting Permissive Parenting Style: Approach and Perceptual Sensitivity as moderators

		Approach							Perceptual sensitivity						
	Predictors	R	R^2	F	ΔF	B	SE	β	R	R^2	F	ΔF	B	SE	β
Step1	Age					.001	.01	.01					.001	.01	.01
	Education level	**.04**	**.002**	**.18**	**.18**	**.01**	**.03**	**.02**	**.04**	**.002**	**.18**	**.18**	**.01**	**.03**	**.02**
Step2	Ses	**.07**	**.005**	**.33**	**.63**	**.02**	**.05**	**.03**	**.07**	**.005**	**.33**	**.63**	**.02**	**.05**	**.03**
Step3	Approach					-.01	.05	-.01					-.01	.05	-.01
	Perceptual sensitivity					.07	.07	.08					.07	.07	.08
	Soothability					-.07	.06	-.11					-.07	.06	-.11
	Persistence					-.14	.05	-.22**					.-14	.05	-.22**
	Reactivity	**.27**	**.07**	**1.97***	**2.95***	**-.04**	**.06**	**-.05**	**.27**	**.07**	**1.97***	**2.95***	**-.04**	**.06**	**-.05**
Step4	Negative affect					.04	.03	.10					.04	.03	.10
	Effortful control					-.05	.04	-.09					-.05	.04	-.09
	Extraversion					-.03	.04	-.07					-.03	.04	-.07
	Orienting sensitivity	**.32**	**.11**	**.1.88***	**1.64**	**-.04**	**.05**	**-.06**	**.32**	**.11**	**.1.88***	**1.64**	**-.04**	**.05**	**-.06**

*p<.05. ** p<.01. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.6 continued Hierarchical Regression Analysis in Predicting Permissive Parenting Style: Soothability and Persistence as moderators

		Soothability							Persistence						
	Predictors	R	R^2	F	ΔF	B	SE	β	R	R^2	F	ΔF	B	SE	β
Step1	Age					.001	.01	.01					.001	.01	.01
	Education level	**.04**	**.002**	**.18**	**.18**	**.01**	**.03**	**.02**	**.04**	**.002**	**.18**	**.18**	**.01**	**.03**	**.02**
Step2	Ses	**.07**	**.005**	**.33**	**.63**	**.02**	**.05**	**.03**	**.07**	**.005**	**.33**	**.63**	**.02**	**.05**	**.03**
Step3	Approach					-.01	.05	-.01					-.01	.05	-.01
	Perceptual sensitivity					.07	.07	.08					.07	.07	.08
	Soothability					-.07	.06	-.11					-.07	.06	-.11
	Persistence					-.14	.05	-.22**					-.14	.05	-.22**
	Reactivity	**.27**	**.07**	**1.97***	**2.95***	**-.04**	**.06**	**-.05**	**.27**	**.07**	**1.97***	**2.95***	**-.04**	**.06**	**-.05**
Step4	Negative affect					.04	.03	.10					.04	.03	.10
	Effortful control					-.05	.04	-.09					-.05	.04	-.09
	Extraversion					-.03	.04	-.07					-.03	.04	-.07
	Orienting sensitivity	**.32**	**.11**	**.1.88***	**1.64**	**-.04**	**.05**	**-.06**	**.32**	**.11**	**.1.88***	**1.64**	**-.04**	**.04**	**-.06**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.6 continued Hierarchical Regression Analysis in Predicting Permissive Parenting Styles: Reactivity as moderator

		Reactivity						
	Predictors	R	R^2	F	ΔF	B	SE	B
Step1	Age					.001	.01	.01
	Education level	**.04**	**.002**	**.18**	**.18**	**.01**	**.03**	**.02**
Step2	Ses	**.07**	**.005**	**.33**	**.63**	**.02**	**.05**	**.03**
Step3	Approach					-.01	.05	-.01
	Perceptual sensitivity					.07	.07	.08
	Soothability					-.07	.06	-.11
	Persistence					-.14	.05	-.22**
	Reactivity	**.27**	**.07**	**1.97***	**2.95***	**-.04**	**.06**	**-.05**
Step4	Negative affect					.04	.03	.10
	Effortful control					-.05	.04	-.09
	Extraversion					-.03	.04	-.07
	Orienting sensitivity	**.32**	**.11**	**.1.88***	**1.64**	**-.04**	**.05**	**-.06**

*p<.05. ** p<.01. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

4.3.1.5. Predicting emotionally maltreating parenting style

Hierarchical regression analyses were conducted to predict emotionally maltreating parenting style. In step 1, education level and age of mother significantly predicted emotionally maltreating parenting (R^2= .04, F (2,202) =4.68, p <.01.). Socioeconomic status was entered in the second step, it accounted for a significant amount of additional variance in this parenting scores, (ΔR^2= .03, ΔF (1,201) = 6.68, p <.01). In step 3, child temperament were entered into the equation, significant change existed in R^2 (ΔR^2= .07, ΔF (5,196) =3.26, p <.01.). In step 4, maternal temperament were entered into the equation, they significantly added to the amount of variation explained in this parenting (ΔR^2=.04, ΔF (4,192) =2.11, p <.08). In the final step, interaction terms were added into the equation there wasn't a significant change in R^2 in any of the four regression analyses where one of the child temperamental characteristic was a moderator; approach (ΔR^2= .02, ΔF (4,188) =1.20, ns), perceptual sensitivity (ΔR^2= .004, ΔF (4,188) =.21, ns), soothability, (ΔR^2= .02, ΔF (4,188) =1.42, ns), persistence (ΔR^2= .03, ΔF (4,188) =1.55, ns), reactivity (ΔR^2= .03, ΔF (4,188) =2.03, p <.09). But, fifth step significantly predicted emotionally maltreating parenting style in each regression analysis. Although individual predictors and interaction terms did not significantly contribute to the step which was entered into, all steps significantly predicted emotionally maltreating parenting style in each regression analysis (see table 4.7)

Table 4.7 Hierarchical Regression Analysis in Predicting Emotionally Maltreating Parenting Style: Approach and Perceptual Sensitivity as moderators

		Approach							Perceptual sensitivity						
	Predictors	R	R^2	F	ΔF	B	SE	B	R	R^2	F	ΔF	B	SE	β
Step1	Age					-.003	.01	-.06					-.003	.01	-.05
	Education level	**.21**	**.04**	**4,68****	**4.68****	**-.03**	**.02**	**-.12**	**.21**	**.04**	**4,68****	**4.68****	**-.04**	**.02**	**-.15***
Step2	Ses	**.27**	**.08**	**5,43*****	**6.68****	**-.05**	**.04**	**-.12**	**.27**	**.08**	**5,43*****	**6.68****	**-.05**	**.04**	**-.11**
Step3	Approach					.06	.03	.13[b]					.06	.03	.14[b]
	Perceptual sensitivity					-.07	.04	-.13					-.07	.04	-.12
	Soothability					.03	.04	.06					.04	.04	.09
	Persistence					-.06	.03	-.13[b]					-.05	.03	-.12
	Reactivity	**.38**	**.15**	**4,19*****	**3.26****	**.08**	**.04**	**.17***	**.38**	**.15**	**4,19*****	**3.26****	**.09**	**.04**	**.19***
Step4	Negative affect					.06	.02	.20**					.05	.02	.18*
	Effortful control					-.03	.03	-.06					-.03	.03	-.07
	Extraversion					.01	.02	.01					.01	.02	.02
	Orienting sensitivity	**.43**	**.18**	**3,56*****	**2.11[c]**	**.02**	**.03**	**.04**	**.43**	**.18**	**3,56*****	**2.11[c]**	**.02**	**.03**	**.05**
Step5	N.affect***approach***					-.02	.03	-.06							
	E.control ****approach***					Ç08	.05	.13[b]							
	Extraversion****approach***					-.01	.03	-.04							
	O.sensitivity****approach***	**.45**	**.20**	**2,98*****	**1.20**	**.01**	**.04**	**.02**							
	N.affect****sensitivity***												-.004	.04	-.01
	E.control ****sensitivity***												-.01	.06	-.01
	Extraversion****sensitivity***												.02	.04	.03
	O.sensitivity****sensitivity***								**.43**	**.19**	**2.68*****	**.21**	.04	**.06**	**.05**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.7 continued Hierarchical Regression Analysis in Predicting Emotionally Maltreating Parenting Style: Soothability and Persistence as moderators

		Soothability							Persistence						
	Predictors	R	R^2	F	ΔF	B	SE	β	R	R^2	F	ΔF	B	SE	β
Step1	Age					-.002	.01	-.03					-.003	.004	-.04
	Education level	**.21**	**.04**	**4,68****	**4.68****	**-.04**	**.02**	**-.15***	**.21**	**.04**	**4,68****	**4.68****	**-.04**	**.02**	**-.17***
Step2	Ses	**.27**	**.08**	**5,43*****	**6.68****	**-.05**	**.03**	**-.10**	**.27**	**.08**	**5,43*****	**6.68****	**-.05**	**.03**	**-.11**
Step3	Approach					.05	.03	.12					.05	.03	.12
	Perceptual sensitivity					-.08	.04	-.13[b]					-.08	.04	-.14[a]
	Soothability					.04	.04	.08					.05	.04	.10
	Persistence					-.05	.03	-.11					-.05	.03	-.11
	Reactivity	**.38**	**.15**	**4,19*****	**3.26****	**.09**	**.04**	**.18***	**.38**	**.15**	**4,19*****	**3.26****	**.09**	**.04**	**.19***
Step4	Negative affect					.06	.02	.19*					.05	.02	.18*
	Effortful control					-.04	.03	-.09					-.04	.03	-.09
	Extraversion					.002	.02	.01					.004	.02	.01
	Orienting sensitivity	**.43**	**.18**	**3,56*****	**2.11[c]**	**.02**	**.03**	**.05**	**.43**	**.18**	**3,56*****	**2.11[c]**	**.02**	**.03**	**.04**
Step5	N.affect****soothability***					-.003	.03	-.01							
	E.control * ***soothability***					.06	.05	.10							
	Extraversion* ***soothability***					.03	.03	.07							
	O.sensitivity* ***soothability***	**.45**	**.21**	**3.05*****	**1.42**	**.06**	**.05**	**.10**							
	N.affect****persistence***												-.06	.03	-.15*
	E.control * ***persistence***												.01	.05	.01
	Extraversion* ***persistence***												-.04	.03	-.11
	O.sensitivity* ***persistence***								**.46**	**.21**	**3.09*****	**1.55**	**.05**	**.05**	**.07**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. [c] p<.08. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.7 continued Hierarchical Regression Analysis in Predicting Emotionally Maltreating Parenting Styles: Reactivity as moderator

		Reactivity						
	Predictors	R	R^2	F	ΔF	B	SE	B
Step1	Age					-.002	.01	-.04
	Education level	**.21**	**.04**	**4,68****	**4.68****	**-.03**	**.02**	**-.13**
Step2	Ses	**.27**	**.08**	**5,43*****	**6.68****	**-.05**	**.03**	**-.10**
Step3	Approach					.05	.03	.12
	Perceptual sensitivity					-.07	.04	-.12
	Soothability					.04	.04	.09
	Persistence					-.05	.03	-.12
	Reactivity	**.38**	**.15**	**4,19*****	**3.26****	**.08**	**.04**	**.17***
Step4	Negative affect					.06	.02	.20**
	Effortful control					-.03	.03	-.08
	Extraversion					.01	.02	.02
	Orienting sensitivity	**.43**	**.18**	**3,56*****	**2.11**[c]	**.02**	**.03**	**.05**
Step5	N.affect****reactivity***					-.01	.04	-.02
	E.control * ***reactivity***					-.09	.05	-.14[b]
	Extraversion****reactivity***					-.08	.04	-.15*
	O.sensitivity****reactivity***	**.47**	**.22**	**3.23*****	**2.03**	**-.002**	**.05**	**-.004**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. [c] p<.08. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

4.3.1.5.1. Approach as a moderator

When approach was a moderator in the final step of the regression analysis, child's persistence (β=-.13, p <.07) negatively and; child's approach positively but marginally significantly (β=.13, p <.07); child's reactivity positively and significantly (β=.17, p <.05) predicted emotionally maltreating parenting. Mother's negative affect positively and significantly (β=.20, p <.01) predicted emotionally maltreating parenting style. These findings suggested that when children had high scores of persistence mothers were less likely to show emotionally maltreating parenting style. Additionally, when children had high scores of approach and reactivity mothers were more likely to show emotionally maltreating parenting style. Mothers who had high scores of negative affect were more likely to show emotionally maltreating parenting style.

In addition, interaction between maternal effortful control and child's approach was marginally significance (β=.13, p <.07) in the prediction of emotionally maltreating parenting. Constructed graph and conducted simple slope analysis suggested that for children with high approach maternal effortful control levels did not make a difference to their emotionally maltreating parenting. However, for children with low approach, when mother's effortful control was high, they were less likely to exhibit emotionally maltreating parenting. But, when mother's effortful control was low, they were more likely to exhibit emotionally maltreating parenting (see figure 4)

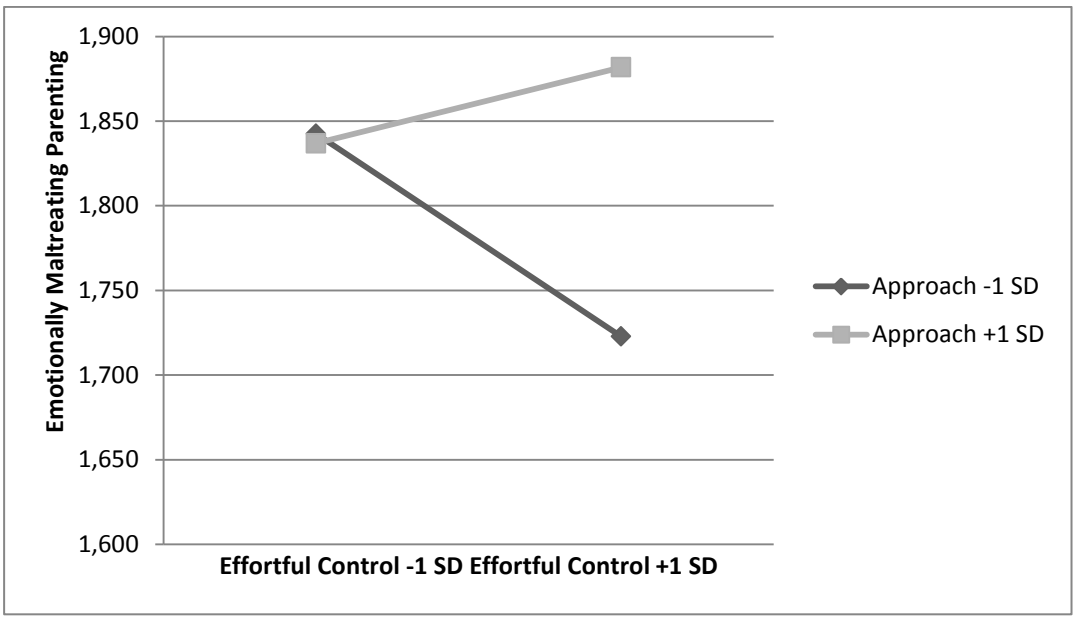

Figure 4 Interaction graph of child's approach and mother's effortful control in predicting emotionally maltreating parenting.

4.3.1.5.2. Perceptual Sensitivity as a moderator

When perceptual sensitivity was a moderator in the final step of the regression analysis, child's approach positively and marginally significantly (β=.14, p <.07); child's reactivity positively and significantly (β=.19, p <.05) predicted emotionally maltreating parenting. Mother's education level negatively (β=-.15, p <.05) and mother's negative affect positively (β=.18, p <.05) predicted emotionally maltreating parenting style. The finding about education level of mother suggested that mothers who had high education level were more likely to show low emotionally maltreating parenting style.

4.3.1.5.3. Soothability as a moderator

When soothability was a moderator in the final step of the regression analysis, child's perceptual sensitivity negatively and marginally significantly (β=-.13, p <.07) child's reactivity positively and significantly (β=.18, p <.05) predicted emotionally maltreating parenting. Mother's education level negatively and significantly (β=-.15, p <.05) and mother's negative affect positively and significantly (β=.19, p <.05) predicted emotionally maltreating parenting style. None of the interactions individually predicted emotionally maltreating parenting style.

4.3.1.5.4. Persistence as a moderator

When persistence was a moderator in the final step of the regression analysis, child's perceptual sensitivity negatively and marginally significantly (β=-.14, p <.06) child's reactivity positively and significantly (β=.19, p <.05) predicted emotionally maltreating parenting. Mother's education level negatively and significantly (β=-.17, p <.05) and mother's negative affect positively and significantly (β=.18, p <.05) predicted emotionally maltreating parenting style.

Interaction between negative affect and persistence significantly (β=-.15, p <.05) predicted emotionally maltreating parenting. According to constructed graph and conducted simple slope analysis, when child's persistence was high, mother's negative affect did not matter. But, when child's persistence was low and mother's negative affect was high, mothers were more likely to exhibitemotionally maltreating parenting. When child's persistence and mother's negative affect were low, mothers were less likely to exhibitemotionally maltreating parenting (see figure 5)

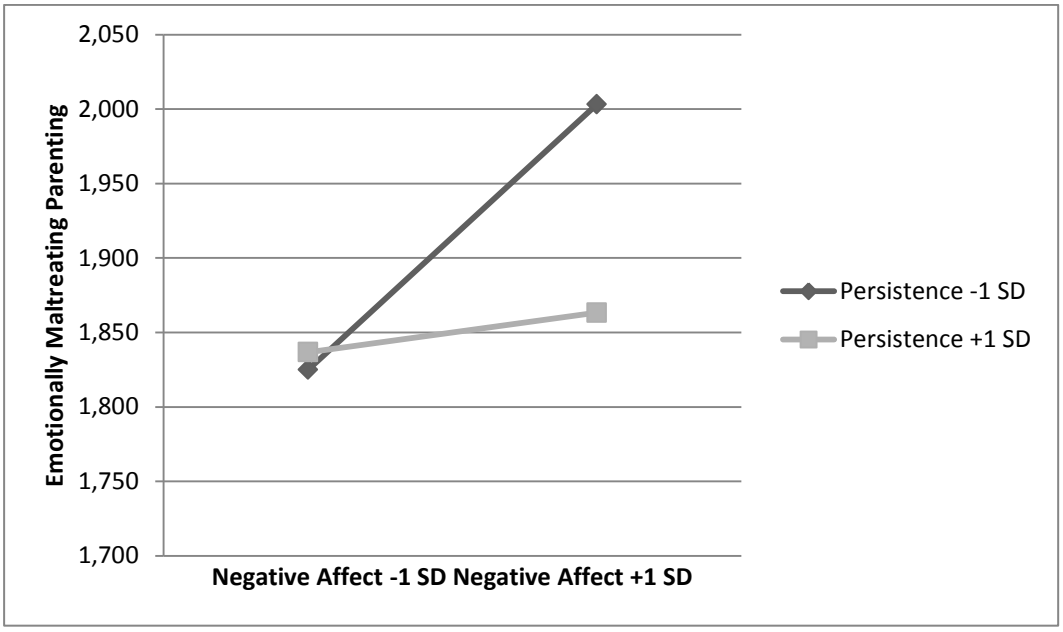

Figure 5 Interaction graph of child's persistence and mother's negative affect in predicting emotionally maltreating parenting

4.3.1.5.5. Reactivity as a moderator

When reactivity was a moderator in the final step of the regression analysis, child's reactivity positively and significantly (β=.17, p <.05) predicted emotionally maltreating parenting. Mother's negative affect positively and significantly (β=.20, p <.01) predicted emotionally maltreating parenting style.

Two interaction terms were significant in predicting emotionally maltreating parenting. The first one was between effortful control and reactivity marginally significantly (β=-.14, p <.07) predicted emotionally maltreating parenting. Constructed graph and conducted simple slope analysis suggested that for children with low reactivity maternal effortful control levels did not make a difference to their emotionally maltreating parenting. However, when child's reactivity and mother's effortful control were high, mothers were less likely to exhibit emotionally maltreating parenting. When child's reactivity was high and mother's effortful control was low, mothers were more likely to exhibit emotionally maltreating parenting (see figure 6). The second one was between extraversion and reactivity significantly (β=-.15, p <.05) predicted emotionally parenting. Simple slope analysis was conducted to detect which aspects of the relations were significant. It was found that simple slope analysis was non-significant.

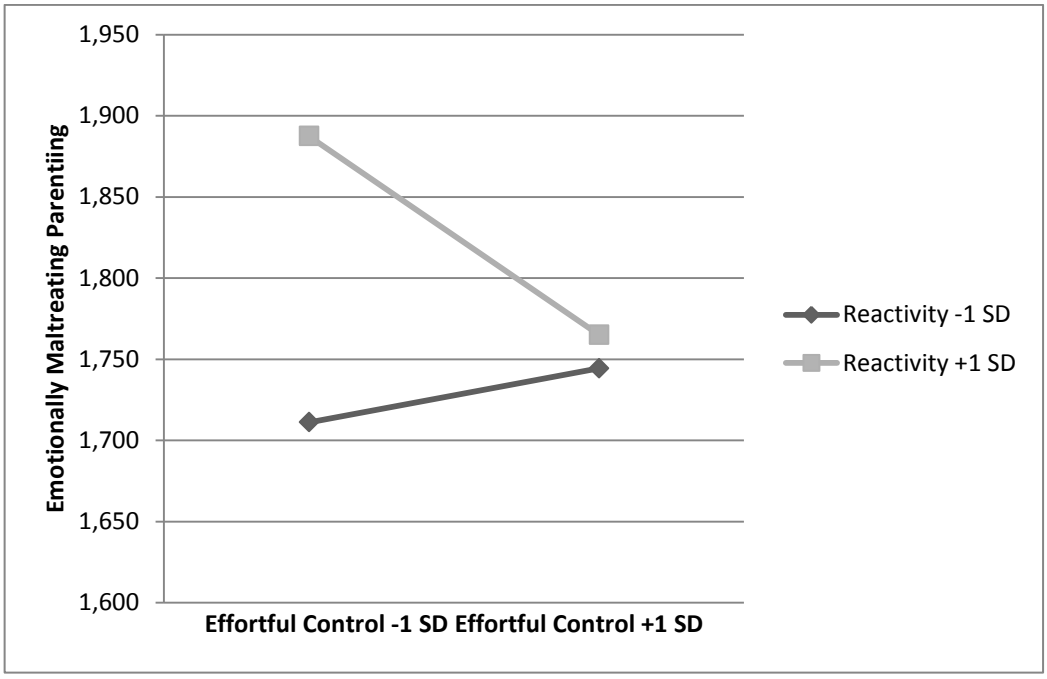

Figure 6 Interaction graph of child's reactivity and mother's effortful control in predicting emotionally maltreating parenting.

4.3.2 Regression analysis in predicting parenting styles from teacher's perceptions of child temperament

4.3.2.1 Predicting authoritative parenting style

In predicting authoritative parenting style five separate hierarchical regression analyses were carried out. In each of these analyses in the final step one of the child temperamental characteristics was taken as a moderator variable.

In the first step, age and education level of the mother were entered into equation, but they did not account for significant amount of variation in authoritative parenting scores (R^2= .01, F (2,175) =.83, *ns*). Socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in authoritative parenting scores, (ΔR^2= .000, ΔF (1,174) = .07, *ns*). In step 3, child temperamental characteristics were entered into the equation, there was significant change in R^2 (ΔR^2= .14, ΔF (5,169) =5.74, p <.001). In step 4, maternal temperamental characteristics were entered into the equation, they significantly added to the amount of variation explained in authoritative parenting (ΔR^2= .13, ΔF (4,165) =7.35, p <.001). In the final step, interaction terms were added into the equation however there wasn't a significant change in R^2 in any of the five

regression analyses where one of the child temperamental characteristic was a moderator; approach (ΔR^2= .02, ΔF (4,161) =1.03, ns), perceptual sensitivity (ΔR^2= .03, ΔF (4,161) =1.55, ns), soothability (ΔR^2= .01, ΔF (4,161) =.77, ns), persistence (ΔR^2= .02, ΔF (4,161) =1.17, ns) and reactivity (ΔR^2= .02, ΔF (4,161) =.93, ns). However, in each regression analysis fifth step was significant in predicting authoritative parenting style (see table 4.8)

Table 4.8 Hierarchical Regression Analysis in Predicting Authoritative Parenting Style: Approach and Perceptual Sensitivity as moderators

		Approach							Perceptual Sensitivity						
	Predictors	R	R^2	F	ΔF	B	SE	β	R	R^2	F	ΔF	B	SE	β
Step1	Age					.01	.01	.12					.01	.01	.08
	Education level	**.10**	**.01**	**.83**	**.83**	**.02**	**.02**	**.07**	**.10**	**.01**	**.83**	**.83**	**.01**	.02	**.04**
Step2	Ses	**.10**	**.01**	**.58**	**.07**	**-.03**	**.04**	**-.06**	**.10**	**.01**	**.58**	**.07**	**-02**	**.04**	**-.03**
Step3	Approach					-.01	.04	-.03					-0,000083	.04	.000
	Perceptual sensitivity					.15	.05	.22**					.17	.05	.25***
	Soothability					.08	.05	.14					.07	.04	.13
	Persistence					.01	.04	.01					-.02	.04	-.04
	Reactivity	**.39**	**.15**	**3,83*** **	**5.74*** **	**.03**	**.05**	**.05**	**.39**	**.15**	**3,83*** **	**5.74*** **	**.01**	.05	**.02**
Step4	Negative affect					-.03	.03	-.08					.03	.04	.09
	Effortful control					.11	.03	.24***					.13	.05	.29*
	Extraversion					.08	.03	.22**					.10	.04	.25*
	Orienting sensitivity	**.53**	**.28**	**5,39*** **	**7.35*** **	**.05**	**.04**	**.10**	**.53**	**.28**	**5,39*** **	**7.35*** **	**-.004**	.05	**-.01**
Step5	N.affect***approach***					.0,000080	.04	-.000							
	E.control ****approach***					-.01	.05	-.01							
	Extraversion****approach***					.04	.03	.08							
	O.sensitivity****approach***	**.55**	**.30**	**4,30*** **	**1.03**	.07	.05	**.11**							
	N.affect****sensitivity***												-.10	.05	-.22*
	E.control ****sensitivity***												-.05	.07	-.09
	Extraversion****sensitivity***												-.04	.05	-.07
	O.sensitivity****sensitivity***								**.56**	**.31**	**4,48*** **	**1.55**	.09	.07	**.14**

*p<.05. ** p<.01. *** p<.001. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.8 continued. Hierarchical Regression Analysis in Predicting Authoritative Parenting Style: Soothability and Persistence as moderators

		Soothability							Persistence						
	Predictors	R	R^2	F	ΔF	B	SE	β	R	R^2	F	ΔF	B	SE	β
Step1	Age					.01	.01	.08					.01	.01	.07
	education level	**.10**	**.01**	**.83**	**.83**	**.02**	**.02**	**.07**	**.10**	**.01**	**.83**	**.83**	**.02**	**.02**	**.07**
Step2	Ses	**.10**	**.01**	**.58**	**.07**	**-.04**	**.04**	**-.07**	**.10**	**.01**	**.58**	**.07**	**-.04**	**.04**	**-.07**
Step3	Approach					.002	.04	.003					.01	**.04**	.03
	Perceptual sensitivity					.16	.05	.23**					.15	.05	.22**
	Soothability					.07	.05	.13					.08	.05	.13
	Persistence					-.01	.04	-.01					-.01	.04	-.01
	Reactivity	**.39**	**.15**	**3,83*** **	**5.74*** **	**.01**	**.05**	**.02**	**.39**	**.15**	**3,83*** **	**5.74*** **	**.02**	**.05**	**.04**
Step4	Negative affect					-.03	.03	-.08					-.04	.03	-.12
	Effortful control					.11	.03	.23**					.09	.04	.20**
	Extraversion					.10	.03	.25**					.09	.03	.22**
	Orienting sensitivity	**.53**	**.28**	**5,39*** **	**7.35*** **	**.05**	**.04**	**.10**	**.53**	**.28**	**5,39*** **	**7.35*** **	**.05**	**.04**	**.10**
Step5	N.affect* ***soothability***					.05	.04	.09							
	E.control * ***soothability***					-.04	.06	-.05							
	Extraversion* ***soothability***					.03	.04	.07							
	O.sensitivity* ***soothability***	**.54**	**.30**	**4.21*** **	**.77**	**-.01**	**.05**	**-.02**							
	N.affect* ***persistence***												-.03	.03	-.06
	E.control * ***persistence***												-.11	.06	-.14*
	Extraversion* ***persistence***												-.002	.03	-.004
	O.sensitivity* ***persistence***								**.55**	**.30**	**4.35*** **	**1.17**	**-.02**	**.06**	**-.02**

*p<.05. ** p<.01. *** p<.001. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.8 continued Hierarchical Regression Analysis in Predicting Authoritative Parenting Styles: Reactivity as moderator

		Reactivity						
	Predictors	R	R^2	F	ΔF	B	SE	B
Step1	Age					.01	.01	.07
	Education level	**.10**	**.01**	**.83**	**.83**	**.02**	**.02**	**.06**
Step2	Ses	**.10**	**.01**	**.58**	**.07**	**-.03**	**.04**	**-.06**
Step3	Approach					.000	.04	.000
	Perceptual sensitivity					.15	.05	. 22**
	Soothability					.08	.05	. 15[b]
	Persistence					-.004	.04	-.01
	Reactivity	**.39**	**.15**	**3,83*** **	**5.74*** **	**.02**	**.05**	**.04**
Step4	Negative affect					-.05	.03	-.13
	Effortful control					.07	.04	.15
	Extraversion					.10	.04	. 26**
	Orienting sensitivity	**.53**	**.28**	**5,39*** **	**7.35*** **	**.04**	**.04**	**.08**
Step5	N.affect* ***reactivity***					.04	.05	.07
	E.control * ***reactivity***					.09	.06	.14
	Extraversion* ***reactivity***					-.04	.04	-.08
	O.sensitivity* ***reactivity***	**.55**	**.30**	**4.27*** **	**.93**	**.03**	**.06**	**.04**

*p<.05. ** p<.01. *** p<.001. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

4.3.2.1.1. Approach as a moderator

When approach was a moderator in the final step of the regression analysis, child's perceptual sensitivity (β=.22, p <.01) significantly, mother's effortful control (β=.24, p <.001) and extraversion (β=.22, p <.01) significantly and positively predicted authoritative parenting style. These findings suggested that when children had high scores of perceptual sensitivity mothers were more likely to show authoritative parenting style. Similarly, mothers who had high scores of effortful control and extraversion were more likely to exhibit authoritative parenting style. None of the interactions individually predicted authoritative parenting style.

4.3.2.1.2. Perceptual Sensitivity as a moderator

When perceptual sensitivity was a moderator in the final step of the regression analysis, child's perceptual sensitivity (β=.25, p <.001); mother's effortful control (β=.29, p <.05) and extraversion (β=.25, p <.05) significantly and positively predicted authoritative parenting style.

Interaction between negative affect and perceptual sensitivity was significant in predicting authoritative parenting (β=-.22, p <.05). A simple slope analysis was conducted to interpret interaction effect. However, slopes were not significant.

4.3.2.1.3. Soothability as a moderator

When soothability was a moderator in the final step of the regression analysis, child's perceptual sensitivity (β=.23, p <.01); mother's effortful control (β=.23, p <.01) and extraversion (β=.25, p <.01) significantly and positively predicted authoritative parenting style. None of the interactions individually predicted authoritative parenting style.

4.3.2.1.4. Persistence as a moderator

When persistence was a moderator in the final step of the regression analysis, child's perceptual sensitivity (β=.22, p <.01); mother's effortful control (β=.20, p <.01) and extraversion (β=.22, p <.01) significantly and positively predicted authoritative parenting style. Moreover, interaction between effortful control and persistence was significant in predicting authoritative parenting (β=-.14, p <.05). A graph was constructed to interpret interaction effect and simple slope analysis was conducted to detect which aspects of the relations were significant. For children with high persistence maternal effortful control levels did not make a difference to their authoritative parenting. However, when child's persistence was low and mother's effortful control was high, mother was more likely to show authoritative parenting style. Similarly, child's persistence was low and mother's effortful control was low, mother was less likely to exhibit authoritative parenting (see figure 7)

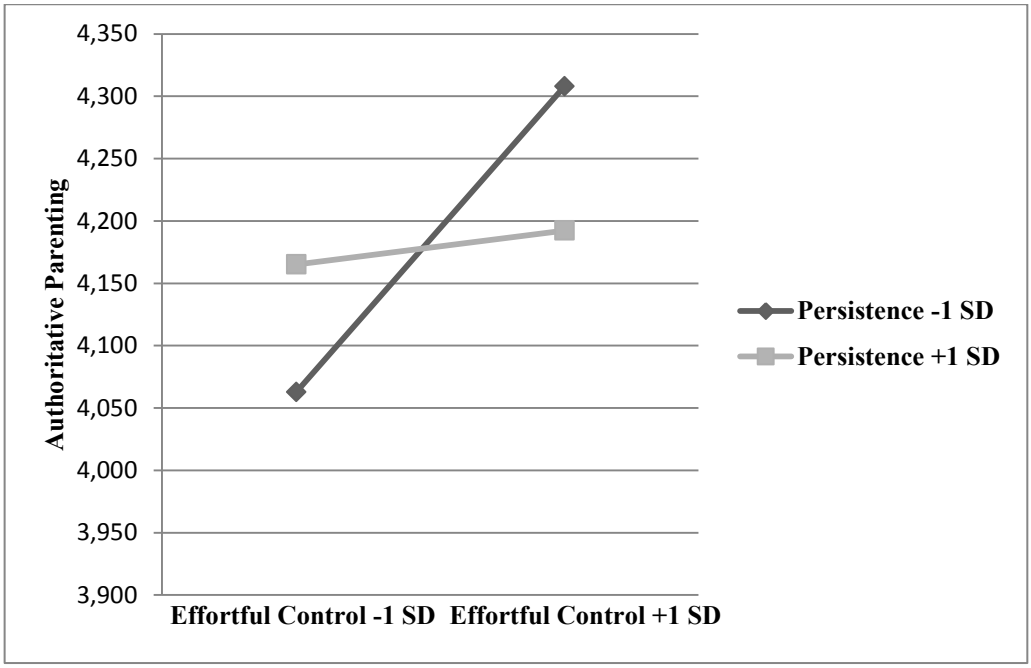

Figure 7 Interaction graph of child's persistence and mother's effortful control in predicting authoritative parenting.

4.3.2.1.5. Reactivity as a moderator

When reactivity was a moderator in the final step of the regression analysis, child's perceptual sensitivity (β=.22, p <.01) significantly and soothability marginally significantly (β=.15, p =.07) and both of them positively; mother's extraversion (β=.26, p <.01) significantly and positively predicted authoritative parenting style. None of the interactions individually predicted authoritative parenting style.

4.3.2.2 Predicting authoritarian parenting style

Hierarchical regression analyses were run to predict authoritarian parenting style. In step 1, education level and age of mother did not account for significant amount of variation in authoritarian parenting (R^2= .02, F (2,175) =1.35, ns.). In step 2, socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in authoritarian parenting scores, (ΔR^2= .01, ΔF (1,174) =.71, ns.). In step 3, child temperamental characteristics were entered into the equation, there was significant change in R^2 (ΔR^2= .10, ΔF (5,169) =3.91 p <.01). In step 4, maternal temperamental characteristics were entered into the

equation, they significantly added to the amount of variation explained in authoritarian parenting (ΔR^2= .11, ΔF (4,165) =5.66, p <.001). In the final step, interaction terms were introduced to the equation but there wasn't a significant change in R^2 in any of the five regression analyses where one of the child temperamental characteristic was a moderator; approach (ΔR^2= .01, ΔF (4,161) =.24, ns), perceptual sensitivity (ΔR^2= .03, ΔF (4,161) =1.78, ns), soothability, (ΔR^2= .01, ΔF (4, 161) =.66, ns), persistence (ΔR^2= .03, ΔF (4, 161) =1.80, ns) and reactivity (ΔR^2= .01, ΔF (4, 161) =.68, ns). However, all variables in the last step significantly predicted authoritarian parenting style in each regression analysis (see table 4.9)

Table 4.9 Hierarchical Regression Analysis in Predicting Authoritarian Parenting Style: Approach and Perceptual Sensitivity as moderators

		Approach							Perceptual sensitivity						
	Predictors	R	R^2	F	ΔF	B	SE	β	R	R^2	F	ΔF	B	SE	β
Step1	Age					.01	.01	.07					.01	.01	.07
	Education level	**.12**	**.02**	**1.35**	**1.35**	**-.04**	**.03**	**-.10**	**.12**	**.02**	**1.35**	**1.35**	**-.04**	**.03**	**-.11**
Step2	Ses	**.14**	**.02**	**1.13**	**.71**	**-.01**	**.05**	**-.01**	**.14**	**.02**	**1.13**	**.71**	**.01**	**.05**	**.02**
Step3	Approach					-.02	.05	-.04					-.02	.05	-.03
	Perceptual sensitivity					-.11	.07	-.14					-.10	.07	-.12
	Soothability					-.04	.06	-.06					-.05	.06	-.07
	Persistence					-.04	.05	-.07					-.06	.05	-.09
	Reactivity	**.35**	**.12**	**2.90****	**3.91****	**.09**	**.07**	**.12**	**.35**	**.12**	**2.90****	**3.91****	**.07**	**.06**	**.09**
Step4	Negative affect					.10	.03	.23**					.11	.05	.26*
	Effortful control					-.11	.04	-.19*					-.21	.07	-.36**
	Extraversion					.06	.04	.11					.12	.05	.24*
	Orienting sensitivity	**.48**	**.23**	**4.04*****	**5.66*****	**-.06**	**.05**	**-.10**	**.48**	**.23**	**4.04*****	**5.66*****	**-.10**	**.07**	**-.18**
Step5	N.affect**approach***					.004	.05	.01							
	E.control ***approach***					.05	.07	.05							
	Extraversion***approach***					.02	.04	.03							
	O.sensitivity***approach***	**.48**	**.23**	**3.03*****	**.24**	**.03**	**.06**	**.04**							
	N.affect***sensitivity***												-.02	.06	-.04
	E.control ***sensitivity***												.16	.09	.22[b]
	Extraversion***sensitivity***												-.13	.07	-.20[a]
	O.sensitivity***sensitivity***								**.51**	**.26**	**3.53*****	**1.78**	**.06**	**.09**	**.07**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.9 continued Hierarchical Regression Analysis in Predicting Authoritarian Parenting Style: Soothability and Persistence as moderators

		Soothability							Persistence						
	Predictors	R	R^2	F	ΔF	B	SE	β	R	R^2	F	ΔF	B	SE	β
Step1	Age					.01	.01	.08					.01	.01	.08
	Education level	**.12**	**.02**	**1.35**	**1.35**	**-.05**	**.03**	**-.13[a]**	**.12**	**.02**	**1.35**	**1.35**	**-.04**	**.03**	**-.12**
Step2	Ses	**.14**	**.02**	**1.13**	**.71**	**-.01**	**.05**	**-.01**	**.14**	**.02**	**1.13**	**.71**	**-.02**	**.05**	**-.03**
Step3	Approach					-.03	.05	-.04					-.03	.05	-.05
	Perceptual sensitivity					-.12	.07	-.14[b]					-.13	.07	-.15*
	Soothability					-.04	.06	-.05					-.05	.06	-.06
	Persistence					-.05	.05	-.07					-.05	.05	-.08
	Reactivity	**.35**	**.12**	**2.90****	**3.91****	**.08**	**.06**	**.11***	**.35**	**.12**	**2.90****	**3.91****	**.08**	**.06**	**.10**
Step4	Negative affect					.10	.03	.23**					.08	.04	.19*
	Effortful control					-.12	.05	-.20*					-.11	.05	-.18*
	Extraversion					.06	.04	.13					.02	.04	.03
	Orienting sensitivity	**.48**	**.23**	**4.04*****	**5.66*****	**-.05**	**.05**	**-.08**	**.48**	**.23**	**4.04*****	**5.66*****	**-.04**	**.05**	**-.06**
Step5	N.affect**soothability***					.05	.05	.08							
	E.control * ***soothability***					.02	.07	.03							
	Extraversion* ***soothability***					.04	.05	.06							
	O.sensitivity* ***soothability***	**.50**	**.24**	**3.17*****	**.66**	**.08**	**.07**	**.09**							
	N.affect**persistence***												-.06	.04	-.12
	E.control * ***persistence***												-.004	.07	-.004
	Extraversion* ***persistence***												-.11	.05	-.22*
	O.sensitivity* ***persistence***								**.51**	**.26**	**3.54*****	**1.80**	**.04**	**.08**	**.04**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.9 continued Hierarchical Regression Analysis in Predicting Authoritarian Parenting Styles: Reactivity as moderator

	Predictors	R	R^2	F	ΔF	B	SE	B
Step1	Age					.01	.01	.06
	Education level	.12	.02	1.35	1.35	**-.04**	**.03**	**-.11**
Step2	Ses	.14	.02	1.13	.71	**-.01**	**.05**	**-.02**
Step3	Approach					-.03	.05	-.04
	Perceptual sensitivity					-.13	.07	-.15[a]
	Soothability					-.04	.06	-.05
	Persistence					-.05	.05	-.07
	Reactivity	.35	.12	2.90**	3.91**	**.07**	**.07**	**.10**
Step4	Negative affect					.11	.04	.25**
	Effortful control					-.12	.06	-.21*
	Extraversion					.08	.05	.17
	Orienting sensitivity	.48	.23	4.04***	5.66***	**-.03**	**.06**	**-.05**
Step5	N.affect***reactivity***					-.02	.06	-.03
	E.control * ***reactivity***					.04	.08	.05
	Extraversion***reactivity***					-.05	.06	-.09
	O.sensitivity***reactivity***	**.49**	**.24**	**3,18*** **	**.68**	**-.08**	**.08**	**-.10**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis.

4.3.2.2.1. Approach as a moderator

When approach was moderator in the final step of the regression analysis, mother's negative affect positively (β=.23, p <.01) and effortful control (β=-.19, p <.05) negatively and significantly predicted authoritarian parenting style. These findings suggested that mothers who had high scores of negative affect and low scores of effortful control were more likely to show authoritarian parenting style. None of the interactions individually predicted authoritarian parenting style.

4.3.2.2.2. Perceptual Sensitivity as a moderator

When perceptual sensitivity was a moderator in the final step of the regression analysis, mother's negative affect (β=.26, p <.05) and extraversion (β=.24, p <.05)

positively and significantly predicted authoritarian parenting, but effortful control negatively and significantly (β=-.36, p <.01) predicted this parenting style.

In addition, two interaction terms marginally significantly predicted authoritarian parenting. One of them was between effortful control and perceptual sensitivity (β=.22, p =.07). According to constructed graph and conducted simple slope analysis, both for children with high perceptual sensitivity and low perceptual sensitivity mother's effortful control levels made a difference to their authoritarian parenting. When child's perceptual sensitivity was low and mother's effortful control was high, mothers were less likely to exhibit authoritarian parenting. When both child's perceptual sensitivity and mother's effortful control was low, mothers were more likely to exhibit authoritarian parenting. Similarly, when both child's perceptual sensitivity and mother's effortful control were high, mothers were less likely to exhibit authoritarian parenting. When child's perceptual sensitivity was high and mother's effortful control was low, mothers were more likely to exhibit authoritarian parenting (see figure 8).

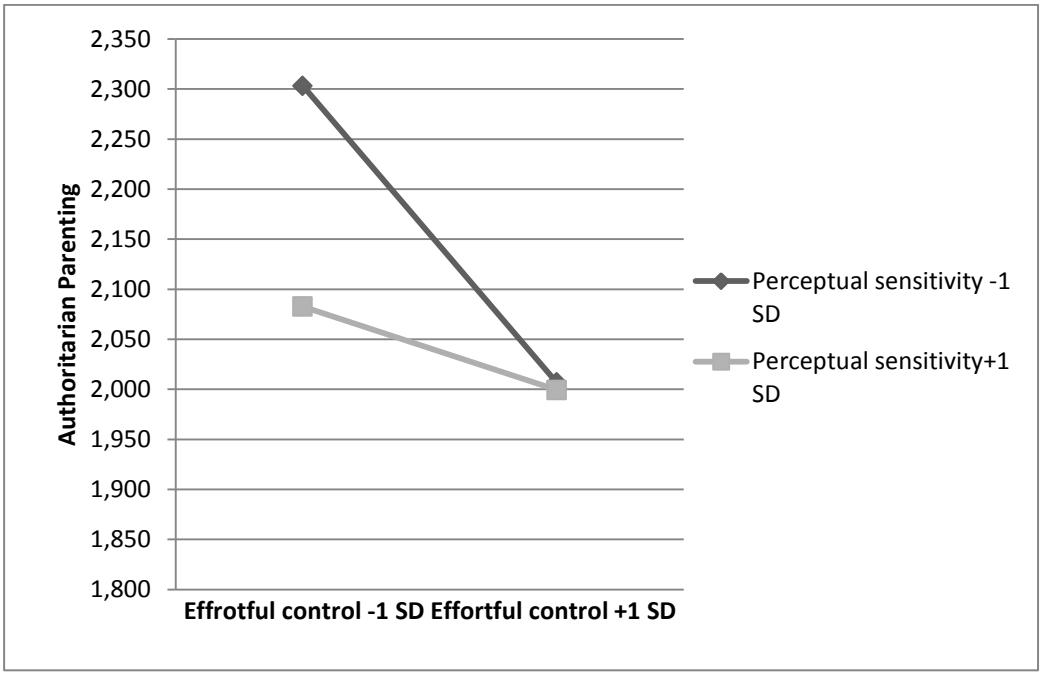

Figure 8 Interaction graph of child's perceptual sensitivity and mother's effortful control in predicting authoritarian parenting.

The other significant interaction was between extraversion and perceptual sensitivity (β=-.20, p =.06). According to this simple slope analysis, only for children with low perceptual sensitivity mother's extraversion levels made a difference to their authoritarian parenting. Therefore, when child's perceptual sensitivity was low and mother's extraversion was high, mothers were more likely to exhibit authoritarian parenting. When both child's perceptual sensitivity and mother's extraversion were low, mothers were less likely to exhibit authoritarian parenting (see figure 9).

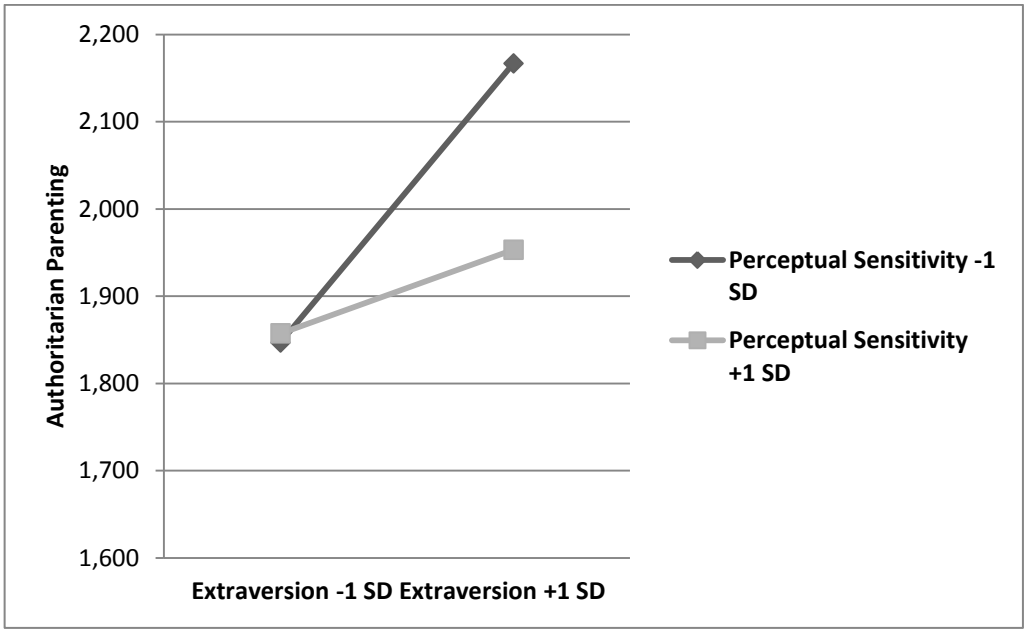

Figure 9 Interaction graph of child's perceptual sensitivity and mother's extraversion in predicting authoritarian parenting

4.3.2.2.3. Soothability as a moderator

When soothability was a moderator, education level of mother negatively but marginally significantly predicted authoritarian parenting (β=-.13, p =.06). Child's perceptual sensitivity negatively and marginally significantly (β=-.14, p =.07); child's reactivity positively (β=.11, p <.05) and significantly predicted outcome variable. Mother's negative affect positively (β=.23, p <.01) and significantly; mother's effortful control negatively and significantly (β=-.20, p <.05) predicted authoritarian parenting style. None of the interactions individually predicted authoritarian parenting style.

4.3.2.2.4. Persistence as a moderator

When persistence was a moderator, child's perceptual sensitivity negatively and significantly (β=-.15, p <.05) predicted authoritarian parenting. Mother's negative affect positively (β=.19, p <.05) and effortful control negatively and significantly (β=-.18, p <.05) predicted authoritarian parenting style.

In addition to these findings, interaction between extraversion and persistence was significant in predicting authoritarian parenting (β=-.22, p< .05). Simple slope analysis was performed to identify which aspects of the relations were significant and a graph was constructed to interpret interaction effect. Slope of the regression line showed that when child's persistence was high mother's extraversion did not matter. However, when child's persistence was low and mother's extraversion was high, mother was more likely to show authoritarian parenting style. When both child's persistence and mother's extraversion were low, mothers were less likely to show authoritarian parenting. (see figure 10)

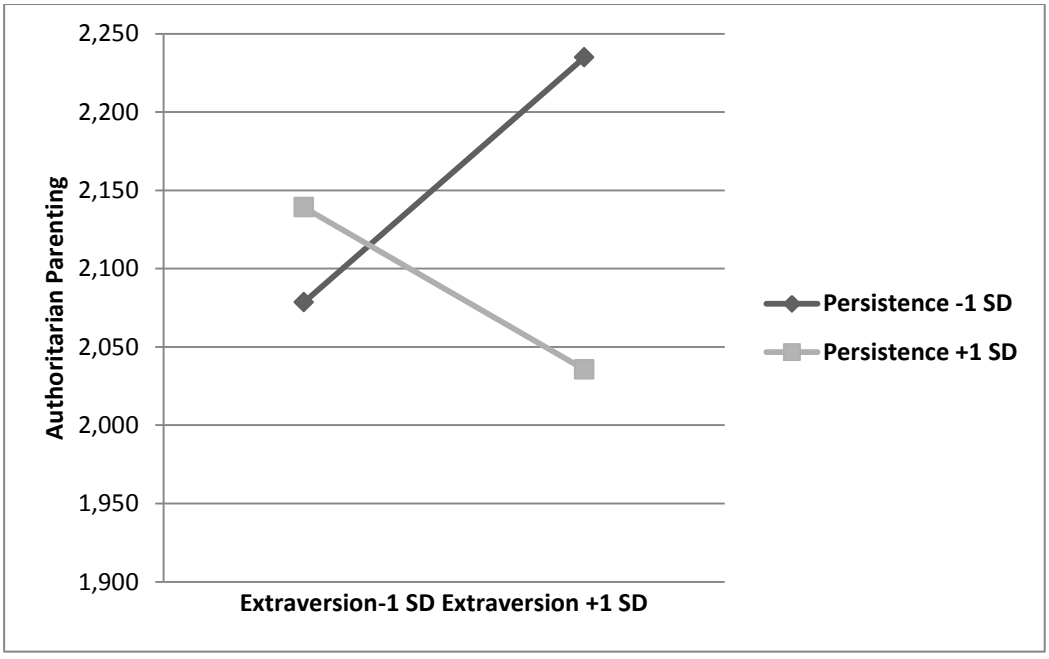

Figure 10 Interaction graph of child's persistence and mother's extraversion in predicting authoritarian parenting.

4.3.2.2.5. Reactivity as a moderator

When reactivity was a moderator in the final step of the regression analysis, child's perceptual sensitivity negatively and marginally significantly (β=-.15, *p* =.06) predicted authoritarian parenting. Mother's negative affect positively (β=.25, *p* <.01); mother's effortful control negatively and significantly (β=-.21, p <.05) predicted authoritarian parenting style. None of the interactions individually predicted authoritarian parenting style.

4.3.2.3 Predicting over-protective parenting style

Regression analyses were conducted to predict over-protective parenting style. In step 1, education level and age of mother significantly predicted over-protective parenting (R^2= .20, F (2,175) =21.46, p<001). Socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in over-protective parenting scores, (ΔR^2= .002, Δ*F* (1,174) = .44, *ns*). In step 3, child temperamental characteristics were entered into the equation, there wasn't significant change in R^2 (ΔR^2= .02, Δ*F* (5,169) =.71, *ns.*). In step 4, maternal temperamental characteristics were entered into the equation, they significantly added to the amount of variation explained in over-protective parenting (ΔR^2= .11, Δ*F* (4,165) =7.04, *p* <.001). In the final step, interaction terms were added into the equation there wasn't a significant change in R^2 in any of the five regression analyses where one of the child temperamental characteristic was a moderator; approach (ΔR^2= .01, Δ*F* (4,161) =.75, ns), perceptual sensitivity (ΔR^2= .01, Δ*F* (4, 161) =.50, ns), soothability (ΔR^2= .02, Δ*F* (4, 161) =1.37, ns), persistence (ΔR^2= .004, Δ*F* (4, 161) =.21, ns) and reactivity (ΔR^2= .01, Δ*F* (4, 161) =.49, ns). Although individual predictors and interaction terms did not significantly contribute to the step which was entered into, all steps significantly predicted over-protective parenting style in each regression analysis (see table 4.10)

Table 4.10 Hierarchical Regression Analysis in Predicting Over-protective Parenting Style: Approach and Perceptual Sensitivity as moderators

		Approach							Perceptual sensitivity						
	Predictors	R	R^2	F	ΔF	B	SE	B	R	R^2	F	ΔF	B	SE	β
Step1	Age					-.02	.01	-.13					-.02	.01	-.12
	Education level	**.44**	**.20**	**21.46*** **	**21.46*** **	**-.15**	**.04**	**-.29*** **	**.44**	**.20**	**21.46*** **	**21.46*** **	**-.16**	**.04**	**-.31*** **
Step2	Ses	**.45**	**.20**	**14.41*** **	**.44**	**.01**	**.07**	**.01**	**.45**	**.20**	**14.41*** **	**.44**	**.02**	**.07**	**.02**
Step3	Approach					-.003	.07	-.003					-.01	.07	-.01
	Perceptual sensitivity					.12	.09	.09					.15	.10	.12
	Soothability					.003	.08	.003					.001	.08	.001
	Persistence					.06	.07	.06					.05	.07	.06
	Reactivity	**.46**	**.22**	**5.80*** **	**.71**	**.003**	**.09**	**.002**	**.46**	**.22**	**5.80*** **	**.71**	**.01**	**.09**	**.01**
Step4	Negative affect					.17	.05	.27***					.17	.07	.27*
	Effortful control					.08	.06	.09					.04	.10	.05
	Extraversion					-.12	.05	-.17*					-.08	.07	-.11
	Orienting sensitivity	**.57**	**.33**	**6.77*** **	**7.04*** **	**-.13**	**.06**	**-.14***	**.57**	**.33**	**6.77*** **	**7.04*** **	**-.22**	**.10**	**-.25***
Step5	N.affect* ***approach***					-.08	.06	-.08							
	E.control * ***approach***					.01	.10	.008							
	Extraversion* ***approach***					-.04	.06	-.05							
	O.sensitivity* ***approach***	**.59**	**.34**	**5.23*** **	**.75**	**-.07**	**.08**	**-.06**							
	N.affect* ***sensitivity***												-.01	.09	-.01
	E.control * ***sensitivity***												.04	.12	.04
	Extraversion* ***sensitivity***												-.08	.10	-.08
	O.sensitivity* ***sensitivity***								**.58**	**.34**	**5,14*** **	**.50**	**.16**	**.13**	**.13**

*p<.05. ** p<.01. *** p<.001. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.10 continued Hierarchical Regression Analysis in Predicting Over-protective Parenting Style: Soothability and Persistence as moderators

		Soothability							Persistence						
	Predictors	R	R^2	F	ΔF	B	SE	β	R	R^2	F	ΔF	B	SE	β
Step1	Age					-.02	.01	-.14*					-.02	.01	-.12
	Education level	**.44**	**.20**	**21.46*** **	**21.46*** **	**-.14**	**.04**	**-.27*** **	**.44**	**.20**	**21.46*** **	**21.46*** **	**-.15**	**.04**	**-.29*** **
Step2	Ses	**.45**	**.20**	**14.41*** **	**.44**	**.01**	**.07**	**.01**	**.45**	**.20**	**14.41*** **	**.44**	**.01**	**.07**	**.01**
Step3	Approach					-.03	.07	-.03					-.01	.07	-.01
	Perceptual sensitivity					.13	.09	.10					.13	.09	.10
	Soothability					.01	.08	.01					.01	.08	.01
	Persistence					.08	.07	.08					.07	.07	.08
	Reactivity	**.46**	**.22**	**5.80*** **	**.71**	**-.01**	**.09**	**-.004**	**.46**	**.22**	**5.80*** **	**.71**	**.01**	**.09**	**.01**
Step4	Negative affect					.17	.05	.28***					.17	.05	.27***
	Effortful control					.07	.06	.08					.08	.06	.09
	Extraversion					-.09	.06	-.12					-.13	.06	-.17*
	Orienting sensitivity	**.57**	**.33**	**6.77*** **	**7.04*** **	**-.15**	**.07**	**-.18***	**.57**	**.33**	**6.77*** **	**7.04*** **	**-14**	**.07**	**-.16***
Step5	N.affect* ***soothability***					.11	.07	.11							
	E.control * ***soothability***					.09	.10	.06							
	Extraversion* ***soothability***					.13	.07	.15[b]							
	O.sensitivity* ***soothability***	**.59**	**.35**	**5,46*** **	**1.37**	**-.13**	**.10**	**-.09**							
	N.affect* ***persistence***												.03	.06	.03
	E.control * ***persistence***												-.01	.10	-.01
	Extraversion* ***persistence***												-.001	.06	-.001
	O.sensitivity* ***persistence***								**.58**	**.33**	**5,03*** **	**.21**	**-.08**	**.11**	**-.06**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.10 continued Hierarchical Regression Analysis in Predicting Over-protective Parenting Styles: Reactivity as moderator

		Reactivity						
	Predictors	R	R^2	F	ΔF	B	SE	β
Step1	Age					-.02	.01	-.13
	Education level	**.44**	**.20**	**21.46*** **	**21.46*** **	**-.16**	**.04**	**-.31*** **
Step2	Ses	**.45**	**.20**	**14.41*** **	**.44**	**.02**	**.07**	**.02**
Step3	Approach					-.01	.07	-.01
	Perceptual sensitivity					.13	.09	.10
	Soothability					.02	.08	.02
	Persistence					.07	.07	.07
	Reactivity	**.46**	**.22**	**5.80*** **	**.71**	**.02**	**.09**	**.02**
Step4	Negative affect					.16	.06	.25**
	Effortful control					.05	.08	.06
	Extraversion					-.08	.06	-.12
	Orienting sensitivity	**.57**	**.33**	**6.77*** **	**7.04*** **	**-.17**	**.08**	**-.19***
Step5	N.affect****reactivity***					.02	.08	.02
	E.control * ***reactivity***					.02	.11	.02
	Extraversion****reactivity***					-.08	.08	-.09
	O.sensitivity****reactivity***	**.58**	**.34**	**5,13*** **	**.49**	**.11**	**.11**	**.09**

*p<.05. ** p<.01. *** p<.001. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

4.3.2.3.1 Approach as a moderator

When approach was a moderator in the final step of the regression analysis, mother's education level (β=-.29, p <.001) negatively mother's negative affect positively (β=.27, p <.001); extraversion (β=-.17, p <.05) and orienting sensitivity negatively (β=-.14, p <.05) and significantly predicted over-protective parenting style. Mothers' with higher education level were less likely to show over-protective parenting. Other findings suggested that mothers who had high scores of negative affect, low scores of extraversion and orienting sensitivity were more likely to show over-protective parenting style. None of the interactions individually predicted over-protective parenting style.

4.3.2.3.2 Perceptual Sensitivity as a moderator

When perceptual sensitivity was a moderator in the final step of the regression analysis, mother's education level negatively (β=-.31, p <.001) predicted over-protective parenting. Mother's negative affect positively (β=.27, p <.05) but orienting

sensitivity negatively (β=-.25, p <.05) predicted over-protective parenting style. None of the interactions individually predicted over-protective parenting style.

4.3.2.3.3. Soothability as a moderator

When soothability was a moderator in the final step of the regression analysis, mother's age (β=-.14, p <.05) and education level (β=-.27, p <.001) negatively and significantly predicted over-protective parenting. Mother's negative affect positively (β=.28, p <.001) and orienting sensitivity negatively (β=-.18, p <.05) predicted over-protective parenting style. In addition, interaction between extraversion and soothability (β=.15, p =.07) was significant. Slope of the regression line showed that when child's soothability was high mother's extraversion did not matter. However, when child's soothability was low and mother's extraversion was high, mother was less likely to show over-protective parenting style. When both child's soothability and mother's extraversion were low, mother was more likely to show over-protective parenting (see figure 11)

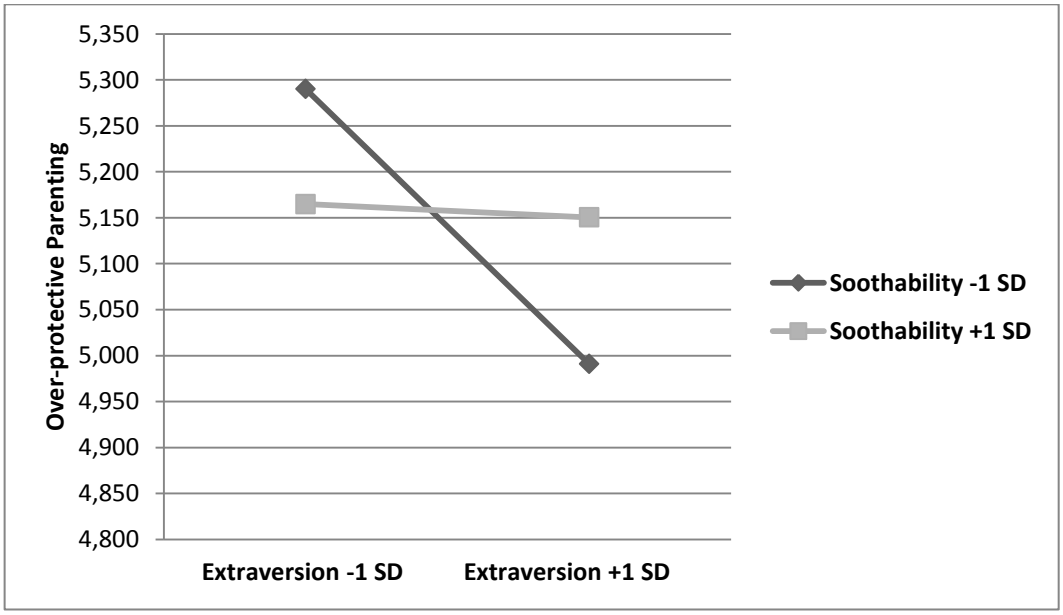

Figure 11 Interaction graph of child's soothability and mother's extraversion in predicting over-protective parenting.

4.3.2.3.4. Persistence as a moderator

When persistence was a moderator in the final step of the regression analysis, mother's education level (β=-.29, p <.001) negatively and significantly predicted

over-protective parenting. Mother's negative affect positively (β=.27, p <.001); extraversion (β=-.17, p <.05) and orienting sensitivity negatively (β=-.16, p <.05) and significantly predicted over-protective parenting style. None of the interactions individually predicted over-protective parenting style.

4.3.2.3.5. Reactivity as a moderator

When reactivity was a moderator in the final step of the regression analysis, mother's education level negatively and significantly (β=-.31, p <.001) predicted over-protective parenting. Mother's negative affect positively (β=.25, p <.01); orienting sensitivity negatively (β=-.19, p <.05) and significantly predicted over-protective parenting style. None of the interactions individually predicted over-protective parenting style.

4.3.2.4 Predicting permissive parenting style

Hierarchical regression analyses were conducted to predict permissive parenting style. In step 1, education level and age of mother did not significantly predict permissive parenting (R^2= .002, F (2,202) =.18, ns.). Socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in permissive parenting scores, (ΔR^2= .003, ΔF (1,201) = .63, *ns*). In step 3, child temperamental characteristics were entered into the equation, significant change existed in R^2 (ΔR^2= .07, ΔF (5,196) =2.95, p <.05). In step 4, maternal temperamental characteristics were entered into the equation, they did not significantly add to the amount of variation explained in permissive parenting (ΔR^2=.03, ΔF (4,192) =1.64, ns). In the final step, interaction terms were added into the equation there wasn't a significant change in R^2 in any of the five regression analyses where one of the child temperamental characteristic was a moderator; approach (ΔR^2= .01, ΔF (4,188) =.64, ns), perceptual sensitivity (ΔR^2= .04, ΔF (4,188) =2.02, p =.09), soothability, (ΔR^2= .02, ΔF (4,188) =.89, ns), persistence (ΔR^2= .01, ΔF (4,188) =.267, ns) and reactivity (ΔR^2= .004, ΔF (4,188) =.24, ns). Additionally, all steps for all moderators were non-significant. Therefore, results and tables of the prediction for permissive parenting styles will not be mentioned in here.

4.3.2.5 Predicting emotionally maltreating parenting style

Hierarchical regression analyses were conducted to predict emotionally maltreating parenting style. In step 1, education level and age of mother significantly predicted emotionally maltreating parenting (R^2= .04, F (2,175) =3.86, p <.05). Socioeconomic status was entered in the second step, it accounted for a significant amount of additional variance in emotionally maltreating parenting scores, (ΔR^2= .02, ΔF (1,174) = 4.17, p <.05). In step 3, child temperamental characteristics were entered into the equation, significant change did not exist in R^2 (ΔR^2= .05, ΔF (5,169) =1.78, *ns*). In step 4, maternal temperamental characteristics were entered into the equation, they did not add to the amount of variation explained in emotionally maltreating parenting (ΔR^2=.04, ΔF (4,165) =2.02, p =.09). In the final step, interaction terms were added into the equation there wasn't a significant change in R^2 in any of the five regression analyses where one of the child temperamental characteristic was a moderator; approach (ΔR^2= .03, ΔF (4,161) =1.21, ns), perceptual sensitivity (ΔR^2= .002, ΔF (4, 161) =.10, ns), soothability (ΔR^2= .03, ΔF (4, 161) =1.55, ns), persistence (ΔR^2= .03, ΔF (4, 161) =1.40, ns) and reactivity (ΔR^2= .03, ΔF (4, 161) =1.59, ns). But, all variables in the last step significantly predicted emotionally maltreating parenting style in each regression analysis (see table 4.11)

Table 4.11 Hierarchical Regression Analysis in Predicting Emotionally Maltreating Parenting Style: Approach and Perceptual Sensitivity as moderators

		Approach							Perceptual sensitivity						
	Predictors	R	R^2	F	ΔF	B	SE	β	R	R^2	F	ΔF	B	SE	β
Step1	Age					-.002	.01	-.03					-.003	.01	-.04
	Education level	**.21**	**.04**	**3.86***	**3.86****	**-.03**	**.02**	**-.11**	**.21**	**.04**	**3.86***	**3.86****	**-.04**	**.02**	**-.15[b]**
Step2	Ses	**.25**	**.07**	**4.01****	**4.17****	**-.05**	**.04**	**-.12**	**.25**	**.07**	**4.01****	**4.17****	**-.05**	**.04**	**-.10**
Step3	Approach					.03	.03	.08					.04	.03	.09
	Perceptual sensitivity					-.06	.05	-.10					-.06	.05	-.10
	Soothability					.02	.04	.05					.04	.04	.09
	Persistence					-.05	.04	-.12					-.04	.04	-.10
	Reactivity	**.33**	**.11**	**2.65****	**1.78**	**.06**	**.05**	**.11**	**.33**	**.11**	**2.65****	**1.78**	**.07**	**.05**	**.14**
Step4	Negative affect					.07	.02	.23**					.07	.04	.23[b]
	Effortful control					-.03	.03	-.07					-.01	.05	-.01
	Extraversion					.02	.03	.07					.02	.04	.07
	Orienting sensitivity	**.39**	**.15**	**2.48****	**2.02**	**.004**	**.03**	**.01**	**.39**	**.15**	**2.48****	**2.02**	**.004**	**.05**	**.01**
Step5	N.affect**approach***					-.03	.03	-.07							
	E.control ***approach***					.08	.05	.14							
	Extraversion***approach***					-.02	.03	-.05							
	O.sensitivity***approach***	**.42**	**.18**	**2.17****	**1.21**	**.03**	**.04**	**.06**							
	N.affect***sensitivity***												-.02	.05	-.05
	E.control ***sensitivity***												-.03	.06	-.07
	Extraversion***sensitivity***												-.01	.05	-.01
	O.sensitivity***sensitivity***								**.39**	**.16**	**1.84***	**.10**	.01	**.07**	**.02**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.11 continued Hierarchical Regression Analysis in Predicting Emotionally Maltreating Parenting Style: Soothability and Persistence as moderators

		Soothability							Persistence						
	Predictors	R	R^2	F	ΔF	B	SE	β	R	R^2	F	ΔF	B	SE	β
Step1	Age					-.001	.01	-.02					-.002	.01	-.03
	Education level	**.21**	**.04**	**3.86***	**3.86****	**-.04**	**.02**	**-.16[a]**	**.21**	**.04**	**3.86***	**3.86****	**-.04**	**.02**	**-.16***
Step2	Ses	**.25**	**.07**	**4.01****	**4.17****	**-.04**	**.04**	**-.09**	**.25**	**.07**	**4.01****	**4.17****	**-.05**	**.04**	**-.12**
Step3	Approach					.03	.03	.08					.03	.03	.08
	Perceptual sensitivity					-.07	.05	-.12					-.07	.05	-.12
	Soothability					.04	.04	.08					.04	.04	.08
	Persistence					-.04	.04	-.09					-.04	.04	-.10
	Reactivity	**.33**	**.11**	**2.65****	**1.78**	**.06**	**.05**	**.12**	**.33**	**.11**	**2.65****	**1.78**	**.07**	**.05**	**.13**
Step4	Negative affect					.06	.02	.21*					.04	.03	.13
	Effortful control					-.03	.03	-.09					-.03	.03	-.07
	Extraversion					.02	.03	.07					.003	.03	.01
	Orienting sensitivity	**.39**	**.15**	**2.48****	**2.02**	**.02**	**.03**	**.04**	**.39**	**.15**	**2.48****	**2.02**	**.01**	**.04**	**.03**
Step5	N.affect* ***soothability***					.01	.04	.02							
	E.control * ***soothability***					.07	.05	.11							
	Extraversion* ***soothability***					.04	.04	.01							
	O.sensitivity* ***soothability***	**.43**	**.18**	**2.27****	**1.55**	**.08**	**.05**	**.12**							
	N.affect* ***persistence***												-.07	.03	-.18*
	E.control * ***persistence***												-.01	.05	-.02
	Extraversion* ***persistence***												-.06	.03	-.16
	O.sensitivity* ***persistence***								**.43**	**.18**	**2.23****	**1.40**	**.02**	**.05**	**.02**

*p<.05. ** p<.01. *** p<.001. [a] p<.06. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.11 continued Hierarchical Regression Analysis in Predicting Emotionally Maltreating Parenting Styles: Reactivity as moderator

		Reactivity						
	Predictors	R	R^2	F	ΔF	B	SE	B
Step1	Age					-.003	.01	-.04
	Education level	**.21**	**.04**	**3.86***	**3.86****	**-.03**	**.02**	**-.13**
Step2	Ses	**.25**	**.07**	**4.01****	**4.17****	**-.04**	**.04**	**-.10**
Step3	Approach					.03	.03	.08
	Perceptual sensitivity					-.06	.05	-.10
	Soothability					.04	.04	.09
	Persistence					-.04	.04	-.10
	Reactivity	**.33**	**.11**	**2.65****	**1.78**	**.06**	**.05**	**.12**
Step4	Negative affect					.07	.03	.24*
	Effortful control					.01	.04	.02
	Extraversion					.05	.03	.16
	Orienting sensitivity	**.39**	**.15**	**2.48****	**2.02**	**.01**	**.04**	**.02**
Step5	N.affect****reactivity***					-.03	.04	-.06
	E.control * ***reactivity***					-.09	.06	-.16
	Extraversion****reactivity***					-.08	.04	-.19*
	O.sensitivity****reactivity***	**.43**	**.19**	**2.28****	**1.59**	**-.003**	**.06**	**-.01**

*p<.05. ** p<.01. *** p<.001. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

4.3.2.5.1 Approach as a moderator

When approach was a moderator in the final step of the regression analysis, Mother's negative affect positively and significantly (β=.23, p <.01) predicted emotionally maltreating parenting style. That is, mothers who had high scores of negative affect were more likely to show emotionally maltreating parenting style. None of the interactions individually predicted emotionally maltreating parenting style.

4.3.2.5.2 Perceptual Sensitivity as a moderator

When perceptual sensitivity was a moderator in the final step of the regression analysis, mother's education level negatively and marginally significantly (β=-.15, p =.07); mother's negative affect positively and marginally significantly (β=.23, p

=.07) predicted emotionally maltreating parenting style. None of the interactions individually predicted emotionally maltreating parenting style.

4.3.2.5.3 Soothability as a moderator

When soothability was a moderator in the final step of the regression analysis, mother's education level negatively and marginally significantly (β=-.16, p =.06); mother's negative affect positively and significantly (β=.21, p <.05) predicted emotionally maltreating parenting style. None of the interactions individually predicted emotionally maltreating parenting style.

4.3.2.5.4 Persistence as a moderator

When persistence was a moderator in the final step of the regression analysis, mother's education level negatively and significantly (β=-.16, p <.05) predicted emotionally maltreating parenting style.

Interaction between negative affect and persistence significantly (β=-.18, p <.05) predicted emotionally maltreating parenting. Constructed graph and conducted simple slope analysis suggested that for chidren with high persistence mother's negative affect levels did not make a difference to their emotionally maltreating parenting. But, when child's persistence was low and mother's negative affect was high, mothers were more likely to exhibit emotionally maltreating parenting. When both child's persistence and mother's negative affect were low, mothers were less likely to exhibit emotionally maltreating parenting (see figure 12).

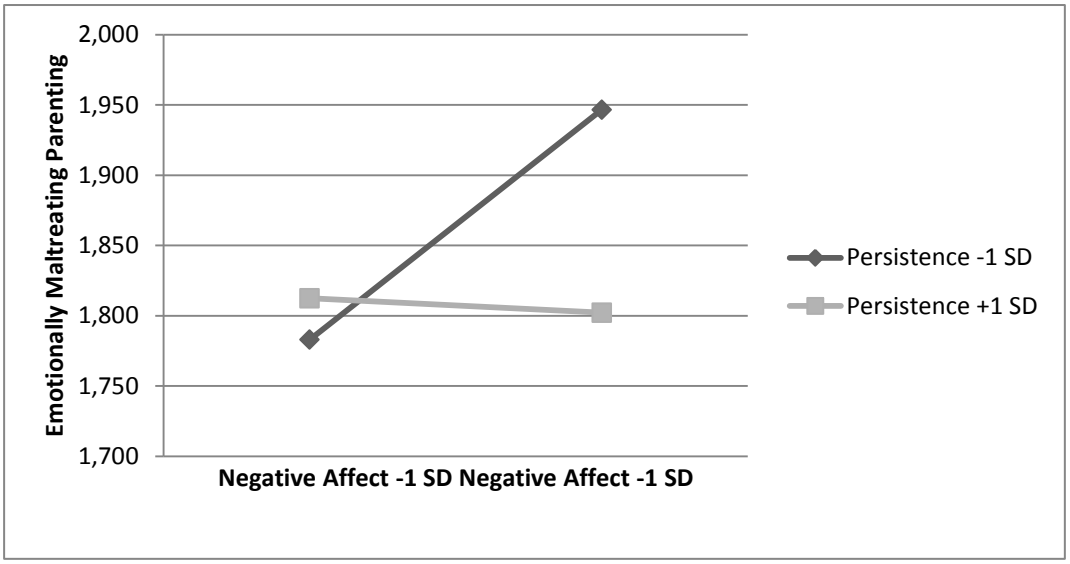

Figure 12 Interaction graph of child's persistence and mother's negative affect in predicting emotionally maltreating parenting.

4.3.2.5.5 Reactivity as a moderator

When reactivity was a moderator in the final step of the regression analysis, mother's negative affect positively and significantly (β=.24, p <.05) predicted emotionally maltreating parenting style.

Interaction between extraversion and reactivity significantly (β=-.19, p <.05) predicted emotionally maltreating parenting. According to simple slope analysis, when child's reactivity was high mother's extraversion did not matter. But, when child's reactivity was low and mother's extraversion was high, mothers were more likely to exhibit emotionally maltreating parenting. When both child's reactivity and mother's extraversion were low, mothers were less likely to exhibit emotionally maltreating parenting (see figure 13).

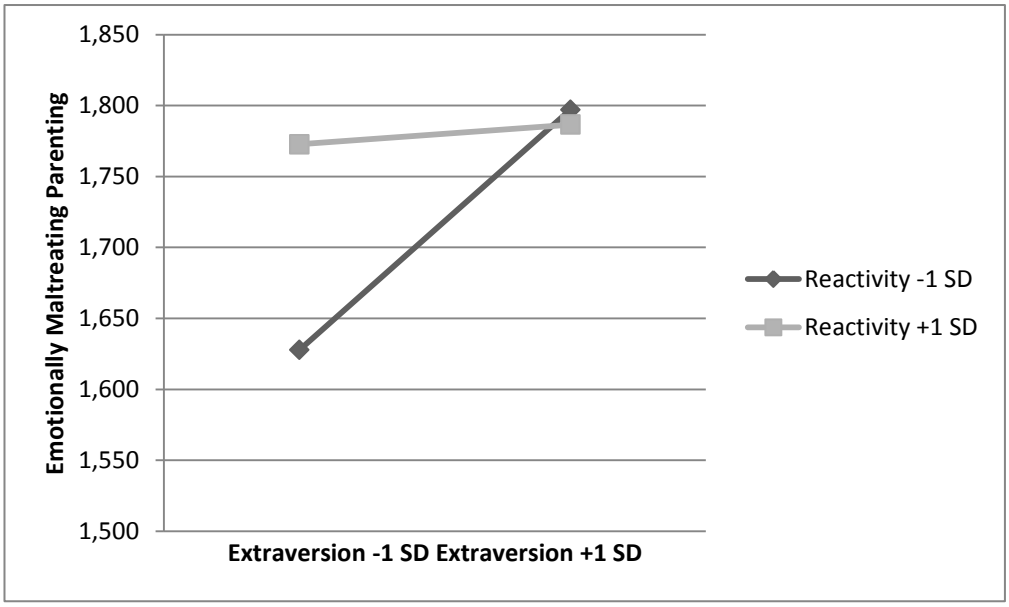

Figure 13 Interaction graph of child's reactivity and mother's extraversion in predicting emotionally maltreating parenting.

4.3.3 Regression analysis in predicting parenting styles from child temperamental characteristics.

In this section, regression analyses that were run to predict parenting styles from 2 and 3 way interactions between child temperamental characteristics will be reported.

For each parenting style, separate sets of hierarchical regression analyses were carried out. Child temperament data included in these analyses were based on maternal reports. Only difference between six regression analyses was the fifth step where three-way interactions were entered to the equation. Therefore, the first three steps will be presented only once in tables. Then, the last two steps where two-way and three-way interactions were entered will be presented separately for each analysis.

Additionally, child reactivity and soothability were taken as predictors since reactivity are most frequently studied temperamental characteristic and found to be related to parenting behaviours in the literature. In addition, soothability negatively correlated with reactivity. For child reactivity and soothability analyses were performed separately. In all of the regression analyses in the first step, mothers' age and education level were entered as control variables, in the second step perceived socioeconomic status was entered in order to test whether socioeconomic status was

influential above the effects of maternal education level same as previous regression analyses, in the third step child temperamental characteristics and in the fourth step two-way interaction between child temperamental characteristics were entered into the equation. In the final step, three-way interaction terms were entered. Since there were many possible interactions to calculate for each child temperamental characteristics -reactivity (reactivity*approach, reactivity*perceptual sensitivity, reactivity*soothability, reactivity*persistence, reactivity*approach*perceptual sensitivity, reactivity*approach*persistence etc.) and soothability-separate analyses were carried out. Although reactivity and soothability were taken as predictors, one of them was taken as moderator when the other was predictor.

4.3.3.1 Predicting authoritative parenting style

4.3.3.1.1 When predictor was reactivity

In predicting authoritative parenting style six separate hierarchical regression analyses were carried out. In the first step, age and education level of mother were entered into equation, they did not account for significant amount of variation in authoritative parenting scores (R^2= .09, F (2,202) =.87, ns). Socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in authoritative parenting scores, (ΔR^2= .001, ΔF (1,201) = .30, *ns*). In step 3, child temperamental characteristics were entered into the equation, there was significant change in R^2 (ΔR^2= .15, ΔF (5,196) =6.76, p<.001). In step 4, two-way interactions were entered into the equation, they significantly added to the amount of variation explained in authoritative parenting in any of the six regression analyses (ΔR^2= .06, ΔF (4,192) =3.43, p<.01). In the final step, three-way interactions between child temperamental characteristics with the same order of the table 7.14 were added into the equation however there wasn't a significant change in R^2 in any of the six regression analyses (ΔR^2= .000, ΔF (1,191) =.03, *ns*, ΔR^2= .001, ΔF (1,191) =.14, *ns;* ΔR^2= .001, ΔF (1,191) =.15, *ns;* ΔR^2= .004, ΔF (1,191) =.88, *ns;* ΔR^2= .002, ΔF (1,191) =.59, *ns;* ΔR^2= .000, ΔF (1,191) =.10, *ns*). However, all variables in the fifth step significantly predicted authoritative parenting style in each regression analysis (see table 4.12)

Child's perceptual sensitivity and soothability positively and significantly (β=.32, p <.001, β=.20, p <.05, respectively) predicted authoritative parenting. These

findings suggested that when children had high scores of perceptual sensitivity and soothability mothers were more likely to show high authoritative parenting.

In addition, the two-way interactions between reactivity and approach; reactivity and persistence, were significant (β=-.16, p <.05, β=.17, p <.05, respectively) in predicting authoritative parenting. Simple slope analysis was performed to identify which aspects of the relations were significant and a graph was constructed to interpret interaction effect. However, none of the simple slopes were significant.

Table 4.12 Hierarchical Regression Analyses in Predicting Authoritative Parenting Style: Reactivity is predictor

	Predictors	R	R^2	F	ΔF	B	SE	β
Step1	Age					.01	.01	.06
	Education level	.09	.01	.87	.87	.03	.02	.10
Step2	Ses	.10	.01	.68	.30	.01	.04	.01
Step3	Approach					.02	.04	.03
	Perceptual sensitivity					.22	.05	.32***
	Soothability					.10	.04	.20*
	Persistence					.04	.04	.08
	Reactivity	.40	.16	4.52***	6.76***	-.002	.05	-.003
Regression 1								
Step4	Reactivity*approach					-.14	.06	-.16*
	Reactivity*p.sensitivity					.10	.08	.10
	Reactivity*persistence					-.14	.07	-.16*
	Reactivity*soothability	.46	.21	4.31***	3.43**	.01	.06	.02
Step5	React*app*persis	.46	.21	3.96***	.03	.02	.09	.02
Regression 2								
Step 4	Reactivity*approach					-.13	.06	-.16*
	Reactivity*p.sensitivity					.10	.08	.10
	Reactivity*persistence					-.14	.06	-.16*
	Reactivity*soothability	.46	.21	4.31***	3.43**	.01	.06	.02
Step5	Reactivity*app*sens	.46	.21	3.97***	.14	.04	.10	.03
Regression 3								
Step 4	Reactivity*approach					-.14	.06	-.17*
	Reactivity*p.sensitivity					.11	.08	.10
	Reactivity*persistence					-.14	.07	-.17*
	Reactivity*soothability	.46	.21	4.31***	3.43**	.02	.06	.02
Step 5	Reactivity*app*sooth	.46	.21	3.97***	.15	-.04	.09	-.04
Regression 4								
Step 4	Reactivity*approach					-.14	.06	-.17*
	Reactivity*p.sensitivity					.12	.08	.11
	Reactivity*persistence					-.13	.06	-.15*
	Reactivity*soothability	.46	.21	4.31***	3.43**	.02	.06	.02
Step 5	Reactivity*persis*sens	.46	.22	4.04***	.88	.12	.13	.07
Regression 5								
Step 4	Reactivity*approach					-.15	.06	-.17*
	Reactivity*p.sensitivity					.10	.08	.10
	Reactivity*persistence					-.16	.07	-.18*
	Reactivity*soothability	.46	.21	4.31***	3.43**	.01	.06	.02
Step 5	Reactivity*persis*sooth	.46	.22	4.01***	.59	-.08	.10	-.07
Regression 6								
Step 4	Reactivity*approach					-.13	.06	-.16*
	Reactivity*p.sensitivity					.11	.08	.10
	Reactivity*persistence					.14	.06	-.16*
	Reactivity*soothability	.46	.21	4.31***	3.43**	.01	.06	.01
Step 5	Reactivity*sens*sooth	.46	.21	3.96***	.10	.04	.12	.03

*p<.05. ** p<.01. *** p<.001. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

4.3.3.1.2 When predictor was soothability

In predicting authoritative parenting style six separate hierarchical regression analyses were carried out. In the first step, age and education level of the mother were entered into equation, they did not account for significant amount of variation in authoritative parenting scores (R^2= .09, *F* (2,202) =.87, ns). Socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in authoritative parenting scores, (ΔR^2= .001, ΔF (1,201) = .30, *ns*). In step 3, child temperamental characteristics were entered into the equation, there was significant change in R^2 (ΔR^2= .15, ΔF (5,196) =6.76, p<.001). In step 4, two-way interactions were entered into the equation, they did not significantly add to the amount of variation explained in authoritative parenting in any of the six regression analyses and results of this step were the same for five regression analyses (ΔR^2= .02, ΔF (4,192) =1.32, ns) except for the second analysis (ΔR^2= .02, ΔF (4,192) =1.06, ns) . In the final step, three-way interactions between child temperamental characteristics with the same order of the table 7.15 were added into the equation however there wasn't a significant change in R^2 in any of the six regression analyses except for second analysis (ΔR^2= .002, ΔF (1,191) =.52, *ns*, ΔR^2= .002, ΔF (1,191) =3.44, *p=.07;* ΔR^2= .000, ΔF (1,191) =.05, *ns;* ΔR^2= .000, ΔF (1,191) =.03, *ns;* ΔR^2= .000, ΔF (1,191) =.03, *ns;* ΔR^2= .003, ΔF (1,191) =.63, *ns*). However, all variables in the fifth step significantly predicted authoritative parenting style in each regression analysis (see table 7.13)

Child's perceptual sensitivity and soothability positively and significantly (β=-.32, *p* <.001, β=-.22, *p* <.05, respectively) predicted authoritative parenting.

Table 4.13 Hierarchical Regression Analyses in Predicting Authoritative Parenting Style: Soothability is predictor

	Predictors	R	R^2	F	ΔF	B	SE	β
Step1	Age					.003	.01	.04
	Education level	.09	.01	.87	.87	.03	.02	.10
Step2	Ses	.10	.01	.68	.30	.01	.04	.02
Step3	Approach					.03	.04	.06
	Perceptual sensitivity					.22	.05	.32***
	Soothability					.12	.05	.22*
	Persistence					.02	.04	.04
	Reactivity	.40	.16	4.52	6.76	.01	.05	.01
Regression 1								
Step4	Soothability*approach					.07	.06	.10
	Soothability*p.sensitivity					-.09	.07	-.08
	Soothability*persistence					-.03	.06	-.04
	Soothability*reactivity	.42	.18	3.47	1.32	-.05	.07	-.05
Step5	Sooth*app*persis	.43	.18	3.24	.52	-.04	.06	-.06
Regression 2								
Step 4	Soothability*approach					.04	.06	.06
	Soothability*p.sensitivity					-.11	.08	-.10
	Soothability*persistence					-.004	.06	-.01
	Soothability* reactivity					-.05	.07	-.06
	Approach*p.sensitivity	.42	.18	3.19	1.06	.02	.07	.02
Step5	Sooth*app*sens	.44	.19	3.25	3.44	-.18	.10	-.14[b]
Regression 3								
Step 4	Soothability*approach					.08	.06	.11
	Soothability*p.sensitivity					-.09	.07	-.08
	Soothability*persistence					-.02	.06	-.03
	Soothability* reactivity	.42	.18	3.47	1.32	-.04	.07	-.05
Step 5	Sooth*app*react	.42	.18	3.19	.05	.02	.10	.02
Regression 4								
Step 4	Soothability*approach					.08	.06	.11
	Soothability*p.sensitivity					-.09	.08	-.09
	Soothability*persistence					-.02	.06	-.02
	Soothability* reactivity	.42	.18	3.47	1.32	-.04	.07	-.05
Step 5	Sooth*persis*sens	.42	.18	3.19	.03	-.02	.12	-.01
Regression 5								
Step 4	Soothability*approach					.08	.06	.11
	Soothability*p.sensitivity					-.09	.07	-.08
	Soothability*persistence					-.02	.06	-.03
	Soothability* reactivity	.42	.18	3.47	1.32	-.04	.07	-.05
Step 5	Sooth*persis*react	.42	.18	3.19	.03	.02	.10	.02
Regression 6								
Step 4	Soothability*approach					.07	.06	.11
	Soothability*p.sensitivity					-.09	.07	-.09
	Soothability*persistence					-.02	.06	-.02
	Soothability* reactivity	.42	.18	3.47	1.32	-.05	.07	-.06
Step 5	Sooth*sens*react	.43	.18	3.25	.63	.10	.13	.06

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis.

In addition, the three-way interaction between soothability, approach and perceptual sensitivity were marginally significant (β=-.14, p =.07) predicting authoritative parenting, Simple slope analysis was performed to identify which aspects of the relations were significant and a graph was constructed to interpret

interaction effect. Only the fourth line (*high approach, low perceptual sensitivity)* was significant. Slope of the regression lines showed that high soothability was associated with high authoritative parenting under conditions of high approach but only among participants with low perceptual sensitivity, and also low soothability was related to low authoritative parenting under the same conditions (see figure 14).

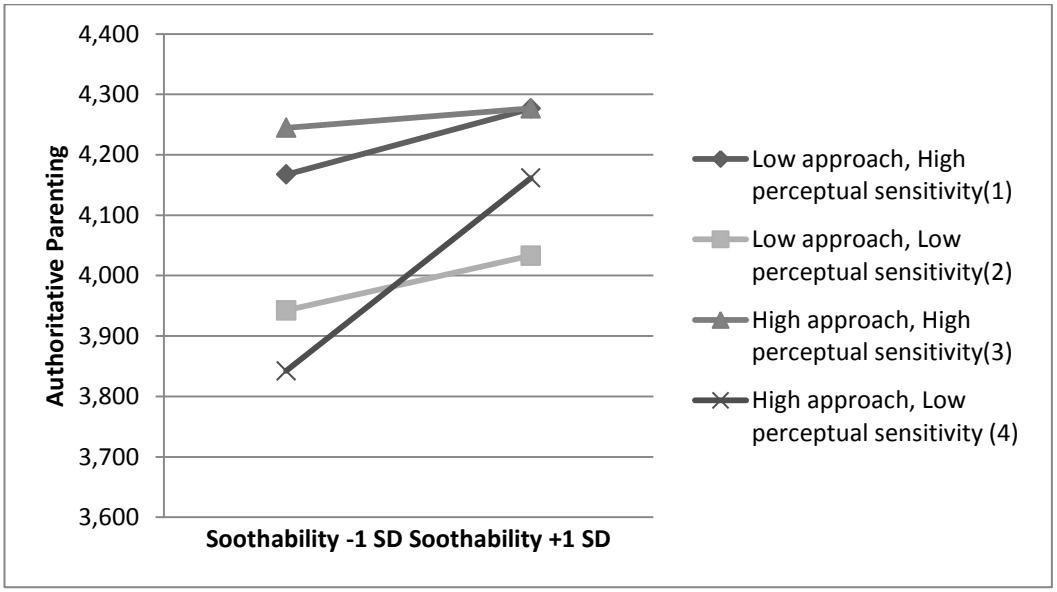

Figure 14 Interaction graph of child's soothability, approach and perceptual sensitivity in predicting authoritative parenting.

4.3.3.2 Predicting authoritarian parenting

4.3.3.2.1 When predictor was reactivity

In predicting authoritarian parenting style six separate hierarchical regression analyses were carried out. In the first step, age and education level of the mother were entered into equation, they did not account for significant amount of variation in authoritarian parenting scores (R^2= .13, *F* (2,202) =1.72, ns). Socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in authoritarian parenting scores, (ΔR^2= .01, ΔF (1,201) = 1.93, *ns*). In step 3, child temperamental characteristics were entered into the equation, there was significant change in R^2 (ΔR^2= .11, ΔF (5,196) =4.99, p<.001). In step 4, two-way interactions were entered into the equation, they did not significantly add to the amount of variation explained in authoritarian parenting in any of the six regression analyses (ΔR^2= .01, ΔF (4,192) =.29, ns). In the final step,

three-way interactions between child temperamental characteristics with the same order of the table 7.16 were added into the equation however there wasn't a significant change in R^2 in any of the six regression analyses (ΔR^2= .01, ΔF (1,191) =.1.13, *ns*, ΔR^2= .000, ΔF (1,191) =.09, ns*;* ΔR^2= .003, ΔF (1,191) =.68, *ns;* ΔR^2= .01, ΔF (1,191) =2.38, *ns;* ΔR^2= .01, ΔF (1,191) =1.41, *ns;* ΔR^2= .004, ΔF (1,191) =.88, *ns*). However, all variables in the fifth step significantly predicted authoritarian parenting style in each regression analysis (see table 7.14)

In these regression analyses same child and mother temperamental characteristics individually predicted authoritarian parenting style reported above. Thus, it will not be repeated here. None of the interactions individually predicted authoritarian parenting style.

4.3.3.2.2 When predictor was soothability

In predicting authoritarian parenting style six separate hierarchical regression analyses were carried out. In the first step, age and education level of the mother were entered into equation, they did not account for significant amount of variation in authoritarian parenting scores (R^2= .13, F (2,202) =1.72, ns). Socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in authoritarian parenting scores, (ΔR^2= .01, ΔF (1,201) = 1.93, *ns*). In step 3, child temperamental characteristics were entered into the equation, there was significant change in R^2 (ΔR^2= .11, ΔF (5,196) =4.99, p<.001). In step 4, two-way interactions were entered into the equation, they did not significantly add to the amount of variation explained in authoritarian parenting in any of the six regression analyses (ΔR^2= .002, ΔF (4,192) =.13, ns). In the final step, three-way interactions between child temperamental characteristics with the same order of the table x were added into the equation however there wasn't a significant change in R^2 in any of the six regression analyses (ΔR^2= .01, ΔF (1,191) =.1.84, *ns*, ΔR^2= .003, ΔF (1,191) =.63, ns*;* ΔR^2= .002, ΔF (1,191) =.45, *ns;* ΔR^2= .002, ΔF (1,191) =.45, *ns;* ΔR^2= .01, ΔF (1,191) =2.11, *ns;* ΔR^2= .004, ΔF (1,191) =.13, *ns*). However, all variables in the fifth step significantly predicted authoritarian parenting style in each regression analysis (see table 4.15)**.** In these regression analyses same child and mother temperamental characteristics individually predicted authoritarian

parenting style reported above. Thus, it will not be repeated here. None of the interactions individually predicted authoritarian parenting style.

Table 4.14 Hierarchical Regression Analyses in Predicting Authoritarian Parenting Style: Reactivity is predictor

	Predictors	R	R^2	F	ΔF	B	SE	β
Step1	Age					.004	.01	.05
	Education level	.13	.02	1.72	1.72	-.05	.03	-.13
Step2	Ses	.16	.03	1.79	1.93	-.04	.05	-.05
Step3	Approach					-.01	.05	-.01
	Perceptual sensitivity					-.16	.06	-.18**
	Soothability					-.01	.06	-.02
	Persistence					-.07	.05	-.11
	Reactivity	.37	.14	3.86***	4.99***	.17	.06	.24**
Regression 1								
Step4	Reactivity*approach					.02	.08	.02
	Reactivity*p.sensitivity					-.05	.10	-.04
	Reactivity*persistence					-.06	.09	-.0
	Reactivity*soothability	.38	.14	2.63**	.29	.03	.08	.03
Step5	React*app*persis	.38	.15	2.52**	1.14	-.13	.12	-.09
Regression 2								
Step 4	Reactivity*approach					.03	.08	.03
	Reactivity*perceptual					-.07	.10	-.05
	Reactivity*persistence					-.03	.08	-.03
	Reactivity*soothability	.38	.14	2.63**	.29	.04	.08	.04
Step5	Reactivity*app*sens	.38	.14	2.42**	.09	.04	.13	.02
Regression 3								
Step 4	Reactivity*approach					.02	.08	.01
	Reactivity*perceptual					-.07	.10	-.05
	Reactivity*persistence					-.04	.09	-.04
	Reactivity*soothability	.38	.14	2.63**	.29	.04	.08	.04
Step 5	Reactivity*app*sooth	.38	.14	2.48**	.68	-.10	.12	-.08
Regression 4								
Step 4	Reactivity*approach					.02	.08	.02
	Reactivity*perceptual					-.03	.10	-.02
	Reactivity*persistence					-.01	.08	-.01
	Reactivity*soothability	.38	.14	2.63**	.29	.04	.08	.04
Step 5	Reactivity*persis*sens	.39	.15	2.63**	2.38	.26	.17	.12
Regression 5								
Step 4	Reactivity*approach					.05	.08	.05
	Reactivity*perceptual					-.06	.10	-.05
	Reactivity*persistence					.002	.09	.002
	Reactivity*soothability	.38	.14	2.63**	.29	.04	.08	.03
Step 5	Reactivity*persis*sooth	.38	.15	2.54**	1.41	.15	.13	.11
Regression 6								
Step 4	Reactivity*approach					.04	.08	.04
	Reactivity*perceptual					-.07	.10	-.05
	Reactivity*persistence					-.02	.08	-.02
	Reactivity*soothability	.38	.14	2.63**	.29	.03	.08	.02
Step 5	Reactivity*sens*sooth	.38	.15	2.49**	.88	.15	.16	.08

*p<.05. ** p<.01. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Table 4.15 Hierarchical Regression Analyses in Predicting Authoritarian Parenting Style: Soothability is predictor

	Predictors	R	R^2	F	ΔF	B	SE	β
Step1	Age					.003	.01	.03
	Education level	.13	.02	1.72	1.72	-.04	.03	-.12
Step2	Ses	.16	.03	1.79	1.93	-.04	.05	-.06
Step3	Approach					-.002	.05	-.003
	Perceptual sensitivity					-.15	.06	-.18*
	Soothability					-.03	.06	-.05
	Persistence					-.08	.05	-.12
	Reactivity	.37	.14	3.86***	4.99***	.16	.06	.22**
Regression 1								
Step4	Soothability*approach					.01	.07	.01
	Soothability*p.sensitivity					.01	.10	.01
	Soothability*persistence					.02	.08	.03
	Soothability*reactivity	.37	.14	2.57**	.13	.04	.09	.04
Step5	Sooth*app*persis	.38	.15	2.52**	1.84	.10	.08	.12
Regression 2								
Step 4	Soothability*approach					-.004	.08	-.01
	Soothability*p.sensitivity					.02	.10	.02
	Soothability*persistence					-.01	.08	-.01
	Soothability* reactivity	.37	.14	2.57**	.13	.03	.09	.03
Step5	Sooth*app*sens	.38	.14	2.41**	.63	.10	.13	.06
Regression 3								
Step 4	Soothability*approach					-.01	.07	-.01
	Soothability*p.sensitivity					.02	.10	.01
	Soothability*persistence					.01	.08	.01
	Soothability* reactivity	.37	.14	2.57**	.13	.04	.09	.04
Step 5	Sooth*app*react	.38	.14	2.40**	.45	-.09	.13	-.07
Regression 4								
Step 4	Soothability*approach					-.03	.07	-.03
	Soothability*p.sensitivity					-.001	.10	-.001
	Soothability*persistence					.001	.08	.001
	Soothability* reactivity	.37	.14	2.57**	.13	.03	.09	.03
Step 5	Sooth*persis*sens	.38	.14	2.40**	.45	-.10	.15	-.05
Regression 5								
Step 4	Soothability*approach					-.04	.07	-.04
	Soothability*p.sensitivity					.02	.10	.02
	Soothability*persistence					-.05	.08	-.05
	Soothability* reactivity	.37	.14	2.57**	.13	.02	.09	.02
Step 5	Sooth*persis*react	.38	.15	2.55**	2.11	.19	.13	.14
Regression 6								
Step 4	Soothability*approach					-.03	.07	-.04
	Soothability*p.sensitivity					.01	.10	.01
	Soothability*persistence					-.004	.08	-.01
	Soothability* reactivity	.37	.14	2.57**	.13	.02	.09	.02
Step 5	Sooth*sens*react	.38	.14	2.43**	.85	.15	.16	.08

*p<.05. ** p<.01. *** p<.001. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

4.3.3.3. Predicting over-protective parenting

4.3.3.3.1 When predictor was reactivity

In predicting over-protective parenting style six separate hierarchical regression analyses were carried out. In the first step, age and education level of the mother were entered into equation, they accounted for significant amount of variation in over-protective parenting scores (R^2= .20, F (2,202) =24.51, p <.001). Socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in over-protective parenting scores, (ΔR^2= .002, ΔF (1,201) = .47, *ns*). In step 3, child temperamental characteristics were entered into the equation, there wasn't significant change in R^2 (ΔR^2= .03, ΔF (5,196) =1.52, ns). In step 4, two-way interactions were entered into the equation, but they did not significantly add to the amount of variation explained in over-protective parenting in any of the six regression analyses based on the order in the table 7.18 (ΔR^2= .01, ΔF (4,192) =.46, ns; ΔR^2= .01, ΔF (4,192) =.37, ns; ΔR^2= .01, ΔF (4,192) =.36, ns; ΔR^2= .01, ΔF (4,192) =.37, ns; ΔR^2= .03, ΔF (4,192) =1.46, ns; ΔR^2= .01, ΔF (4,192) =.37, ns) . In the final step, three-way interactions between child temperamental characteristics with the same order of the table x were added into the equation however there wasn't a significant change in R^2 in any of the six regression analyses (ΔR^2= .02, ΔF (1,191) =5.31, p <.05, ΔR^2= .001, ΔF (1,191) =.26, ns, ΔR^2= .01, ΔF (1,191) =3.45, p <.07, ΔR^2= .000, ΔF (1,191) =.11, ns, ΔR^2= .01, ΔF (1,191) =2.20, ns, ΔR^2= .01, ΔF (1,191) =1.49, ns). However, all variables in the fifth step significantly predicted over-protective parenting style in each regression analysis (see table 4.16)

Mother's age and education level negatively and significantly (β=-.14, p <.05, β=-.36, p <.001) predicted over-protective parenting. These findings suggested that mothers who were older and had higher level of education were less likely to show over-protective parenting.

Table 4.16 Hierarchical Regression Analyses in Predicting Over-Protective Parenting Style: Reactivity is predictor

	Predictors	R	R^2	F	ΔF	B	SE	β
Step1	Age					-.02	.01	-.14*
	Education level	.44	.20	24.51***	24.51***	-.20	.04	-.36***
Step2	Ses	.44	.20	16.45***	.47	-.01	.07	-.01
Step3	Approach					-.04	.07	-.04
	Perceptual sensitivity					.10	.09	.08
	Soothability					.08	.08	.08
	Persistence					.09	.07	.09
	Reactivity	.48	.23	7.20***	1.52	.14	.08	.13
Regression 1								
Step4	Reactivity*approach					-.06	.12	-.04
	Reactivity*p.sensitivity					.05	.14	.02
	Reactivity*persistence					.08	.13	.05
	Reactivity*soothability					-.01	.12	-.01
	App*persis	.49	.24	4.54***	.46	-.02	.10	-.02
Step5	React*app*persis	.51	.26	4.69***	5.31*	.45	.20	.21*
Regression 2								
Step 4	Reactivity*approach					-.07	.12	-.05
	Reactivity* p.sensitivity					.08	.14	.04
	Reactivity*persistence					-.01	.12	-.01
	Reactivity*soothability	.48	.23	4.86***	.37	-.05	.12	-.03
Step5	Reactivity*app*sens	.48	.23	4.49***	.26	.09	.18	.04
Regression 3								
Step 4	Reactivity*approach					-.03	.13	-.02
	Reactivity* p.sensitivity					.09	.14	.04
	Reactivity*persistence					.04	.12	.02
	Reactivity*soothability					-.07	.13	-.04
	App*sooth	.48	.23	4.50***	.36	.01	.11	.01
Step 5	Reactivity*app*sooth	.50	.25	4.47***	3.45[b]	.34	.18	.18[b]
Regression 4								
Step 4	Reactivity*approach					-.08	.11	-.05
	Reactivity* p.sensitivity					.10	.15	.05
	Reactivity*persistence					0,000036	.12	.000
	Reactivity*soothability	.48	.23	4.86***	.37	-.05	.12	-.03
Step 5	Reactivity*persis*sens	.48	.23	4.47***	.11	.08	.24	.03
Regression 5								
Step 4	Reactivity*approach					-.03	.11	-.02
	Reactivity* p.sensitivity					.11	.14	.05
	Reactivity*persistence					.15	.13	.09
	Reactivity*soothability					.03	.13	.02
	Sooth*persis	.51	.26	5.05***	1.48	.22	.12	.16[b]
Step 5	Reactivity*persis*sooth	.51	.26	4.88***	2.20	.29	.19	.14
Regression 6								
Step 4	Reactivity*approach					-.06	.11	-.04
	Reactivity* p.sensitivity					.08	.14	.04
	Reactivity*persistence					.01	.12	.004
	Reactivity*soothability	.48	.23	4.86***	.37	-.07	.12	-.04
Step 5	Reactivity*sens*sooth	.49	.24	4.61***	1.49	.29	.23	.09

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

In addition, the three-way interactions between *reactivity, approach and persistence*; and between *reactivity, approach and soothability* were significant (β=.21, p <.05, β=.18, p <.07, respectively) in predicting over-protective parenting. Simple slope analysis was performed to identify which aspects of the relations were significant and a graph was constructed to interpret interaction effect. For the first interaction term (*reactivity, approach and persistence*), slope of the regression lines showed that second (low approach, low persistence) and third (high approach, high persistence) lines were significant. For the second line, high reactivity was associated with high over-protective parenting under conditions of low approach but only among participants with low persistence, and also low reactivity was related to low over-protective parenting under the same conditions. For the third line, high reactivity was associated with high over-protective parenting under the conditions of high approach but only among participants with high persistence, and also low reactivity was related to low over-protective parenting under the same conditions (see figure 15).

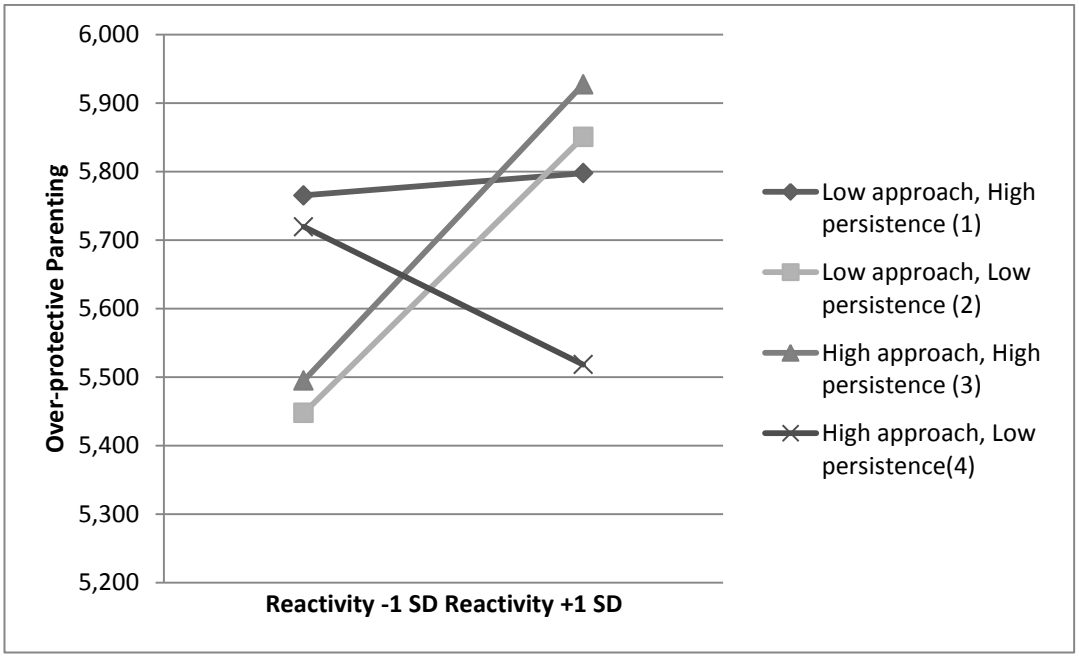

Figure 15 Interaction graph of child's reactivity, approach and persistence in predicting over-protective parenting.

For the second interaction term (*reactivity, approach and soothability)*, second line (low approach, low soothability) was significant. For a child with low soothability, child's high reactivity was related to high over-protective parenting under the condition of low approach, but child's low reactivity was significantly related to low over-protective parenting under the same conditions (see figure 16)

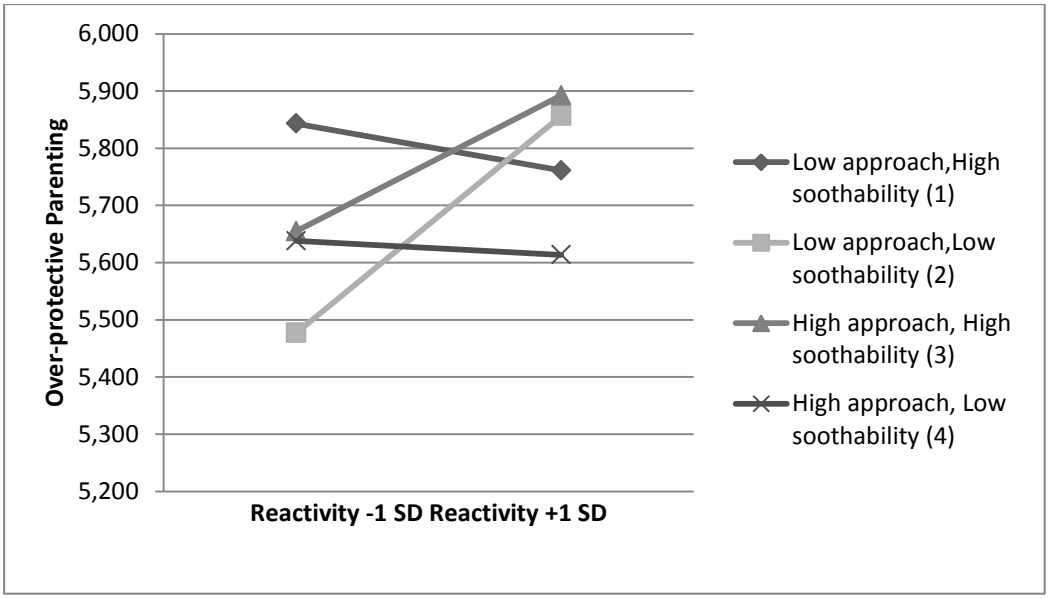

Figure 16 Interaction graph of child's reactivity, approach and soothability in predicting over-protective parenting.

Additionally, three-way interaction between *reactivity, persistence* and *soothability* (β=.19, $p<.05$) was to be significant. Therefore, two-way interaction between *soothability* and *persistence* was entered into the equation to graph the interaction. Although three-way interaction was changed to non-significant (β=.14, *ns*) and added two-way interaction (β=.16, $p=.07$) was significant, graphs of both of them were constructed (See figures 18 and 19). For the three-way interaction, third line (high persistence, high soothability) was significant. For a child with high persistence, child's high reactivity was related to high over-protective parenting under condition of high soothability, but child's low reactivity was significantly related to low over-protective parenting under the same conditions (see figure 17)

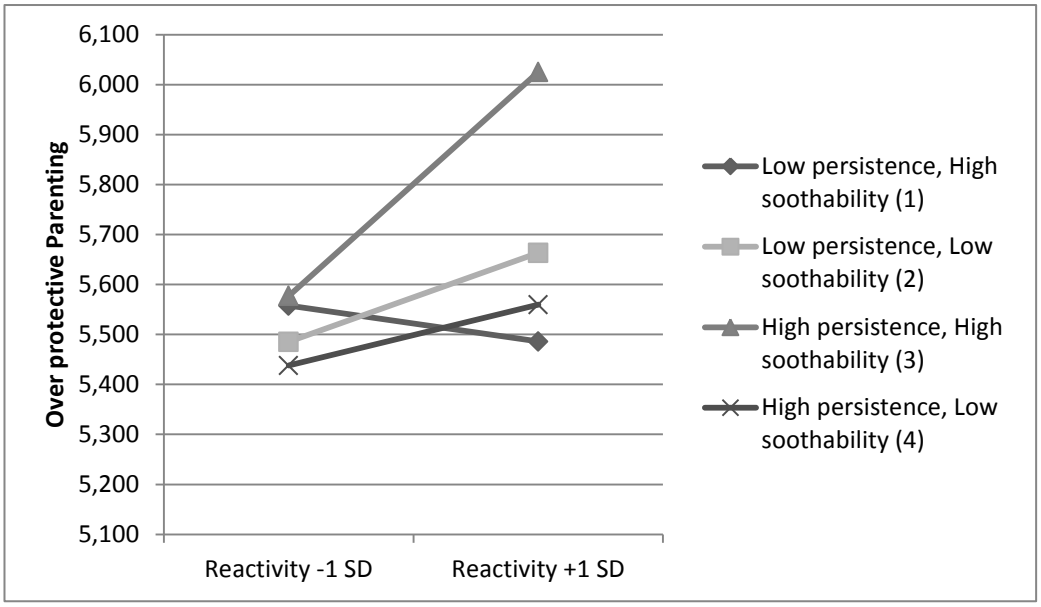

Figure 17 Interaction graph of child's reactivity, persistence and soothability in predicting over-protective parenting.

4.3.3.3.2 When predictor was soothability

In predicting over-protective parenting style six separate hierarchical regression analyses were carried out. In the first step, age and education level of the mother were entered into equation, they accounted for significant amount of variation in over-protective parenting scores (R^2= .20, *F* (2,202) =24.51, *p* <.001). Socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in over-protective parenting scores, (ΔR^2= .002, ΔF (1,201) = .47, *ns*). In step 3, child temperamental characteristics were entered into the equation, there wasn't significant change in R^2 (ΔR^2= .03, ΔF (5,196) =1.52, ns). In step 4, two-way interactions were entered into the equation, but they did not significantly add to the amount of variation explained in over-protective parenting in any of the six regression analyses based on the order in the table x (ΔR^2= .02, ΔF (4,192) =1.12, ns; ΔR^2= .02, ΔF (4,192) =1.34, ns; ΔR^2= .02, ΔF (4,192) =1.34, ns; ΔR^2= .02, ΔF (4,192) =1.34, ns; ΔR^2= .02, ΔF (4,192) =1.34, ns; ΔR^2= .02, ΔF (4,192) =1.34, ns) . In the final step, three-way interactions between child temperamental characteristics with the same order of the table 7.19 were added into the equation however there wasn't a significant change in R^2 in any of the five regression analyses except for the first analysis (ΔR^2= .01, ΔF (1,191) =3.21, *p* =.07, ΔR^2= .001, ΔF (1,191) =.21, ns, ΔR^2= .01, ΔF (1,191) =2.09, ns, ΔR^2=

.002, ΔF (1,191) =.53, ns, ΔR^2= .01, ΔF (1,191) =1.81, ns, ΔR^2= .01, ΔF (1,191) =1.47, ns). However, all variables in the fifth step significantly predicted over-protective parenting style in each regression analysis (see table 4.17)

Table 4.17 Hierarchical Regression Analyses in Predicting Over-protective Parenting Style: Soothability is predictor

	Predictors	R	R^2	F	ΔF	B	SE	β
Step1	Age					-.01	.01	-.09
	Education level	.44	.20	24.51***	24.51***	-.20	.04	-.38**
Step2	Ses	.44	.20	16.45***	.47	.01	.07	.01
Step3	Approach				*	-.07	.07	-.07
	Perceptual sensitivity					.10	.09	.08
	Soothability					.11	.08	.11
	Persistence					.08	.07	.08
	Reactivity	.48	.23	7.20***	1.52	.16	.08	.15[a]
Regression 1								
Step4	Soothability*approach					-.05	.11	-.04
	Soothability*p.sensitivity					.04	.14	.02
	Soothability*persistence					.16	.11	.12
	Soothability*reactivity					0,000057	.12	.000
	Approach*persistence	.50	.25	4.87***	1.12	-.03	.10	-.03
Step5	Sooth*app*persis	.51	.26	4.81***	3.21[c]	-.22	.12	-.17[c]
Regression 2								
Step 4	Soothability*approach					-.01	.11	-.01
	Soothability*p.sensitivit					.02	.14	.01
	Soothability*persistence					.22	.11	.16*
	Soothability* reactivity	.50	.25	5.28***	1.34	.02	.12	.01
Step5	Sooth*app*sens	.50	.25	4.87***	.21	-.08	.18	-.03
Regression 3								
Step 4	Soothability*approach					-.03	.10	-.02
	Soothability*p.sensitivit					.02	.14	.01
	Soothability*persistence					.18	.11	.13
	Soothability*reactivity	.50	.25	5.28***	1.34	-.01	.12	-.003
Step 5	Sooth*app*react	.51	.26	5.06***	2.09	.26	.18	.14
Regression 4								
Step 4	Soothability*approach					.01	.10	.01
	Soothability*p.sensitivit					.05	.14	.02
	Soothability*persistence					.21	.11	.15[b]
	Soothability* reactivity	.50	.25	5.28***	1.34	.02	.12	.01
Step 5	Sooth*persis*sens	.50	.25	4.90***	.53	.16	.22	.05
Regression 5								
Step 4	Soothability*approach					-.01	.10	-.01
	Soothability*p.sensitivit					.03	.14	.01
	Soothability*persistence					.16	.12	.11
	Soothability* reactivity	.50	.25	5.28***	1.34	.01	.12	.01
Step 5	Sooth*persis*react	.51	.26	5.03***	1.81	.26	.19	.12
Regression 6								
Step 4	Soothability*approach					-.004	.10	-.003
	Soothability*p.sensitivit					.01	.14	.004
	Soothability*persistence					.21	.11	.15*
	Soothability* reactivity	.50	.25	5.28***	1.34	.004	.12	.002
Step 5	Sooth*sens*react	.50	.25	5.00***	1.47	.28	.23	.09

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. [c] p<.08. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

Mother's education level negatively and significantly (β=-.38, p <.001) predicted over-protective parenting. These findings suggested that mothers who have higher levels of education were less likely to show over-protective parenting. Child's reactivity positively and marginally significantly (β=.15, p =.06) predicted over-protective parenting.

In addition, two-way interaction between soothability and persistence significantly (β=.16, p <.05), and three-way interaction between soothability, approach and persistence; were approaching significant (β=-.17, p =.08) in predicting over-protective parenting. Simple slope analysis was performed to identify which aspects of the relations were significant and a graph was constructed to interpret interaction effect. Slope of the regression lines of two –way interaction showed that for the children with low persistence, soothability did not matter when predicting mother's over-protective parenting. However, when children have high scores of persistence and soothability, mothers were more likely to exhibit over-protective parenting. When children had high persistence but low soothability, mothers were less likely to show over-protective parenting (see figure 18).

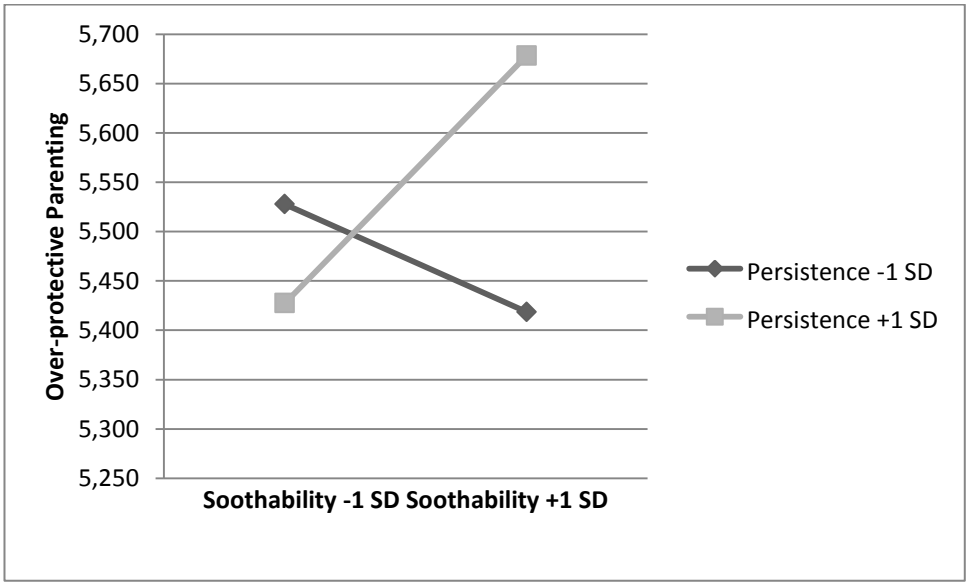

Figure 18 Interaction graph of child's soothability and persistence in predicting over-protective parenting.

Simple slope analysis of three-way interaction suggested that first line (low approach, high persistence) was significant. High soothability was associated with

high over-protective parenting under conditions of low approach but only among participants with high persistence, and also low soothability was related to low over-protective parenting under the same conditions (see figure 19).

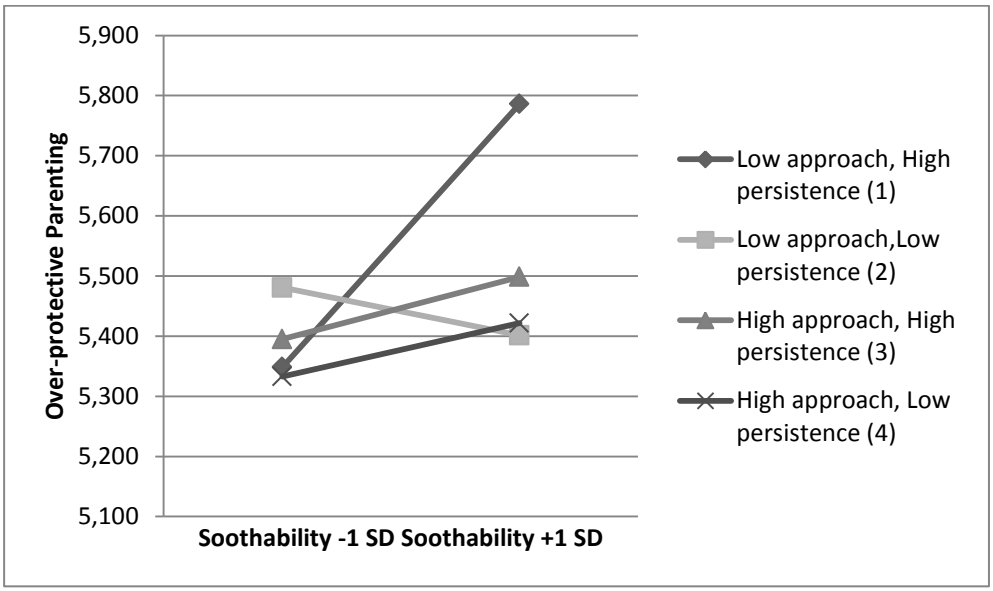

Figure 19 Interaction graph of child's soothability, approach and persistence in predicting over-protective parenting.

4.3.3.4. Predicting permissive parenting

4.3.3.4.1 When predictor was reactivity

In predicting permissive parenting style six separate hierarchical regression analyses were carried out. In the first step, age and education level of the mother were entered into equation, they did not account for significant amount of variation in permissive parenting scores (R^2= .002, *F* (2,202) =.18, ns). Socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in permissive parenting scores, (ΔR^2= .003, ΔF (1,201) = .63, *ns*). In step 3, child temperamental characteristics were entered into the equation, there was significant change in R^2 (ΔR^2= .07, ΔF (5,196) =2.95, p <.05). In step 4, two-way interactions were entered into the equation, they did not significantly add to the amount of variation explained in permissive parenting in any of the six regression analyses (ΔR^2= .02, ΔF (4,192) =1.20, *ns*). In the final step, three-way interactions between child temperamental characteristics with the same order of the table 7.20 were added into the equation however there wasn't a significant change in R^2 in any

of the six regression analyses (ΔR^2= .004, ΔF (1,191) =.76, *ns*, ΔR^2= .003, ΔF (1,191) =.63, ns, ΔR^2= .000, ΔF (1,191) =.02, ns, ΔR^2= .003, ΔF (1,191) =.54, ns, ΔR^2= .01, ΔF (1,191) =1.73, ns, ΔR^2= .000, ΔF (1,191) =.06, ns). However, step 4 and step 5 for all regression analysis marginally significantly predicted permissive parenting (R^2= .10, F (1,191) =1.72, p =.07, R^2= .10, F (1,191) =1.64, p=.08). Since fourth and fifth steps and none of the interactions predicted permissive parenting styles, these results were not reported.

4.3.3.4.2 When predictor was soothability

In predicting permissive parenting style six separate hierarchical regression analyses were carried out. In the first step, age and education level of the mother were entered into equation, they did not account for significant amount of variation in permissive parenting scores (R^2= .002, F (2,202) =.18, ns). Socioeconomic status was entered in the second step, but it did not account for a significant amount of additional variance in permissive parenting scores, (ΔR^2= .003, ΔF (1,201) = .63, *ns*). In step 3, child temperamental characteristics were entered into the equation, there was significant change in R^2 (ΔR^2= .07, ΔF (5,196) =2.95, p <.05). In step 4, two-way interactions were entered into the equation, they significantly added to the amount of variation explained in permissive parenting in six regression analyses (ΔR^2= .06, ΔF (4,192) =3.39, p <.01). In the final step, three-way interactions between child temperamental characteristics with the same order of the table 7.21 were added into the equation however there wasn't a significant change in R^2 in any of the six regression analyses (ΔR^2= .003, ΔF (1,191) =.67, *ns*, ΔR^2= .001, ΔF (1,191) =.19, ns, ΔR^2= .002, ΔF (1,191) =.35, ns, ΔR^2= .01, ΔF (1,191) =1.02, ns, ΔR^2= .002, ΔF (1,191) =.56, ns, ΔR^2= .000, ΔF (1,191) =.000, ns). However, all variables in the fifth step significantly predicted permissive parenting style in each regression analysis (see table 4.18)

Child's persistence negatively and significantly (β=-.25, p <.001) predicted permissive parenting. This finding suggested that when children had high persistence mothers are less likely to show permissive parenting.

Table 4.18 Hierarchical Regression Analyses in Predicting Permissive Parenting Style: Soothability is predictor

	Predictors	R	R^2	F	ΔF	B	SE	B
Step1	Age					-.003	.01	-.03
	Education level	.04	.002	.18	.18	.002	.03	.01
Step2	Ses	.07	.01	.33	.63	-.04	.05	-.05
Step3	Approach					-.03	.05	-.05
	Perceptual sensitivity					.01	.06	.01
	Soothability					-.07	.06	-.11
	Persistence					-.16	.05	-.25***
	Reactivity	.27	.07	1.97*	2.95*	-.03	.06	-.04
Regression 1								
Step4	Soothability*approach					-.003	.08	-.004
	Soothability*p.sensitivity					.20	.10	.15*
	Soothability*persistence					-.20	.08	-.22*
	Soothability*reactivity	.37	.14	2.51**	3.39**	-.18	.09	-.17*
Step5	Sooth*app*persis	.37	.14	2.36**	.67	.06	.08	.07
Regression 2								
Step 4	Soothability*approach					-.03	.08	-.04
	Soothability*p.sensitivity					.20	.10	.15*
	Soothability*persistence					-.21	.08	-.23**
	Soothability* reactivity	.37	.14	2.51**	3.39**	-.19	.09	-.17*
Step5	Sooth*app*sens	.37	.14	2.32**	.19	-.06	.13	-.03
Regression 3								
Step 4	Soothability*approach					-.03	.07	-.04
	Soothability*p.sensitivity					.20	.10	.15*
	Soothability*persistence					-.23	.08	-.25**
	Soothability* reactivity	.37	.14	2.51**	3.39**	-.19	.09	-.18*
Step 5	Sooth*app*react	.37	.14	2.33**	.35	.08	.13	.06
Regression 4								
Step 4	Soothability*approach					-.02	.07	-.02
	Soothability*p.sensitivity					.23	.10	.17*
	Soothability*persistence					-.22	.08	-.25**
	Soothability* reactivity	.37	.14	2.51**	3.39**	-.19	.09	-.17*
Step 5	Sooth*persis*sens	.37	.14	2.39**	1.02	.16	.15	.08
Regression 5								
Step 4	Soothability*approach					-.02	.07	-.02
	Soothability*p.sensitivity					.20	.10	.15*
	Soothability*persistence					-.20	.08	-.21*
	Soothability* reactivity	.37	.14	2.51**	3.39**	-.18	.09	-.17*
Step 5	Sooth*persis*react	.37	.14	2.35**	.51	-.10	.13	-.07
Regression 6								
Step 4	Soothability*approach					-.02	.07	-.03
	Soothability*p.sensitivity					.20	.10	.15*
	Soothability*persistence					-.22	.08	-.24**
	Soothability* reactivity	.37	.14	2.51**	3.39**	-.19	.09	-.17*
Step 5	Sooth*sens*react	.37	.14	2.30**	.000	.003	.16	.002

*p<.05. ** p<.01. *** p<.001. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

In addition, three two-way interactions were found significant. Fistly, interaction between soothability and perceptual sensitivity (β=.15, p <.05) were significant in predicting permissive parenting. For children with high perceptual sensitivity soothability did not matter. However, when children had low scores of perceptual sensitivity and soothability, mothers were more likely to exhibit

permissive parenting. When children had low perceptual sensitivity but high soothability, mothers were less likely to show permissive parenting (see figure 20).

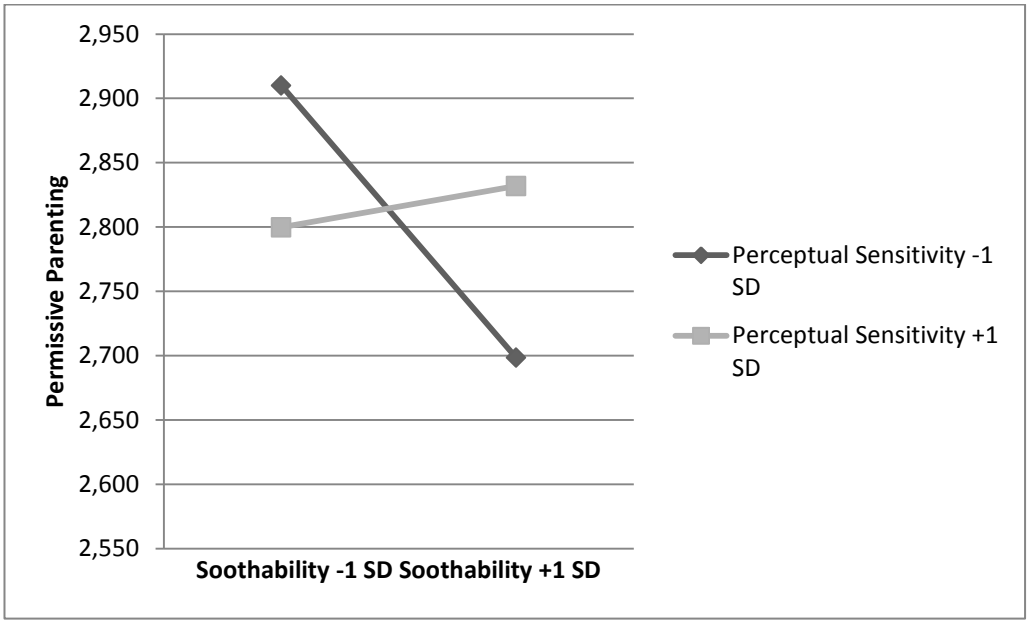

Figure 20 Interaction graph of child's soothability and perceptual sensitivity in predicting permissive parenting.

Secondly, slope of regression lines for interaction between soothability and persistence (β=-.22, p <.05) suggested that when child's persistence was low child's soothability levels did not make a difference to mother's permissive parenting. But, when children had high scores of persistence and soothability, mothers were less likely to exhibit permissive parenting. When children had high persistence but low soothability, mothers were more likely to show permissive parenting (see figure 21).

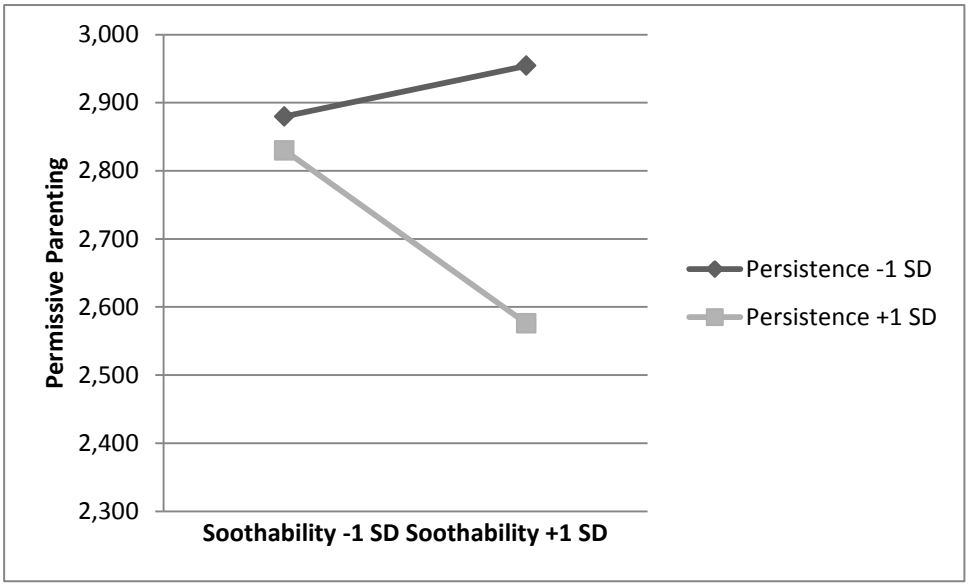

Figure 21 Interaction graph of child's soothability and persistence in predicting permissive parenting.

Lastly, simple slope analysis of the interaction between soothability and reactivity (β=-.17, p <.05) suggested that for children with low reactivity child's soothability did not matter. However, when children had high scores of reactivity and soothability, mothers were less likely to exhibit permissive parenting. When children had high reactivity but low soothability, mothers were more likely to show permissive parenting (see figure 22).

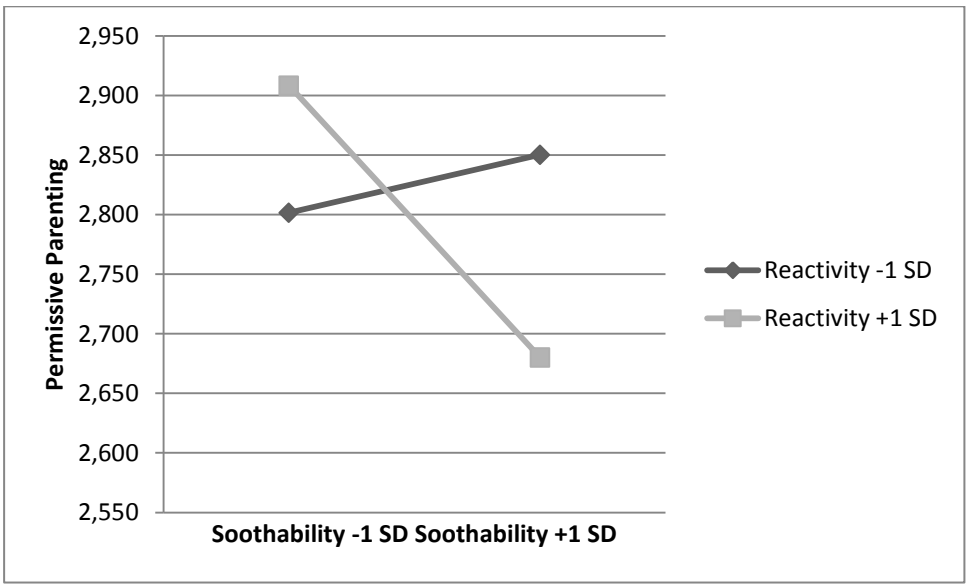

Figure 22 Interaction graph of child's soothability and reactivity in predicting permissive parenting.

4.3.3.5. Predicting emotionally maltreating parenting

4.3.3.5.1 When predictor was reactivity

In predicting emotionally maltreating parenting style six separate hierarchical regression analyses were carried out. In the first step, age and education level of the mother were entered into equation, they accounted for significant amount of variation in emotionally maltreating parenting scores (R^2= .04, *F* (2,202) =4.68, p<.01). Socioeconomic status was entered in the second step, it accounted for a significant amount of additional variance in emotionally maltreating parenting scores, (ΔR^2= .03, ΔF (1,201) = 6.68, *p<.01*). In step 3, child temperamental characteristics were entered into the equation, there was significant change in R^2 (ΔR^2= .07, ΔF (5,196) =3.26, *p* <.01). In step 4, two-way interactions were entered into the equation, they did not significantly add to the amount of variation explained in emotionally maltreating parenting in any of the six regression analyses (ΔR^2= .01, ΔF (4,192) =.47, ns). In the final step, three-way interactions between child temperamental characteristics with the same order of the table x were added into the equation however there wasn't a significant change in R^2 in any of the five regression analyses except for the first analysis (ΔR^2= .01, ΔF (1,191) =1.92, *ns*, ΔR^2= .001, ΔF (1,191) =.24, ns, ΔR^2= .01, ΔF (1,191) =.1.33, ns, ΔR^2= .000, ΔF (1,191) =.003, ns, ΔR^2= .001, ΔF (1,191) =.20, ns, ΔR^2= .01, ΔF (1,191) =1.97, ns). However, all variables in the fifth step significantly predicted emotionally maltreating parenting style in each regression analysis (see table 4.19)

Mother's education level and SES negatively (β=-.15, *p* <.05, β=-.14, *p* =.06, respectively) predicted emotionally maltreating parenting. Additionally, child's reactivity positively and significantly (β=.21, *p* <.05) predicted this type of parenting. None of the interactions individually predicted emotionally maltreating parenting style

Table 4.19 Hierarchical Regression Analyses in Predicting Emotionally Maltreating Parenting Style: Reactivity is predictor

	Predictors	R	R^2	F	ΔF	B	SE	B
Step1	Age					-.01	.01	-.08
	Education level	.21	.04	4.68**	4.68**	-.04	.02	-.15*
Step2	Ses	.27	.08	5.43***	6.68**	-.07	.04	-.14[a]
Step3	Approach					.03	.03	.08
	Perceptual sensitivity					-.06	.04	-.10
	Soothability					.05	.04	.11
	Persistence					-.06	.04	-.13
	Reactivity	.38	.15	4.19***	3.26**	.10	.04	.21*
Regression 1								
Step4	Reactivity*approach					-.02	.05	-.03
	Reactivity*p.sensitivity					.04	.07	.05
	Reactivity*persistence					-.06	.06	-.09
	Reactivity*soothability	.39	.15	2.92***	.47	-.05	.06	-.07
Step5	React*app*persis	.40	.16	2.85***	1.92	-.12	.08	-.12
Regression 2								
Step 4	Reactivity*approach					-.01	.05	-.02
	Reactivity*perceptual					.03	.07	.03
	Reactivity*persistence					-.04	.06	-.05
	Reactivity*soothability	.39	.15	2.92***	.47	-.04	.06	-.05
Step5	Reactivity*app*sens	.39	.16	2.70**	.24	.04	.08	.03
Regression 3								
Step 4	Reactivity*approach					-.03	.05	-.04
	Reactivity*perceptual					.03	.07	.03
	Reactivity*persistence					-.05	.06	-.07
	Reactivity*soothability	.39	.15	2.92***	.47	-.04	.06	-.05
Step 5	Reactivity*app*sooth	.40	.16	2.80***	1.33	-.10	.08	-.11
Regression 4								
Step 4	Reactivity*approach					-.02	.05	-.02
	Reactivity*perceptual					.03	.07	.04
	Reactivity*persistence					-.04	.06	-.05
	Reactivity*soothability	.39	.15	2.92***	.47	-.04	.06	-.06
Step 5	Reactivity*persis*sens	.39	.15	2.68**	.003	.01	.11	.01
Regression 5								
Step 4	Reactivity*approach					-.01	.05	-.02
	Reactivity*perceptual					.03	.07	.04
	Reactivity*persistence					-.03	.06	-.04
	Reactivity*soothability	.39	.15	2.92***	.47	-.04	.06	-.06
Step 5	Reactivity*persis*sooth	.39	.16	2.70**	.20	.04	.09	.04
Regression 6								
Step 4	Reactivity*approach					-.01	.05	-.01
	Reactivity*perceptual					.03	.07	.03
	Reactivity*persistence					-.03	.06	-.04
	Reactivity*soothability	.39	.15	2.92***	.47	-.05	.06	-.07
Step 5	Reactivity*sens*sooth	.40	.16	2.86***	1.97	.15	.11	.11

*p<.05. ** p<.01. *** p<.001. [a] p<.06. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

4.3.3.5.2 When predictor was soothability

In predicting emotionally maltreating parenting style six separate hierarchical regression analyses were carried out. In the first step, age and education level of the mother were entered into equation, they accounted for significant amount of variation in emotionally maltreating parenting scores (R^2= .04, *F* (2,202) =4.68, p<.01). Socioeconomic status was entered in the second step, it accounted for a significant amount of additional variance in emotionally maltreating parenting scores, (ΔR^2= .03, ΔF (1,201) = 6.68, *p<.01*). In step 3, child temperamental characteristics were entered into the equation, there was significant change in R^2 (ΔR^2= .07, ΔF (5,196) =3.26, *p* <.01). In step 4, two-way interactions were entered into the equation, they did not significantly add to the amount of variation explained in emotionally maltreating parenting in any of the six regression analyses (ΔR^2= .02, ΔF (4,192) =1.01, ns). In the final step, three-way interactions between child temperamental characteristics with the same order of the table 7.23 were added into the equation however there wasn't a significant change in R^2 in any of the five regression analyses except for the first analysis (ΔR^2= .000, ΔF (1,191) =.03, *ns*, ΔR^2= .01, ΔF (1,191) =1.40, ns, ΔR^2= .002, ΔF (1,191) =.48, ns, ΔR^2= .001, ΔF (1,191) =.20, ns, ΔR^2= .01, ΔF (1,191) =1.81, ns, ΔR^2= .01, ΔF (1,191) =2.22, ns). However, all variables in the fifth step significantly predicted emotionally maltreating parenting style in each regression analysis (see table 4.20)

Mother's education level and SES negatively (β=-.15, *p* <.05, β=-.15, *p* <.05, respectively) predicted emotionally maltreating parenting. Additionally, child's perceptual sensitivity negatively and marginally significantly (β=-.13, *p* =.07); reactivity positively and significantly (β=.22, *p* <.01) predicted this type of parenting.

Table 4.20 Hierarchical Regression Analyses in Predicting Emotionally Maltreating Parenting Style: Soothability is predictor

	Predictors	R	R^2	F	ΔF	B	SE	B
Step1	Age					-.01	.01	-.10
	Education level	.21	.04	4.68**	4.68**	-.04	.02	-.15*
Step2	Ses	.27	.08	5.43***	6.68**	-.07	.04	-.15*
Step3	Approach					.05	.03	.13
	Perceptual sensitivity					-.07	.04	-.13[b]
	Soothability					.06	.04	.13
	Persistence					-.05	.03	-.12
	Reactivity	.38	.15	4.19***	3.26**	.10	.04	.22**
Regression 1								
Step4	Soothability*approach					.03	.05	.04
	Soothability*p.sensitivity					.05	.06	.05
	Soothability*persistence					-.09	.05	-.14
	Soothability*reactivity	.40	.16	3.13***	1.01	-.08	.06	-.11
Step5	Sooth*app*persis	.41	.16	2.88***	.03	-.01	.05	-.02
Regression 2								
Step 4	Soothability*approach					.05	.05	.08
	Soothability*p.sensitivity					.05	.06	.06
	Soothability*persistence					-.09	.05	-.15[c]
	Soothability* reactivity	.40	.16	3.13***	1.01	-.07	.06	-.10
Step5	Sooth*app*sens	.41	.17	3.001***	1.40	.10	.08	.09
Regression 3								
Step 4	Soothability*approach					.04	.05	.07
	Soothability*p.sensitivity					.05	.06	.05
	Soothability*persistence					-.08	.05	-.13
	Soothability* reactivity	.40	.16	3.13***	1.01	-.07	.06	-.10
Step 5	Sooth*app*react	.41	.17	2.92***	.48	-.06	.09	-.07
Regression 4								
Step 4	Soothability*approach					.03	.05	.05
	Soothability*p.sensitivity					.04	.07	.04
	Soothability*persistence					-.08	.05	-.13
	Soothability* reactivity	.40	.16	3.13***	1.01	-.08	.06	-.11
Step 5	Sooth*persis*sens	.41	.16	2.89***	.20	-.05	.10	-.03
Regression 5								
Step 4	Soothability*approach					.02	.05	.04
	Soothability*p.sensitivity					.05	.06	.06
	Soothability*persistence					-.11	.06	-.18
	Soothability* reactivity	.40	.16	3.13***	1.01	-.08	.06	-.11
Step 5	Sooth*persis*react	.41	.17	3.04***	1.81	.12	.09	.13
Regression 6								
Step 4	Soothability*approach					.02	.05	.04
	Soothability*p.sensitivity					.04	.06	.04
	Soothability*persistence					-.08	.05	-.14
	Soothability* reactivity	.40	.16	3.13***	1.01	-.09	.06	-.12
Step 5	Sooth*sens*react	.42	.17	3.08***	2.22	.16	.11	.12

*p<.05. ** p<.01. *** p<.001. [a] p<.06. [b] p<.07. Note: B, Standard Error (SE) and β values were taken from the final step of the each regression analysis

In addition, a two-way interaction was found significant for only one regression analysis. Interaction between soothability and persistence (β=-.15, p =.08) were approaching significant in predicting emotionally maltreating parenting. When child's persistence was high soothability levels did not make a difference to mothers' emotionally maltreating parenting. For this interaction, when children had low scores

of persistence and soothability, mothers were less likely to exhibit emotionally maltreating parenting. When children had low persistence but high soothability, mothers were more likely to show emotionally maltreating parenting (see figure 23).

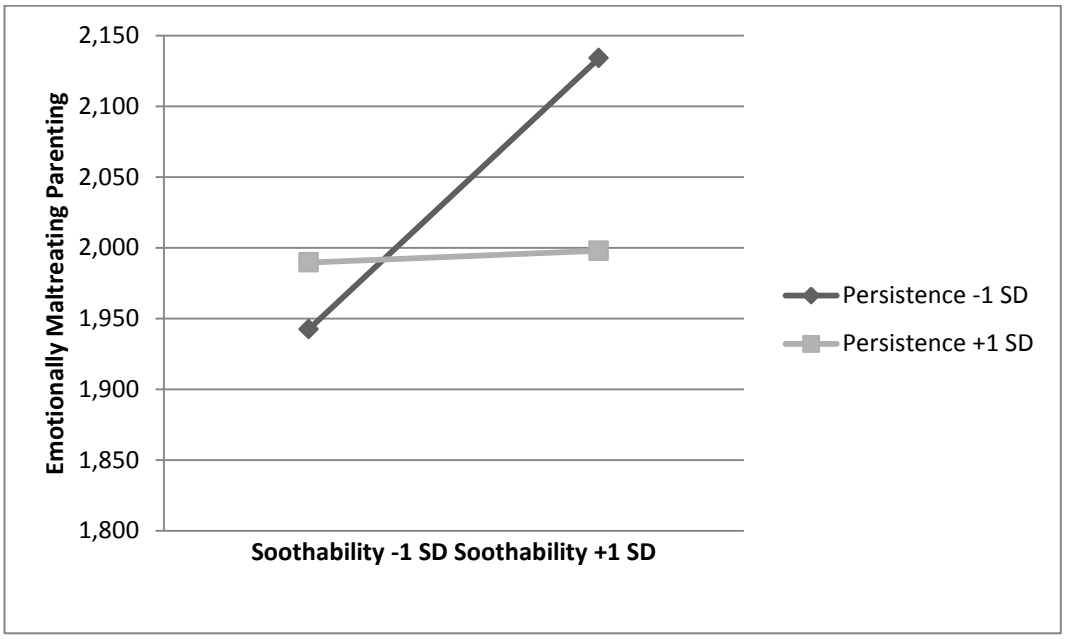

Figure 23 Interaction graph of child's soothability and persistence in predicting emotionally maltreating parenting.

CHAPTER 5

DISCUSSION

The main purpose of the current study was to examine the relationship between maternal temperamental characteristics (negative affect, extraversion, effortful control, orienting sensitivity) and parenting styles (authoritative, authoritarian, over-protective, permissive, emotionally maltreating) with the moderating role of the child temperamental characteristics (approach, perceptual sensitivity, soothability, persistence, reactivity) in the scope of Goodness of Fit Theory. Additionally, the influences of demographic variables on parenting styles and correlations among all the variables were investigated. There are a number of studies examining the relationships between parental characteristics especially focusing on maternal personality and child characteristics (e.g. temperament). Some of them focus on the goodness of fit theory in predicting quality of mother-infant dyadic interaction (see introduction chapter). Moreover, there is a study investigating the interactions between child and parent temperament and child outcomes of externalizing, internalizing, and attention problems (Rettew, Stanger, McKee, Doyle & Hudziak 2006). Despite these studies, no accessible data was found on the association between maternal temperament and child temperament in predicting parenting styles in the scope of Goodness of Fit Theory. It is important to identify these relationships as it might help to parents, caregivers and clinicians to understand the best fit in parent-child relationship for parenting. This may guide us to work with temperament; not against it.

Therefore, in this chapter, firstly, findings of the study one reporting the factor analysis of the Adult temperament Questionnaire and findings of the main study related to influences of demographic variables on parenting styles will be explained. Afterwards, in the light of the literature, discussion of the findings from regression analyses' will be covered. Finally, contributions to literature, strengths and limitations of the study, clinical implications and suggestions for future research will be stated.

Briefly speaking, the results of the current study showed that child temperament, maternal temperament and interactions between them predicted

different parenting styles. Additionally, interactions between child temperamental characteristics also had varied influence on parenting styles.

5.1 Review of the Hypotheses

In the present study, there are four hypotheses. Firstly, after controlling demographic variables, it was expected that child temperamental characteristics would individually predict parenting styles. Secondly, in a similar way, it was expected that maternal temperamental characteristics would predict parenting styles. Thirdly, interaction between mother and child temperamental characteristics was expected to be associated with parenting. As the last and fourth hypothesis, interaction between child temperamental characteristics themselves was expected to be associated with parenting styles.

5.2 Discussion of factor analysis

After conducting exploratory factor analysis, four factors, namely negative affect, effortful control, extraversion, and orienting sensitivity, were extracted that was consistent with the original scale but 38 items did not work and they were excluded from the analysis. Specifically, 15 items from negative affect, 11 items from effortful control, 8 items from extraversion, and four items from orienting sensitivity were excluded from the analysis.

Adult temperament Questionnaire was translated into several languages (Chinese, Dutch, French, Finnish, German, Hebrew, Italian, Japanese, Portuguese, Brazilian, Spanish). Only adaptations into French (Laverdière, Diguer, Gamache & Evans, 2010) and German (Wiltink, Vogelsang & Beutel, 2006) languages were reported. Four factors with 77 items were remained for both of the languages as in the original study. However, in Turkish sample, factor structure remained the same but 77 items reduced to 39 items. The discrepant results may be due to cultural differences. That's because cultural norms and values through socialization determine the expression and functional importance of temperament in development (Chen, Yang & Fu, 2012). Specifically speaking, Turkish sample may be less sensitive to the excluded items or these items may be ambiguous for them.

Adaptation study into French was conducted with a sample of 141 undergraduate students (age range; 19-59 years) and replicated with a sample of 385

students and employees from university. They performed confirmatory factor analysis based on the subcales to adapt the scale into French and extracted four factors which were negative affect, effortful control, extraversion/surgency, orienting sensitivity. For the German version of the scale, researchers did not make factor analysis. They examined the correlations between dimensions and reliability coefficients. They also used NEO-Five Factor Inventory to validate the German version of Adult Temperament Questionnaire. They tested the impact of effortful control on the relationship between negative affect and psychological stress with two samples which were clinical sample of 213 psychosomatic patients (age range; 18-82 years) and non-clinical sample of 116 individuals (age range; 18-62 years). In other words, they compared clinical and non-clinical samples through temperamental dimensions. That is, characteristics of these samples were different than Turkish sample (age range; 17-73 years) that majority of the participants were recruited from community. Moreover, different methods were applied to adapt the scale into different languages. Therefore, excluded items may be related to these notions. It was conducted with community sample because Turkish version of the scale would be distributed to mothers from different regions, socioeconomic status, and education level in the main study.

Reliability analyses for negative affect, effortful control, extraversion/surgency and orienting sensitivity showed that Cronbach's alfa coefficients were found as .73, .65, .71 and .69, respectively. In the same order of factors but in original study of the scale (Evans & Rothbart, 2007), alfa coefficients were obtained as .81, .78, .76, .85. Additionally, for the first sample (N=141, undergraduate students) in French version of the scale, internal consistencies were found as .85, .79, .74, and .85, respectively. For the second sample (N=385, students and employees of university) in French version of the scale, internal consistencies were obtained as .82, .80, .72, and .75, respectively. In German version of the scale for the total sample, internal consistencies were found as .84, .74, .74, and .72, respectively. Regarding these values, reliability coefficients of the current study were found slightly lower than the original and other versions of the scale. However, Pallant (2003) suggested that reliability coefficients may be quiet small based on the number of items in the scale (e.g. fewer than 10 items). Moreover, DeVellis (2003) explained that if reliability coefficients are between .70 and .80, they are respectable. Yet, if these coefficients

are between .60 and .70, they are seen as acceptable. Therefore, it might be said that the literature supports the results of reliability coefficients as in this study.

5.3. Findings related to regression analyses in predicting parenting styles

5.3.1. Relations between demographic variables and parenting

As mothers' education level increased, their use of authoritarian, over-protective and emotionally maltreating parenting styles were declined. These results are in line with the literature. For instance, Fox, Platz and Bentley (1995) found that mothers who had low levels of education were less likely to exhibit positive parenting practices. Similarly, Kang and Jaswal (2006) investigated the relationship between parental education and parenting patterns. They found that mothers who had higher education were more likely to exhibit positive patterns of parenting (e.g., acceptance). They also found a significant relationship between education level and negative patterns of parenting. It indicated that mothers with low level of education had higher scores of negative patterns of parenting. In addition, higher parental education level was related to love type of raising children (Chanchalor & Sansanwal, 1998).

In addition, mother's age and perceived SES negatively predicted over-protective and emotionally maltreating parenting, respectively. In the study of Fox and colleagues (1995), the determinants of parenting practices of mothers with very young children were examined in terms of maternal age, marital status, education level, number of children living at home and family socioeconomic status. They found that mothers who were at low socioeconomic status were less likely to show positive parenting that supports the findings of the current study. In addition low socioeconomic status in ethnic minority families predicted less than optimal parenting through family stress (Emmen, Malda, Mesman, van IJzendoorn, Prevoo & Yeniad, 2013).Consistently, high socioeconomic status of mothers were likely to show higher levels of warmth (Weis & Toolis, 2008). Thus, relationships found between demographic variables and parenting styles in the current study is in line with the previous findings.

5.3.2 Findings related to predicting authoritative parenting style

First looking at child temperament and parenting relations, child's soothability and perceptual sensitivity were positively related to authoritative parenting. In the literature, there is no study to investigate the relationship between child's perceptual sensitivity and parenting styles. However this finding makes sense since children who are higly sensitive may quickly perceive the changes, read the cues or signals around them. Therefore, they may be more likely to follow parental requirements which in turn may elicit authoritative parenting.

Turning to soothability and authoritative parenting relation, if a child calms down easily which may make the mother feel competent and elicits positive parenting. This finding is also in line with previous results. For instance, it was examined the relationship between infant negativity and maternal sensitivity with the moderating role of soothability (Ghera et al., 2006). It indicates that child' negativity was positively related to maternal sensitivity, only for soothable children. In another study, emotion dysregulation (reverse of soothability) was examined. Then, negative relationship between emotion dysregulation and authoritative parenting was found. Other researchers pointed out that, if child's soothability is high, he/she is more likely to be soothed while crying or he/she may not probably cry for hours. Therefore, mother may have less difficulty to sooth her child so that her feelings of efficacy may increase (Leerkes & Crockenberg, 2002; Lipscomb et al., 2011). Then, mother may behave in a more positive way.

When looking at maternal temperament and parenting relations, as expected mother's effortful control and extraversion positively predicted authoritative parenting style based on both mother and teacher reports. If mother has high effortful control she can inhibit inappropriate or harmful behaviour towards the child, and control her impulses. Thus, she can behave in a more positive manner.

Relation found between the extraversion and parenting, also consistent with the literature, Koenig, Barry and Kochanska (2010) reported that father's high extraversion was related to more positive parenting), more nurturance (Metsapelto & Pulkkinen, 2003), lower levels of over-reactivity and more warmth (de Haan et al., 2009). When mother and child temperament interactions were tested, an interaction between child's persistence and mother's effortful control was found to be significant. For children with low levels of persistence, mothers who had high levels

of effortful control were more likely to show authoritative parenting. Child with low persistence may easily give up by an obstacle or having to wait for something. In addition, child may tend to give up in case of any impediments instead of continuing the task. Thus, persistence may be seen as a subscale of effortful control by some researchers (Rueda, 2012; Zhou, Hofer, Eisenberg, Reiser, Spinrad & Fabes, 2007). Mother with low level of effortful control may not inhibit inappropriate behaviour so that the mother might show less authoritative parenting. In this context, there occurs mismatch between child and mother temperamental characteristics. On the other hand, with the same characteristics of the child, if mother have high levels of effortful control, her temperamental characteristic may enable her to tolerate the child's challenging temperament.

Finally, when interactions between child temperamental characteristics are inspected, there was a three way interaction between soothability, approach and perceptual sensitivity. Soothability was positively associated with authoritative parenting under conditions of high approach and low sensitivity. It might be explained by the fact that child who has high approach (social or not shy), low sensitivity (less likely to be affected from negative stimuli) and high soothability (easily calms down) may be seen as an easy child compared to a child who is not easily soothed. Therefore high approach, low sensitivity, highly soothable child is more likely to elicit positive parenting. In line with this finding Kristal, (2005) suggested that less sensitive child would not catch the negative signals from anyone around her/him or environment and feel less pain so that it might be a protective factor for the child. Similarly, Kochanska and colleagues (2004) found that more joyful infants got more responsive parenting. This finding is also consistent with the result of van den Akker and colleagues (2010) because typical temperament profile (low social fear, low anger proneness, low activity level) was associated with more positive parenting. In addition, Putnam and colleagues (2002) suggested that soothable and sociable children obtained warm and responsive parenting which supports the aforementined finding.

5.3.3 Findings related to predicting authoritarian parenting style

Based on both mothers' and teachers' reports of child temperament, results of the regression analyses revealed that child's perceptual sensitivity negatively but

reactivity as expected positively predicted authoritarian parenting. It is interesting that while high perceptual sensitivity predicted authoritative parenting, low perceptual sensitivity predicted authoritarian parenting. Child with low levels of perceptual sensitivity may be less likely to read the cues coming from the mother and follow her requests which may lead to harsh parenting. Another explanation of this finding might be that less sensitive child doesn't get hurt compared to a highly sensitive child, easily. Thus, mother may not understand the child's vulnerability and the pain that the child experiences so that she may be harsh towards the child. There are no studies in the literature that investigated this relationship.

However, relationship between child's reactivity and authoritarian parenting has been shown by a number of studies. For instance, Chinese parents who had children with high levels of anger/frustration, were more likely to exhibit authoritarian parenting (Lee et al., 2012; Zhou, Eisenberg, Wang, & Reiser, 2004). Moreover, proactive and reactive aggressions as child temperamental characteristics were associated with harsh parenting (Xu, Farver & Zhang, 2009). Current findings support the previous studies.

Turning to mother's temperament and parenting relationship, negative affect was positively but effortful control was negatively associated with the authoritarian parenting. This is consistent with the expectations of the present study. As mentioned above effortful control was positively associated with authoritative parenting. Mother who has difficulty to control herself may be more likely to show harsh behaviours towards her child. On the other hand mother who is good at controlling herself is less likely to be harsh towards her child. In the literature, there is no study to investigate the relations of maternal effortful control and authoritarian parenting. Only one study reported the link between low effortful control and authoritarian parenting but in that study it was child's effortful control rather than the mother's (Lee et al., 2012). Thus, this finding of the present study fills the gap in the literature.

The association between maternal negative affect and authoritarian parenting supports the literature. For instance, while low neuroticism in mothers was related to more positive parenting (Koenig et al., 2010), high neuroticism was associated with more power assertion (e.g. more controlling, forceful style) (Clark et al., 2000), more

negative affect (Kochanska et al., 1997) and less positive affect (Kochanska et al., 2004).

Furthermore, based on the results of teacher reports of child temperament, extraversion was positively related to authoritarian parenting. This finding is also parallel with the previous studies which found a positive correlation between extraversion and power assertion (Clark et al., 2000). An explanation for this situation might be that parents with high extraversion may easily express anger tendencies (Karreman et al., 2008).

In this study, three interaction effects of maternal temperament and child temperament were found in the prediction of authoritarian parenting. Firstly, both according to mother and teacher reports of child temperament, for children with low perceptual sensitivity, variation in maternal effortful control was important. In other words, when child's perceptual sensitivity and mother's effortful control were at low level, authoritarian parenting was more likely to be displayed because of poorness of fit between these characteristics. In this case, child with low level of perceptual sensitivity may have difficulty reading mother or environmental signals, and may not detect of slight stimuli from the environment (Rothbart et al., 2001). Mother also may not control her negative arousal because of low level of effortful control. But when mothers have high levels of effortful control, she makes the relationship better.

Additionally, in teachers' reports, high value of perceptual sensitivity was also found significant. In other words, variation in maternal effortful control was not only important for less sensitive child but was also important for sensitive child although to a lesser degree. This might be interpreted by Kristal's analogy (2005). She suggested that highly sensitive children are like radios which receive all the stations so that they perceive everything around them. This may trigger a tantrum because the child may be overstimulated or overwhelmed by the stimulants (Kristal, 2005). Mother with low level of effortful control may not manage the tantrum so this situation may result in negative parenting such as authoritarian parenting.

Secondly, according to teachers' reports of child temperamental characteristics, another important and interesting interaction was between extraversion and perceptual sensitivity. In addition, this finding was parallel with the same interaction's trend for mother reports of child temperamental characteristics but not at good significance level. Mother's extraversion was positively related to

authoritarian parenting for children with low perceptual sensitivity. As Karreman and colleagues (2008) reported that highly extraverted mothers may express their negativity or negative feelings towards children sooner than less extraverted mothers. Expectations of mother may not fit the child's temperament since low perceptually sensitivity child may not detect slight environmental stimulant, especially social cues from his/her mother (Rothbart et al., 2001). Thus, the child with low perceptual sensitivity may not synchronize with his/her mother. Additionally, this finding is generally consistent with established links between mother's extraversion and child's negative emotionality (Clark et al., 2000). They asserted that regardless of easy or difficult children, extraverted mothers may have a tendency to use power tactics to elicit cooperation.

Lastly, in the prediction of authoritarian parenting interaction between maternal extraversion and child persistence was also significant. Similar to the previous discussed result, when mother is highly extraverted but children at low levels of persistent, mismatch may exist so that authoritarian parenting may happen. An explanation for this interaction might be that a child with low persistence may want her/his mother around for assistance (Kristal, 2005). In addition, highly extraverted mother may not want to care about the child whenever she/he needs. Therefore, mother may express negativity toward the child through high sociability dimension of extraversion (Ganiban et al., 2011) to deal with this situation. This finding corresponds with interaction effects found between negative emotionality and extraversion which suggests that highly extraverted mothers may show more power-assertive parenting only with children having high negative emotionality (Clark et al., 2000).

The expectation to find a relation between maternal extraversion and authoritarian parenting with the moderating role of reactivity was not met.

5.3.4 Findings related to predicting over-protective parenting style

Based on mothers' reports, results of the regression analyses revealed that child's perceptual sensitivity was positively related to overprotective parenting. Child with high perceptual sensitivity may be affected deeply from external stimuli and mother may be protective to prevent the child from more pain. High sensitivity was related to more perceived stress and more frequent symptoms of ill health

(Benham, 2006). In line with, mothers may provide more care and protection to sensitive children.

Furthermore, mother's negative affect positively but mother's extraversion and orienting sensitivity negatively predicted overprotective parenting. Mothers how have high negative affect may show unpleasant affect related to pain or distress (Evans & Rothbart, 2007). In terms of mother-child relationships, they may experience fear in case of any risky situation for the child or may worry about the child due to the threats (Lindhout et al., 2006). Therefore, they may have a tendency to protect the child from potential risks (e.g., illness). Extraverted mothers may be considered as very social individuals and they may be flexiable. They like to interact with people. Unlike fathers, mother's extraversion was related to being child-centred (Metsapelto & Pulkkinen, 2005). This finding supports the negative relationship between extraversion and over-protective because over-protective parents do not give any responsibility to the child and may see the child as vulnerable. Furthermore, mother with low orienting sensitivity may not perceive the child's needs so that she may tend to be over-protective despite absence of any need of the child. Additionally, this finding may be explained by using the relationship between openness to experience and parental restriveness. Low openness to experience was related to high parental restrictiveness (Metsapelto & Pulkkinen, 2003). Moreover, openness to experience was associated with orienting sensitivity (Evans & Rothbart, 2007). In line with, mothers who have low levels of orienting sensitivity may not be child centred and may restrict the child's behaviour through protective behaviour towards the child.

In predicting over-protective parenting, several interactions were found. In consistent with literature, maternal negative affect was positively associated with over-protective parenting at low level of approach based on mother reports with approaching significance level (p=.09). Thus, it will not be discussed but this trend may be observed in future studies.

In predicting over-protective parenting second interaction was found between maternal extraversion and child's soothability. Interaction indicated that mothers who had high extraversion were less likely to show over-protective parenting if their chid showed low levels of soothability. A possible explanation for this might be that mother may be flexible because of high extraversion so that she may not worry about

the child while she/he is crying. Another viewpoint was that mother may have difficulty reading child's signals or needs as she may lack of empathy because of high extraversion and happiness (Clark et al., 2000). However, mother with low level of extraversion may be negative and unhappy so that the child's low soothability may evoke the mother's tendency to exaggerate the problem so that mother may use over-protection as a soothing technique to quiet the child.

When looking at interactions among child temperamental characteristics, the first interaction was between persistence and soothability. While high persistent highly soothable child elicited higher levels of overprotection, high persistent but low soothable child elicited lower levels of overprotection. It is possible that when a mother provides firm control and protection, it may work and this successful soothing may evoke mother's over-protection. On the other hand, the child who is persistent but difficult to sooth may exacerbate mother's feeling of inefficacy (Leerkes & Crockenberg, 2002; Lipscomb et al., 2011) and this may lead learned helplessness so that mother may not attempt to soothe the child (Ghera et al., 2006).

Secondly, three-way interaction was found between reactivity, approach and persistence. Reactivity was positively associated with over-protective parenting under conditions of both high approach and high persistence; and low approach and low persistence. As is seen, when one moderator was low and the other one was high, this situation could be protective combination for children because reactivity didn't make a difference to mother's over-protective parenting. This finding may be explained by the viewpoint of Kristal (2005), persistent, approaching and reactive child may be accident prone, stubborn, loud and reacts easily, expresses extreme emotions. Additionally, the child may bang his/her head on the floor to express frustration and his/her reactivity may augment this behaviour. Mother may worry about this child and be eager to keep the child safe not suppressing joy of life. However, for this trend when child was not reactive mother was less likely to be over-protective. Similarly, van den Akker and colleagues' (2010) extracted expressive profile (low social fear, high anger proneness, high activity level) that was found to be associated with less positive parenting. This finding also supports that high reactivity predicted high over protective parenting as less positive parenting with children having high approach and high persistence. The same trend was observed on the other extreme points of approach and persistence and also two levels

of reactivity. The child who has low approach and low persistence may be fearful and wants mother around for help to continue on a task or to warm up new things (Kristal, 2005). This fearfulness may result in mother's worry about the child (Bryan, & Dix, 2009). Moreover, reactivity may accelerate expression of easily frustration. For this situation, mother may begin to perform the task (e.g. drawing a picture) instead of child, to prevent him/her from possible outburst or risks. In terms of reactivity dimension, this result is consistent with a study conducted by Laukkanen and colleagues (2013) which is about the positive relationship between child's negative emotionality and mother's controlling attempts. Similarly, van den Akker and colleagues' (2010) extracted fearful profile (high social fear, intermediate anger proneness and activity level) was related to less positive and more negative parenting. It also supports that high reactivity predicted high over protective parenting as less positive parenting with children having low approach and low persistence.

Another significant three-way interaction was between reactivity, approach and soothability where reactivity was positively associated with over-protective parenting under conditions of low approach and low soothability. By way of illustration, this child may begin to cry and keep that behaviour for a long time. Additionally, this child may be a little bit shy or fearful. Consistently, Bryan and Dix (2009) asserted that socially fearful child could lead mother's worry. Herein, mother may be over-protective towards the child in order not to get hurt. Laukkanen and colleagues (2013) lends support to the result through the positive relationship between child's negative emotionality and mother's controlling attempts.

Another significant three-way interaction was between reactivity, persistence and soothability. Child's reactivity was positively associated with over-protective parenting under conditions of high persistence and high soothability. When highly persistent but soothable child is also reactive this child elicits more protection from the mother than a child who is less reactive. A child who is persistent tries until he/she succeeds on the task or getting the desired outcome but at the same time when mother pays attention to him/her easily calms down. If this child is also reactive mother may prefer to respond to this child or do things for him or her knowing that soon this crisis will be over. But if a child is not reactive mother may not find herself in the position of doing things for him/her.

The last significant three-way interaction suggested that soothability was positively associated with over-protective parenting under condition of low approach and high persistence. It is difficult to explain this result but it might be that this child may be fearful about new things, stubborn but easily soothed. High soothability may trigger over-protective parenting since successful soothing technique may bring along protection (Leerkes & Crockenberg, 2002) as similar with the interaction between soothability and persistence in predicting over-protective parenting. However, when the child is unsoothable under the same conditions, mother may develop learned helplessness so she may show less over-protective parenting towards the child (Ghera et al., 2006).

5.3.5 Findings related to predicting permissive parenting style

Among the child's temperamental characteristics only persistence had a negative relation between permissive parenting. When child's persistence is low mother may be more likely to display permissive parenting. As mentioned previously, persistence may be considered as an index of effortful control (Rueda, 2012; Zhou, Hofer, Eisenberg, Reiser, Spinrad, Fabes, 2007). This relationship might be explained by the relation between effortful control and parenting. That is, mothers who have children with high effortful control are more likely to provide more supportive parenting and warmth (Bates, Shermerhorn & Petersen, 2012).

In predicting permissive parenting three two-way interactions among child temperamental characteristics were found significant. The first interaction was between soothability and perceptual sensitivity. Soothability was negatively associated with permissive parenting in children with low levels of perceptual sensitivity. It can be interpreted that child may have difficulty tuning in to emotions and reading social signals due to low perceptual sensitivity (Kristal, 2005). Starting from this point, mother may give up dealing with that challenging temperament and allow the child to do whatever he/she wants. Moreover, child with low sensitivity but high soothability may not read social signals but being soothable may be advantageous in terms of parenting under this condition and mother also behave in a more positive way than permissive parenting. This is because soothable children might be handled easily and so that mother may show maternal sensitivity and

behave in a positive way towards the child corresponding with results found with similar aspects of child temperament (Karreman et al., 2008; Kochanska et al., 2000)

The second significant finding was that soothability was negatively associated with this parenting for highly persistent children. By way of illustration, the child seems stubborn and unsoothable. For example, child wants to eat junk food but mother does not allow this behaviour. Child perseveres on her/his request and starts to cry for a long time. Then, mother might be exhausted and allow the child to eat whatever he/she wants. On the other hand, both persistent and soothable children may control their impulses or emotions and they may be handled easily when clear limits were presented to them. Thus, for this interaction mothers may prefer to set clear limits to handle with them instead of displaying permissiveness that is consistent with the Karreman et al.'s study (2008). The opposite trend was found for over-protective and permissive parenting styles. This discrepancy may be due to the difference about firm control in over-protective parenting. In other words, when child is highly soothable and persistent, mother may be over-protective to perpetuate this interaction for the benefit of the child.

The same explanation for the former one may be appropriate for the last important finding. However, highly reactive children were considered instead of highly persistent children. Since child may be loud, cries easily and expresses negative emotions at the extreme levels so that mother may not want to struggle for power or gives up to do/care about right thing for the child. Another explanation might be given about a child's tantrums, when starts it lasts for a long time because the child is unsoothable, mother may feel deficient about calming down the child (Leerkes & Crockenberg, 2002) and provides a lot of freedom to the child.

5.3.6 Findings related to predicting emotionally maltreating parenting style

Child's reactivity and approach, positively predicted emotionally maltreating parenting. However, child's perceptual sensitivity and persistence negatively predicted this parenting. If child's approach was high, this child is very social. In other words, when the child meets unfamiliar person, he/she will not be shy. This finding supports Ganiban et al.'s study (2011). They found that, at high levels of child's sociability, parent negativity increased through child's expression of anger tendencies. If a child with high reactivity may not obtain whatever she/he wants, this

child cries. Mother may ignore the child or may threaten her/his with spanking, abandoning etc. Mothers may use less emotional maltreatment towards the highly sensitive child. Higly sensitive child may use cues coming from his/her mother and may behave accordingly so mother is less likely to exhibit emotionally maltreating parenting. The negative relationship between persistence and emotionally maltreating parenting may be congruent with the notion of the positive relationship between effortful control and supportive parenting (Bates, Shermerhorn & Petersen, 2012). Child with higher level of self-regulation is more likely to elicit supportive parenting. Similarly, persistent child may continue to perform her/his homework until he/she finish through self-regulation. But, a child with lower level of persistence gives up easily. In his case, mother may use threats (e.g., not allowing the child to play outside) if the child gives up to do homework.

In terms of maternal temperament, as expected mother's negative affect positively predicted emotionally maltreating parenting. This finding is in line with the literature in terms of the relationship between high neuroticism and negative, less affectively positive (Belsky et al., 1995; Clark et al., 2000), less sensitive, and less cognitively stimulating parenting (Belsky et al., 1995). To illustrate, mother with high levels of negative affect may be frustrated because of interruption of behaviour. In other words, she may abuse or degrade the child because of the frustration she experiences.

When looking at interactions between maternal temperament and child temperament, effortful control was negatively associated with emotionally maltreating parenting for higher levels of reactivity. This result may be explained by the fact that when child expresses reactivity at high levels, mother may not inhibit her inappropriate behaviour because of her low levels of effortful control so that she may display negative parenting practices such as threatening. In parallel with this finding, Lipscomb and colleagues (2011) found that child's negative emotionality was related to high parental over-reactivity. Hemphill and Sanson (2001) supported that reactive children with observed behavioural problems obtained least warmth and the most punishment from parents compared with non-reactive children independent of having behavioural problems. Moreover, Paulussen-Hoogeboom and colleagues (2007) suggested that child's negative emotionality was associated with less parental

warmth more likely in lower-socioeconomic-status than in upper-socioeconomic-status samples.

Another important finding was that effortful control was negatively related to emotionally maltreating parenting when children had low levels of approach. Child with low approach may need time to warm up to a new toy (Kristal, 2005), but mother with low effortful control may not bear for the child to warm up. For instance, mother may expect from the child to play as soon as she presents the toy to the child. Then, unrealistic expectations of mothers may not fit the child's temperament and so that this situation may probably be result in emotional maltreatment (Iwaniec, Larkin & McSherry, 2007). Thus, poorness of fit will probably occur in this relationship. In addition, mother may exhibit verbal hostility or hostile degradation towards the child because the child may be incapable of performing the behaviour which mother expects.

In this study one more finding was that negative affect was positively correlated with emotionally maltreating parenting at low levels of persistence. This result may suggests that when mother's negative affect was high and child has low persistence, high levels of emotionally maltreating parenting were observed because of the mismatch between mother and child temperamental characteristics. Child's low tolerance of frustration may exacerbate the mother's negative reactions (e.g. frustration) which in turn augmenting frustration in the child. This finding was not supported by Karreman and colleagues (2008). In constrast to the result of current study, they found that neuroticism in fathers was positively correlated with positive control (sensitivity, limit setting, provision of structure) under condition of low level of effortful control. According to the study, more neurotic fathers may set limits and provides structure to control the child with low levels of effortful control. However, Kochanska, Clark and Goldman (1997), lending support to the finding of the current study, found that mothers who had high negative affect were more likely to display more power assertive discipline (aggregation of physical and verbal) and less responsiveness/warmth.

Another finding which is extraversion was positively associated with emotionally maltreating parenting at low levels of reactivity. Mothers may express negative emotions easily due to high levels of extraversion (Karreman et al., 2008) even if child has low level of reactivity. But, when both mother's extraversion and

child's reactivity was at low levels, emotionally maltreating parenting are less likely to be showed because of low levels of extraversion.

In terms of the interactions between child temperamental characteristics, the last interaction was between soothability and persistence in predicting this type of parenting. Soothability was positively associated with emotionally maltreating parenting with low levels of persistence. This finding seems a bit contradictory at first. Hemphill and Sanson (2000) found that distress-related temperament (e.g. irritability, difficultness) characteristics were more likely to be associated with general unresponsiveness and poor parenting. Despite the discrepancy related to the literature, this dyadic relationship may be illustrated by an example. The child may be considered as giving up easily about doing homework. Mother may have higher expectations from the child, but child may not fulfill expectations because of low level of persistence. Mother may use threats to prevent possible outbursts because of the child's low tolerance of patience or she may ignore the child. In case of any signs of outbursts, the child may be pacified with an inappropriate technique. As a result, it may be said that mother may abuse or neglect the child due to mismatch between child and mother characteristics.

5.4 Contribution to literature

As mentioned before (see introduction chapter), there are some studies investigating the relationship between child temperament and parenting styles, the relationship between maternal personality and parenting styles, and the impact of the interaction between them on parenting styles. However, there are no studies examining the impact of the interaction between child temperament and maternal temperament on parenting styles within Goodness of fit theory. Similarly, there are no studies that examined the impact of the interactions between child temperamental characteristics on parenting styles. Besides in the present study authoritative, authoritarian, permissive and over-protective parenting styles were taken as outcome variables. However, emotional maltreatment was previously investigated but it was not taken as an outcome variable while examining aforementioned impacts of the interactions. Therefore, this study contributes to the literature in the scope of mother-child dyadic interaction. To sum up, this study differed from other studies in terms of

including several temperamental dimensions and their interactions. In other words, this study is very comprehensive.

5.5 Strengths and Limitations of the study

Before discussing limitations of the study, some strengths of the study should be reported. Firstly, in the adaptation study of Adult Temperament Questionnaire into Turkish, the sample not only included university students but also contained community sample to adapt the Adult Temperament Questionnaire (Evans & Rothbart, 2007) into Turkish. This is important for the benefit of generalizability of the scale. Secondly, in the assessment of child temperament multi informants - child's mother and teacher -responded to questionnaires. In addition, it may be said that the sample of the study was probably representative of children attending to preschools in Ankara because several child care centres were selected from the different regions of Ankara. Moreover, to obtain higher quality data from the teachers, they were asked to complete at most 5 child temperament questionnaires.

No study exists without the limitations. First, although child's temperament was assessed by two informants, maternal temperament and parenting styles were assessed through self-reports of mothers. Parenting and child temperament can be measured by observational methods. Secondly, several hierarchical regression analyses were conducted separately. Therefore, type 1 error may have increased due to these regression analyses. Most important limitation of the study is that this study was cross sectional, and relational, thus we can't infer causality.

5.6 Implications of the study

As previously reported (see introduction chapter), temperamental characteristics are not evaluated as good or bad independent from the context (Kristal, 2005; Thomas et al., 1968) and it is essential to work with temperament; not against it, in different contexts such as family, school and health settings. In the family context, since parenting styles were taken as outcome variables, findings may be used to guide the parents on how they should approach to their children. For example, interaction between child's persistence and mother's effortful control predicted authoritative parenting. That is, for children with low levels of persistence, if mother's effortful control is high, this may result in optimal relationship. When

looking at interactions between child temperamental characteristics, for children with high approach, low perceptual sensitivity and high soothability, mothers are more likely to show authoritative parenting. By the help of these findings, mothers may be informed about the general child and adult characteristics. Then, they may be oriented to focus on their and children' specific temperamental characteristics so that mother's awareness may be increased about the relationship with their children.

Futhermore, Kristal (2005) proposed that temperament may guide the people in health care and educational settings. In health care settings, temperament may guide professionals in several clinical settings providing a basis to evaluate, understand and explain the individual's behaviour. For instance, reasons of child behaviour problems may be easily evaluated through temperamental characteristics and it may provide a key to resolve these problems. Moreover, it guides to decide whether a problem is related to temperamental difficulty or beyond temperament. In other words, temperament may not provide any explanation for all behaviour or difficulties. However, it may give support for interventions and serve to prevent psychological misdiagnosis. Regardless of the findings of this study, in educational settings, administrators and teachers may benefit from temperament as considering individual differences so that they may provide a learning environment enhancing strengths of children and to handle with their weaknesses.

5.7 Suggestions for future research

This study may be replicated with a larger sample and observational methods or mixed methods. Since mother or teacher reports may be biased about overestimating or underestimating temperamental characteristics of children, observational tasks or combining this method with scales might be more objective. In larger sample size may give more accurate information about the interaction between temperament and environment. In addition, since the relationship between temperament and environment or context as reported in introduction chapter, longitudinal design might give opportunity to see the temperament profiles as well as parenting styles and quality of dyadic interaction in the long run.

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APPENDICES

APPENDIX A

Items Excluded From Factor Analysis

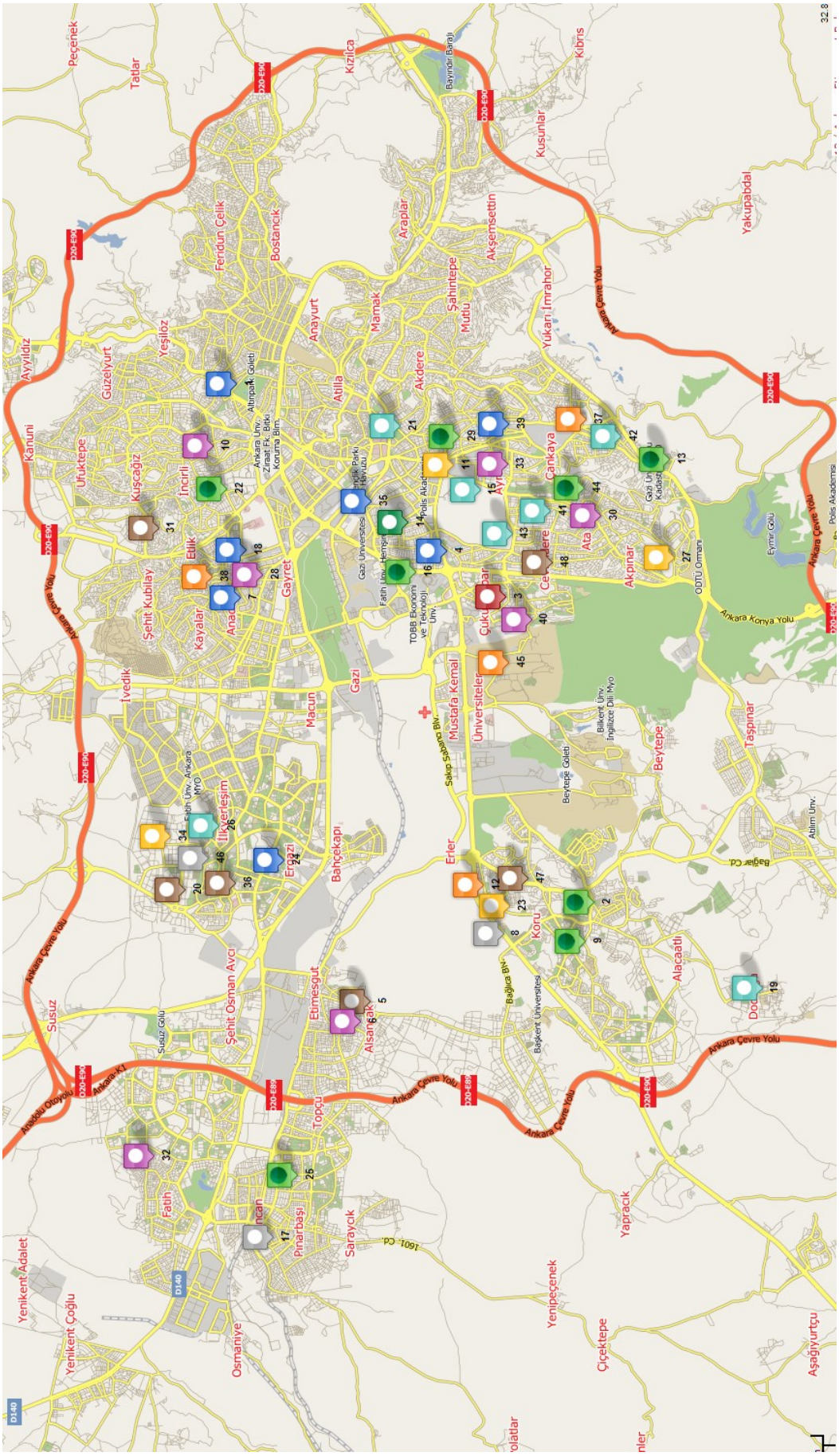
Gürültülü sesleri çok sinir bozucu bulurum. (NA)
İki farklı görev arasında geçiş yapmak benim için çoğu kez zordur. (EC)
Yavaş ilerleyen bir sırada beklemek zorunda kaldığımda nadiren sinirlenirim.(NA)
Yüksek sesli müzikle birlikte lazer ışıklı bir gösteride bulunmaktan hoşlanmam (uyaran çokluğu nedeniyle). (E/S)
Arkadaşlar ya da akrabalarla vedalaştıktan sonra nadiren kendimi üzgün hissederim. (NA)
Kendimi enerji dolu hissetsem bile, gerektiğinde genellikle sorun yaşamadan sakince oturabilirim. (EC)
Yapmayı tercih etmesem bile bir işi yapmaya devam edebilirim. (EC)
Normalde hoşlandığım olay ve aktivitelerden bazen zevk alamıyorum. (E/S)
Acıklı bir film izlediğimde nadiren üzülürüm. (NA)
Müzik dinlerken, müziğin sesini genellikle diğer insanlardan daha fazla açmayı severim. (E/S)
Canım istemese bile kendimi güç bir işi denemeye zorlayabilirim. (EC)
Dikkatimi yoğunlaştırmaya çalıştığım zaman, dikkatim kolayca dağılır. (EC)
Çok fazla gürültülü, parlak ve yanıp sönen ışıkları olan hızlı ve zor bir video oyunu oynamaktan muhtemelen zevk alırım. (E/S)
Aşırı parlak ışıklardan çoğu zaman rahatsız olurum. (NA)
Kötü bir olay duyduğumda nadiren üzülürüm. (NA)
Genellikle sabırlı bir insanımdır. (NA)
Gözlerim kapalı dinlendiğimde, gözümün önüne görüntüler gelir. (OS)
Stresliyken dikkatimi toplamak benim için çok zordur. (EC)
Zihnim bazen birbiriyle pek bağlı olmayan çok farklı düşünceler ve görüntüler ile doludur. (OS)
Çok canlı renkler bazen beni rahatsız eder. (NA)
Engellenmiş ya da öfkeli hissetmem için çok büyük bir şey olmasına gerek yoktur. (NA)

Mutlu olmam için çok şey gerekmez. (E/S)
Yakında gerçekleşecek bir olay hakkında mutlu ya da heyecanlı olduğum zaman, dikkatimi toplama- yı gerektiren işlere odaklanmakta zorlanırım. (EC)
Yiyecek ve içeceklere olan iştahımı dizginlemekte sık sık problem yaşarım. (EC)
Yanıp sönen renkli parlak ışıklar beni rahatsız eder. (NA)
Kendimi sık sık üzgün hissederim. (NA)
İşler benim için düzgün gitmediğinde genellikle öfkelenmeden sakin kalırım. (NA)
Benim için gürültülü müzik hoş bir şey değildir. (NA)
Bir şey hakkında heyecanlandığım zaman, o şeyin olası sonuçlarını göz önünde bulundurmadan direk onun üzerine atlamaya karşı koymak benim için genellikle zordur. (EC)
Bazen, uyanıkken yaşadığım herhangi bir şeye benzemeyen, canlı ve detaylı sahneler içeren rüyalar görürüm. (OS)
Bir mağazada çekici bir ürün gördüğümde, onu almadan durabilmek benim için genellikle çok zordur. (EC)
Çok sayıda parlak ve renkli yanıp sönen ışıkları olan bir lazer gösterisini izlemekten hoşlanırım. (E/S)
Bir film izlediğim zaman, genellikle karakterlerin duygu durumunu yansıtmak için oluşturulan ortamın nasıl kullanıldığını fark etmem. (OS)
Yalnız olduğumu zannederken yanımda aniden birinin olduğunu farketmek beni korkutmaz (NA)
Bir durumun nasıl sonuçlanacağından korktuğum zaman, genellikle onunla uğraşmaktan kaçınırım. (EC)
Durup düşünmeden bir şeyler anlatabileceğim muhabbetlerden özellikle hoşlanırım. (E/S)
Yeni bir şey denediğim zaman, başarısız olma ihtimalinden nadiren endişelenirim. (NA)
Avazım çıktığı kadar yüksek sesle bağırma hissinden hoşlanmam (konser, maç vs. olduğu gibi). (E/S)

Note: Abbreviations: NA; Negative Affect, E/S; Extaversion/Surgency, OS; Orientinig Sensitivity, EC; Effortful Control

APPENDIX B

LOCATION OF CHILD CARE CENTER



APPENDIX C

DEMOGRAFİK BİLGİ FORMU

Yaşınız: _____

Eğitim seviyeniz:

☐ Okuma-yazma bilmiyor

☐ Okuma-yazma biliyor

☐ İlkokul terk

☐ İlkokul

☐ Ortaokul

☐ Lise

☐ İki yıllık yüksek okul

☐ Üniversite

☐ Yüksek Lisans

☐ Doktora

Kendinizi sosyo-ekonomik düzey açısından nerede gördüğünüzü değerlendiriniz:

Alt	Ortanın altı	Orta	Ortanın üstü	Üst
☐	☐	☐	☐	☐

Sahip olduğunuz çocuk sayısı: _____

Çocuğun;

☐ Anne-babası birlikte yaşıyor

☐ Anne-babası boşanmış/ayrı yaşıyor, çocuk anneyle yaşıyor

☐ Anne-babası boşanmış/ayrı yaşıyor, anne tekrar evlenmiş, çocuk anneyle yaşıyor

Çocuk;

☐ Koruyucu aile yanında yaşıyor

☐ Evlat edinilmiş

Diğer (lütfen belirtiniz) _____

Anketin uygulandığı çocuğun;

Doğum tarihi (gün/ay/yıl olarak): …./…./….

Yaşı (yıl/ay): …. /….

Doğum sırası (kaçıncı çocuğunuz?): _____

Çocuğun herhangi bir okulöncesi kuruma başlama tarihi (gün/ay/yıl olarak):

…./…./….

Çocuğun herhangi bir okulöncesi kuruma başladığı zamanki yaşı (ay/yıl olarak):

…./….

Bu çocuğunuza isteyerek mi sahip oldunuz?

☐ Evet ☐ Hayır

APPENDIX D

ÇOCUKLAR İÇİN MİZAÇ ÖLÇEĞİ

Aşağıdaki sorular çocukların mizacı ile ilgilidir. **Burada mizaç derken** pek değişmeyen, sanki doğduğundan beri aynı kalmış gibi olan huylarından söz edilmektedir.

Sizden sorulara, çocuğunuzun mizaç özelliklerini değerlendirerek cevap vermeniz istenmektedir.

eğer ifade çocuğunuzun mizaç özellikleri için;	**sayı daire içine alın**
hiçbir zaman böyle değilse	1
genellikle böyle değilse	2
bazen böyle bazen değilse	3
genellikle böyleyse	4
her zaman böyleyse	5

Bazı maddelere cevap vermeniz zor olabilir, önemli olan her maddeye cevap vermenizdir. Doğru ya da yanlış yanıt bulunmamaktadır, bir yanıtın diğerinden daha iyi olduğunu düşünmeyiniz.

	Hiçbir Zaman Böyle Değildir	**Genellikle Böyle Değildir**	**Bazen Böyledir Bazen Değildir**	**Genellikle böyledir**	**Her Zaman Böyledir**
1. Tanımadığı kişilere karşı utangaçtır.	1	2	3	4	5
2. Resim yapmak veya dağıttıklarını toplamak gibi bir işin üstünde, uzun zaman alsa bile, bitirene kadar çalışır.	1	2	3	4	5
3. Beklenmedik bir durum nedeniyle üzüldüğünde kolayca sakinleşir.	1	2	3	4	5
4. Anne-babasının dış görünüşündeki değişiklikler hakkında yorum yapmaz.	1	2	3	4	5
5. Bir işle uğraşırken (yap-boz, resim yapmak vb.) üzülür veya canı sıkılırsa yaptığı şeyi yere atar, ağlar, kapıları çarpar.	1	2	3	4	5
6. Alışveriş yaparken, oyuncak ya da şeker istediğinde, onun yerine başka bir şeyi kolayca kabul eder.	1	2	3	4	5
7. Ağlarken ona konuşulursa, ağlamayı keser.	1	2	3	4	5
8. Oturma odasındaki birkaç yeni eşyanın hemen farkına varır.	1	2	3	4	5

	Hiçbir Zaman Böyle Değildir	Genellikle Böyle Değildir	Bazen Böyledir Bazen Değildir	Genellikle böyledir	Her Zaman Böyledir
9. Bir faaliyete başladığında bununla uzun zaman uğraşır.	1	2	3	4	5
10. Parkta ya da misafirlikteyken tanımadığı çocukların yanına gider ve onların oyununa katılır.	1	2	3	4	5
11. Yeni tanıştığı bir yetişkinin yanında ilkin utangaç davransa da, yarım saat gibi, kısa bir süre içerisinde ısınır.	1	2	3	4	5
12. Bir şeye kızgınsa bunu geçiştirmek zor olur.	1	2	3	4	5
13. Ailece yolculuğa veya gece yatısına bir yere gittiğimizde, yeni yere hemencecik alışır.	1	2	3	4	5
14. Beraber alışveriş yaparken istediğini almazsam (örneğin: şeker, oyuncak gibi), ağlar ve bağırır.	1	2	3	4	5
15. Üzüntülü ise onu rahatlatmak zordur.	1	2	3	4	5
16. Anne-babası dış görünüşünü değiştirdiğinde yorum yapar.	1	2	3	4	5
17. Bir oyuncak ya da oyun zor geldiği zaman ilgisini hemen kaybeder.	1	2	3	4	5
18. Sevdiği bir oyun ya da oyuncakla istediğini yapamazsa, buna çok üzülür.	1	2	3	4	5
19. Anne-babasının yüz ifadelerini fark etmiyor gibidir.	1	2	3	4	5
20. Bir şeyi iyice öğreninceye kadar (yap-boz, yeni şarkı veya yeni bir kelime gibi) o faaliyetin üzerinde çalışır.	1	2	3	4	5
21. Nesnelerin üzerindeki en ufacık lekeleri bile fark eder.	1	2	3	4	5
22. Bir şeyle oynamaya başladığında, bırakmasını istersem çok zorluk çıkarır.	1	2	3	4	5
23. Kitap okumak, kitaplara bakmak veya el işi yapmak gibi faaliyetlerle uzun zaman uğraşır.	1	2	3	4	5
24. İlk kez tanıştığı çocuklara karşı utangaçtır.	1	2	3	4	5
25. Ne zaman ağlamaya başlasa dikkatini kolayca başka şeylere yönlendirebilir.	1	2	3	4	5
26. Tamamlamadığı bir işi ya da oyunu bırakmayı istemez.	1	2	3	4	5
27. Hayal kırıklığının üstesinden kolayca gelebilir.	1	2	3	4	5
28. Parfüm, sigara, yemek kokusu gibi kokuları fark etmez.	1	2	3	4	5
29. Dokunduğu nesnelerin pürüzlü ya da pürüzsüz olmasını fark eder.	1	2	3	4	5
30. Yeni bir işe geçmeden önce başlamış olduğu işi tamamlamayı ister.	1	2	3	4	5
31. Anne-babası yeni bir kıyafet giydiğinde bunu fark eder.	1	2	3	4	5
32. Kısık sesleri bile fark eder.	1	2	3	4	5
33. İlk kez evimize gelen birine yaklaşır ve dostça davranır.	1	2	3	4	5

	Hiçbir Zaman Böyle Değildir	Genellikle Böyle Değildir	Bazen Böyledir Bazen Değildir	Genellikle böyledir	Her Zaman Böyledir
34. İnsanların burun ya da ağızlarının büyüklüğü gibi yüz hatlarına ilişkin yorum yapmaz.	1	2	3	4	5
35. Saçının taranması gibi bir işe karşı çıkarsa, buna direnmeyi aylarca sürdürür.	1	2	3	4	5
36. Birinin alışılmadık bir ses tonu varsa, bunun hakkında yorum yapar.	1	2	3	4	5
37. Bir kıyafeti giymek istemediğinde bağırır ya da ağlar.	1	2	3	4	5
38. Yiyeceklerin farklı dokularına (örn; katı gıdalara geçerken zorlanma, tüylü şeylere tepki verme, pütürlü gıdaları reddetme,) tepki verir.	1	2	3	4	5
39. Annesinin olmadığı yeni bir yere (yuva, komşu ya da arkadaş evi gibi) ilk kez bırakıldığı zaman üzülür.	1	2	3	4	5
40. Ne zaman biri onunla konuşsa ya da onu kucağına alsa huysuzlanmayı keser.	1	2	3	4	5

APPENDIX E

YETİŞKİN MİZAÇ ÖLÇEĞİ

Bu ankette, bireylerin kendilerini tanımlamak için kullanabilecekleri bir dizi ifade göreceksiniz. Burada doğru ya da yanlış cevap bulunmamaktadır. Her birey diğerlerinden farklıdır, ve bizim öğrenmeye çalıştığımız şey de bu farklılıklardır. Lütfen her ifadeyi dikkatlice okuyun ve bu ifadelerin sizi ne kadar doğru tanımladığıyla ilgili en doğru seçeneği daire içine alın.

eğer ifade sizin için:	**sayıyı daire içine alın:**
son derece yanlış	1
oldukça yanlış	2
biraz yanlış	3
ne doğru ne yanlış	4
biraz doğru	5
oldukça doğru	6
son derece doğru	7

Eğer ifadelerden herhangi biri size uygun değilse (örneğin, cümle araç kullanmayı içeriyor ve siz araç kullanmıyorsanız) o zaman X (söz konusu değil) seçeneğini daire içine alınız. **Her bir** maddeyi cevapladığınızdan emin olunuz.

	Son derece yanlış	Oldukça yanlış	Biraz yanlış	Ne doğru ne yanlış	Biraz doğru	Oldukça doğru	Son derece doğru	Söz konusu değil
1. Kolayca korkuya kapılırım.	1	2	3	4	5	6	7	X
2. Randevularıma sıklıkla geç kalırım.	1	2	3	4	5	6	7	X
3. Küçük hadiseler benim son derece mutlu olmama sebep olur.	1	2	3	4	5	6	7	X
4. Çoğu zaman sonuçlandıramadığım planlar yaparım.	1	2	3	4	5	6	7	X
5. Zar zor farkedilebilen görsel detaylar nadiren dikkatimi çeker.	1	2	3	4	5	6	7	X
6. Aşırı yüksek bir yerden aşağıya bakmak beni tedirgin hissettirir.	1	2	3	4	5	6	7	X
7. Müzik dinlerken duygusal tınıların (tonların) sıklıkla farkındayımdır.	1	2	3	4	5	6	7	X
8. İnsanlarla etkileşime girmeyi gerektiren bir işten hoşlanmam.	1	2	3	4	5	6	7	X
9. Almak istediğim ürünün mağazanın stoğunda kalmamasını çok sinir bozucu buluyorum.	1	2	3	4	5	6	7	X
10. Tablo ve resimlerin duygusal yönlerini farketmeye meyilliyimdir.	1	2	3	4	5	6	7	X
11. Genelde çok konuşmayı severim.	1	2	3	4	5	6	7	X
12. Etrafımdaki kuş seslerinin sıklıkla farkındayımdır.	1	2	3	4	5	6	7	X
13. Asansör gibi kapalı ve küçük yerlerde kendimi rahatsız hissederim.	1	2	3	4	5	6	7	X
14. Sanırım bazen olayları sezgisel olarak anlıyorum.	1	2	3	4	5	6	7	X
15. Bazen küçük olaylar çok üzülmeme neden olur.	1	2	3	4	5	6	7	X
16. İçinde bulunduğum durum uygun değilse, kahkahamı tutmak benim için kolaydır.	1	2	3	4	5	6	7	X
17. Hemen hemen her gün, kısa da olsa çok mutlu olduğum anlar vardır.	1	2	3	4	5	6	7	X

	Son derece yanlış	Oldukça yanlış	Biraz yanlış	Ne doğru ne yanlış	Biraz doğru	Oldukça doğru	Son derece doğru	Söz konusu değil
18. Ne zaman oturmak ve bir şeyler için (örn:bir bekleme odasında) beklemek zorunda kalsam, huzursuz olurum.	1	2	3	4	5	6	7	X
19. İnsanların göz rengini nadiren fark ederim.	1	2	3	4	5	6	7	X
20. Sözüm kesildiğinde ya da dikkatim dağıldığında, dikkatimi önceden yaptığım şeye genellikle kolayca geri çevirebilirim.	1	2	3	4	5	6	7	X
21. Cızırtılı sesleri çok sinir bozucu bulurum.	1	2	3	4	5	6	7	X
22. Çok kişiyi kapsayan muhabbetleri severim.	1	2	3	4	5	6	7	X
23. Heyecanlı olduğum ve fikrimi ifade etmek istediğim zaman bile, sıram gelmeden konuşmamaya kolaylıkla dayanabilirim.	1	2	3	4	5	6	7	X
24. Muhtemelen hızlı ve çılgın bir festival yürüyüşünden hoşlanmam.	1	2	3	4	5	6	7	X
25. Bazen bir saatten daha uzun süre üzgün hissettiğim olur.	1	2	3	4	5	6	7	X
26. Kalabalık insan gruplarıyla sosyalleşmekten nadiren hoşlanırım.	1	2	3	4	5	6	7	X
27. Bir şeyin yapılması gerektiğini düşünüyorsam, genellikle o şeyin üzerinde çalışmak için hemen harekete geçerim.	1	2	3	4	5	6	7	X
28. Bazen, görünürde bir sebep yokken panik ya da korku hissine kapılırım.	1	2	3	4	5	6	7	X
29. Hafif kokuların ve parfümlerin sıklıkla farkına varırım.	1	2	3	4	5	6	7	X
30. Genellikle yapılacak şeylerin zamanı gelmeden ben onları yapmış olurum (örneğin, faturaları ödemek, ödevi bitirmek gibi).	1	2	3	4	5	6	7	X
31. Bir odanın renk ve aydınlığının benim ruh halimi nasıl etkileyeceğinin çoğu kez farkındayımdır.	1	2	3	4	5	6	7	X
32. Gürültülü sesler bazen beni korkutur.	1	2	3	4	5	6	7	X

	Son derece yanlış	Oldukça yanlış	Biraz yanlış	Ne doğru ne yanlış	Biraz doğru	Oldukça doğru	Son derece doğru	Söz konusu değil
33. Kötü bir olaydan haberdar olduğumda, anında kendimi üzgün hissederim.	1	2	3	4	5	6	7	X
34. Boş zamanlarımda genellikle insanlarla birlikte olmaktan hoşlanırım.	1	2	3	4	5	6	7	X
35. Hava durumunun, ruh halimi nasıl etkilediğinin çoğu kez farkındayımdır.	1	2	3	4	5	6	7	X
36. Beni gerçekten mutlu hissettirmek için çok şey gerekir.	1	2	3	4	5	6	7	X
37. Tuttuğum şeylerin dokusunun nadiren farkındayımdır.	1	2	3	4	5	6	7	X
38. Yaratıcı düşünceler bazen ben çaba göstermeden, bana kendiliğinden gelir.	1	2	3	4	5	6	7	X
39. Uygunsuz olabilecek şakacı/eğlenceli davranışlarımı engellemek benim için kolaydır.	1	2	3	4	5	6	7	X

APPENDIX F

EBEVEYN TUTUM ÖLÇEĞİ

Bu soru formu ebeveynlerin çocuklarını yetiştirirken gösterdikleri tutumlar hakkındadır. Sizden soru formundaki her bir soruyu değerlendirerek cevap vermeniz istenmektedir. Her maddede belirtilen ifadenin sizin için ne kadar uygun olduğunu düşünerek cevap veriniz.

Eğer ifade sizin için;	**sayıyı daire içine alınız**
hiçbir zaman geçerli değilse	1
çok seyrek olarak geçerliyse	2
bazen geçerliyse	3
çoğu zaman geçerliyse	4
her zaman geçerliyse	5

Bazı maddelere cevap vermeniz zor olabilir, bizim için önemli olan her maddeye cevap vermenizdir. Doğru ya da yanlış yanıt bulunmamaktadır, bir yanıtın diğerinden daha iyi olduğunu düşünmeyiniz

	Hiçbir Zaman	**Çok Seyrek**	**Bazen**	**Çoğu Zaman**	**Her Zaman**
1. Ben bir başkasıyla konuşurken çocuğumun araya girmesine izin veririm.	1	2	3	4	5
2. Çocuğumun kendine özgü bir bakış açısı olduğunu kabul ederim.	1	2	3	4	5
3. Çocuğumla aynı fikirde olmadığımız zaman, benim fikirlerimi kabul etmesi için onu zorlarım.	1	2	3	4	5
4. Çocuğumu, hayatın ufak tefek güçlüklerinden korurum.	1	2	3	4	5
5. Çocuğuma sanki orada yokmuş gibi davranırım.	1	2	3	4	5

	Hiçbir Zaman	Çok Seyrek	Bazen	Çoğu Zaman	Her Zaman
6. Çocuğuma, kurallara neden uyması gerektiğini açıklarım.	1	2	3	4	5
7. Çocuğuma yaptığı şeyin önemli olduğunu hissettiririm.	1	2	3	4	5
8. Çocuğum yanlış hareket ettiği zaman onu artık sevmediğimi söylerim.	1	2	3	4	5
9. Çocuğum söz dinlemediğinde ona vururum.	1	2	3	4	5
10. Çocuğumun iyi ve kötü davranışı karşısında neler hissettiğimi ona açıklarım.	1	2	3	4	5
11. Çocuğumu yola getirmek için onu azarlarım.	1	2	3	4	5
12. Çocuğuma karşı koruyucu davranırım.	1	2	3	4	5
13. Çocuğumun istediği her şeyi yapmasına izin veririm.	1	2	3	4	5
14. Çocuğumun kişisel görüşlerine saygı gösteririm.	1	2	3	4	5
15. Çocuğumu dövmek, öldürmek veya terk etmekle tehdit ederim.	1	2	3	4	5
16. Arkadaşları çocuğuma sataştığı zaman onu korurum.	1	2	3	4	5
17. Çocuğumun başkaları konuşurken araya girmesine izin veririm.	1	2	3	4	5
18. Çocuğumun cinsel konularda sorduğu soruları anlayacağı bir dilde doğru olarak cevaplarım.	1	2	3	4	5
19. Çocuğum yanlış bir şekilde davrandığında ona bağırırım.	1	2	3	4	5
20. Ebeveynlik konusunda bir yanlış yaptığımda çocuğumdan özür dilerim.	1	2	3	4	5
21. Çocuğum yanlış davrandığında onu utandırmaya veya suçlu hissettirmeye çalışırım.	1	2	3	4	5
22. Çocuğumun hastalanmasından endişe ederim.	1	2	3	4	5
23. Çocuğumun duygularını serbestçe ifade etmesine izin veririm.	1	2	3	4	5

	Hiçbir Zaman	Çok Seyrek	Bazen	Çoğu Zaman	Her Zaman
24. Çocuğuma kızdığımda çocuğumu cezalandırırım.	1	2	3	4	5
25. Çocuğum yanlış davrandığında, bunun neden yanlış olduğunu ona açıklarım.	1	2	3	4	5
26. Çocuğumun istediği saatte uyumasına izin veririm.	1	2	3	4	5
27. Fiziksel cezayı, çocuğumu disipline sokmanın bir yolu olarak kullanırım.	1	2	3	4	5
28. Çocuğumun hayal kırıklığına uğramaması için elimden geleni yaparım.	1	2	3	4	5
29. Çocuğumu olumsuz bir şekilde başka çocuklarla kıyaslarım.	1	2	3	4	5
30. Çocuğumun yanlış davranışını görmezden gelirim.	1	2	3	4	5
31. Çocuğumun şımarıklıklarına göz yumarım.	1	2	3	4	5
32. Çocuğuma karşı çabuk öfkelenirim.	1	2	3	4	5
33. Çocuğumla her konuyu konuşabilirim.	1	2	3	4	5
34. Çocuğum bana birşey anlatırken sözünü kesmeden dinlerim.	1	2	3	4	5
35. Çocuğuma bir şey alırken onun da fikrini alırım.	1	2	3	4	5
36. Çocuğuma karşı sabırsızım.	1	2	3	4	5
37. Çocuğumu şımartırım.	1	2	3	4	5
38. En ufak bir hatasında, çocuğumu cezalandırırım.	1	2	3	4	5
39. Çocuğumun büyüdükçe yeni şeyler denemeyi göze alması gerektiğine inanırım.	1	2	3	4	5
40. Çocuğum için hemen hemen bütün eğlencelerimden fedakarlık ederim.	1	2	3	4	5
41. Çocuğum yanlış bir şey yaptığında artık annen olmayacağım derim.	1	2	3	4	5
42. Çocuğuma bana sormaksızın şahsi eşyalarımdan herhangi birini alıp kullanmasına izin veririm.	1	2	3	4	5

	Hiçbir Zaman	Çok Seyrek	Bazen	Çoğu Zaman	Her Zaman
43. Evimizde hangi televizyon programının izleneceği, çocuğumun isteğine göre belirlenir.	1	2	3	4	5
44. Çocuğumu yapabileceğinden fazlasını yapması için zorlarım.	1	2	3	4	5
45. Çocuğumu, onun cesaretini kırabilecek zor işlerden uzak tutarım.	1	2	3	4	5
46. Çocuğumu hiç doğurmamış olmayı dilerim.	1	2	3	4	5
47. Çocuğumu bir şeyleri kendi başına yapması konusunda cesaretlendiririm.	1	2	3	4	5
48. Çocuğumu gerçekten sevip sevmediğimden şüphe ediyorum.	1	2	3	4	5
49. Çocuğuma bağımsız olmayı öğrenmesi konusunda yardımcı olurum.	1	2	3	4	5
50. Çocuğuma kızdığımda seni "beceriksiz", "tipsiz", "gerizekalı", "aptal" gibi kötü sözler söylerim.	1	2	3	4	5
51. Çocuğumu, onun yanında başkalarına şikayet ederim.	1	2	3	4	5
52. Çocuğumun kendi başına becerebileceği şeyleri denemesi için ona fırsat tanırım.	1	2	3	4	5
53. Çocuğumu, kendisi için yorucu olabilecek işlerden korurum.	1	2	3	4	5
54. Çocuğum sinirime dokunur.	1	2	3	4	5
55. Çocuğumun görüşlerine saygı duyarım ve açıkça söylemesi için onu cesaretlendiririm.	1	2	3	4	5
56. Çocuğumla alay ederim.	1	2	3	4	5
57. Çocuğum iyi davrandığında onu överim.	1	2	3	4	5
58. Çocuğumu, kendisi için zor olabilecek işlerden korurum.	1	2	3	4	5

APPENDIX G

TEZiN TÜRKÇE ÖZETi

ÇOCUĞUN VE ANNENİN MİZAÇ ÖZELLİKLERİNDEN EBEVEYNLİK TARZLARININ YORDANMASI

Bu çalışmanın amacı, Uyuşma Düzeyi Kuramı (Goodness of fit) çerçevesinde çocuk ve annenin mizaç özelliklerinden ebeveynlik tarzlarını yordamaktır. Katılımcılar Ankara'da bulunan alt, orta ve üst sosyoekonomik düzeylere sahip yuvalardaki 3-4 yaş çocuklarının annelerinden oluşmaktadır. Anneler çocuklarının mizacı, kendilerinin mizacı ve ebeveynlik tutumlarını değerlendiren ölçekleri doldururlarken, öğretmenler de sadece çocuk mizacını değerlendirmişlerdir. Bu çalışma için 3 farklı hiyerarşik regresyon analizi yapılmıştır. Birinci analizde annelerin değerlendirmelerine dayanarak, mizaç özellikleri girildikten sonra çocuk ve annenin mizaç özelliklerinin etkileşimleri test edilmiştir. İkinci analizde aynı etkileşimler öğretmenlerin değerlendirmelerine dayanılarak yapılmıştır. Son regresyon analizinde ise çocuk mizaç özelliklerinin birbirleriyle etkileşimleri test edilmiştir.

Anahtar kelimeler: Çocuk mizacı, Yetişkin mizacı, Ebeveynlik, Duygusal İstismar

GİRİŞ

Her çocuk birbirinden farklı olup çevresindeki uyaranlara karşı mizacının gerektirdiği şekilde tepki vermektedir. Çocuğun davranışlarını nasıl sergilediği bireysel mizaç özelliklerinden etkilenmektedir (Kristal, 2005). Ayrıca, mizaç sadece çocuğun çevreye nasıl tepki vereceğini değil çevreden nasıl tepkiler alacağını de etkiler. Örneğin, bir annenin sessiz ve utangaç bir çocukla herkese gülümseyen bir çocuğa vereceği tepki aynı olmayabilir. Bu nedenle ebeveynlik çocuğun mizacına göre de değişiklik gösterebilmektedir (Gallagher, 2002). Mizaç göreceli olarak değişmeyen biyolojik bir temele sahip olmakla birlikte özellikle ebeveynlik kavramı göz önünde tutulduğunda çevreden tamamen de bağımsız değildir (Bates, Schermerhorn & Petersen, 2012). Ayrıca çocuğun mizacından başka annenin kişiliği gibi faktörler de ebeveynliği etkilemektedir (Belsky, 1984). Örneğin, enerji düzeyi çok yüksek ve çok düşük iki annenin yine enerji düzeyi çok yüksek ve oldukça hareketli bir çocuğa olan tepkisi aynı olmayacaktır (Kristal, 2005). Sonuç olarak,

ebeveynlik çocuğun mizaç özelliklerinden, annenin mizaç özelliklerinden ve bu özelliklerin birbirleriyle etkileşimlerinde etkilenmektedir (Belsky, 1984; Kendler, Shami & Maclean, 1997; Thomas & Chess, 1977).

Bu noktadan yola çıkarak, bu çalışma çocuk mizacı, anne mizacı ve ebeveynlik stilleri arasındaki ilişkiyi incelemeyi amaçlamaktadır. Bu amaçla giriş bölümünde sırasıyla çocuğun mizacı, annenin mizacı, ebeveynlik stilleri ve uyuşma düzeyi teorisi (goodness of fit) üzerinden geçilecektir.

Çocuk Mizacı

Mizaç, çocuğun doğuştan getirdiği ve onun çevresindeki uyaranlara tepki verme biçimini etkileyen bir özelliktir. Yani farklı mizaçlar farklı tepkilere yol açmaktadır. Diğer bir deyişle, çocuğun mizacı çevresine tepki verme biçiminin yanında çevresindekilerin çocuğa tepki verme biçimini de etkilemektedir (Kristal, 2005).Mizacın biyolojik temelleri ve göreceli devamlılığı üzerinde kuramlar arasında bir fikir birliği olmakla birlikte, her kuram mizacı farklı bir noktadan değerlendirerek tanımlamıştır.

Mizaç tanımları

Mizacın farklı kuramlar çerçevesinde birçok tanımı bulunmaktadır. Mizaç kuramının ilk temsilcileri olan Thomas ve Chess mizacı (1977) davranışın sergilenme tarzı konusundaki bireysel farklılıklar üzerinden tanımlamışlardır. Buss ve Plomin (1984; Goldsmith, Buss, Plomin, Rothbart, Thomas, Chess, Hinde & McCall, 1987) ise doğuştan gelen ve yaşamın ilk yıllarında ortaya çıkan kişilik özellikleri olarak tanımlamışlardır. Bu tanımların yanında Rothbart (1981) tepkisellik (reactivity) ve kendini düzenleme (self-regulation) alanlarındaki bireysel farklılıklar üzerinden tanımlarken Goldsmith temel duygular üzerinde yoğunlaşarak tanımlamıştır (Goldsmith et al., 1987).

Mizaç farklı kuramcılara göre değişik şekillerde tanımlansa da genel mizaç tanımları da yapılmıştır. Kristal'a (2005) ek olarak McCall da (Goldsmith, Buss, Plomin, Rothbart, Thomas, Chess, Hinde & McCall, 1987) mizacı göreceli olarak tutarlı temel eğilimler olarak tanımlamıştır. Bu eğilimler de doğuştan gelmekle birlikte aktivite, tepkisellik, duygusal hassasiyet (emotionality) ve sosyallik gibi boyutların dışavurumunu belirlemektedir (Goldsmith et al., 1987).

Mizaç Teorileri

Dört farklı teoriye göre mizacın tanımı benzerliklerin yanında farklılıklar da taşımaktadır. Mizacın bu ekollere göre birçok ortak noktası bulunmaktadır. Bunlardan birisi mizaç boyutları davranışlardan ziyade davranışsal eğilimleri ifade etmektedir. Ayrıca kuramcılar mizacın biyolojik temelleri ve devamlılığı konusunda da ortak bir görüşe sahiptir. Bunun yanında ana yapılarda tam anlamıyla devamlılık olsa da mizacın dışavurumunda değişiklikler olabileceğini söylemektedirler (Goldsmith et al, 1987).

Kuramcıların mizaç konusunda ayrıldıkları en büyük nokta ise mizaç konusunda vurgu yaptıkları ve oluşturdukları boyutların farklı olmasıdır. Bu bağlamda her kuramcı mizacın ne olduğu konusunda davranışsal dışavurum, duygularla bağlantı, göreceli olarak tutarlılık ve kalıtsallık gibi yönlerine farklı düzeylerde vurgu yapmışlardır. Ayrıca tüm kuramcılar aktivite düzeyi ve duygusal hassasiyet boyutları hariç diğer boyutlarda tam bir fikir birliğine varamamışlardır (Goldsmith et al, 1987).

Thomas and Chess: Davranışın ne olduğu ya da niçin sergilendiği ile değil nasıl sergilendiğiyle ilgilenmektedirler (Thomas & Chess, 1977). Yaştan bağımsız olmak üzere mizaç, tutumdan farklı bir yapı olmakla birlikte motivasyon, yetenek ve kişilikten de farklılaşmalıdır. Ayrıca mizaç çevreden gelen dışsal uyaranlara, beklentilere ve taleplere yönelik bir cevap olarak görülebilir (Goldsmith et al., 1987). Thomas ve arkadaşları, (Thomas & Chess, 1977; Thomas, Chess & Birch, 1968) 1956'da başlattıkları New York Boylamsal Çalışmasından elde ettikleri sonuçlara göre 9 mizaç boyutu belirlemişlerdir: ritmiklik, aktivite düzeyi, yaklaşma veya uzaklaşım (approach or withdrawal), uyumluluk, tepki eşiği (threshold of responsiveness), duygu durumu kalitesi (quality of mood), tepki yoğunluğu (intensity of reaction), dikkat dağınıklığı ve dikkat uzamı/sebatkarlık.

Buss ve Plomin: Genel olarak mizaçtan söz edebilmek için bu özelliklerin genetik olması ve yaşamın ilk yıllarında ortaya çıkması gerektiğini savunmuşlardır. Ayrıca bir karakteristiğin mizaç olabilmesi için 5 kriter ortaya belirlemişlerdir. Bu kriterler kalıtsal yönünün olması, gelişim aşamasında belli bir süre değişmezlik göstermesi, yetişkinlerde var olması, bireyin çevreye adapte olması için bir fonksiyonunun olması ve hayvanlarda da bulunmasıdır. Tüm bunlara dayanarak,

duygusal hassasiyet (emotionality), aktivite, sosyallik olmak üzere üç ana boyut belirlemişlerdir (Buss & Plomin, 1975).

Goldsmith: Diğer kuramcılardan farklı olarak mizaç temel duyguların dışavurumu çerçevesinde değerlendirilmiş (Goldsmith et al., 1987), ve içeren (inclusion criteria) ve dışarda tutan (exclusion criteria) olmak üzere iki kriter belirlemiştir. Birinci kritere göre mizaç özünde duygularla alakalı olup davranışın kendisinden ziyade davranışsal eğilimlere işaret etmektedir. İkinci kritere göre ise mizaç bilişsel ve algısal faktörleri dışarda tutmaktadır (Goldsmith et al, 1987).

Rothbart: Mizacı tanımlarken tepkisellik ve kendini düzenleme kavramlarını kullanmıştır. Burada tepkisellik derken davranışsal sistem, sinir sistemi gibi sistemlerdeki uyarılabilirlik kastedilmektedir. Kendini düzenleme için de dikkat, kaçınma gibi süreçlere işaret edilmiştir. Bu kurama göre, bahsedilen yapılardan yola çıkarak temelde 3 boyut olan pozitif tepkisellik, negatif tepkisellik ve davranış ketlemesi üzerinden mizaç kavramsallaştırılmıştır (Goldsmith et al., 1987). Ancak daha sonra, Rothbart ve arkadaşları farklı yaş gruplarında yaptıkları çalışmalara göre (Rothbart, Ahadi, Hershey & Fisher, 2001; Putnam, Gartstein & Rothbart, 2006; Evans & Rothbart, 2007) mizacın yapısını ve alt boyutlarını en az 3 ana boyut kapsamında belirlemişlerdir. Bu ana boyutlar ise Negatif duygulanım (Negative Affect, Kabarma (Surgency) ve Çaba gerektiren kontrolden (Effortful Control) oluşmaktadır (Rothbart & Bates, 2006, as cited in Mervielde & Pauw, 2012). Bu ana boyutları oluşturan 15 tane de alt boyut belirlemişlerdir (Rothbart et al., 2001). Bu alt boyutlar ise öfke/engellenme (anger/frustration), huzursuzluk (discomfort), korku (fear), üzüntü (sadness), yatıştırılabilirlik (soothability), aktivite düzeyi (activity level), dürtüsellik (impulsivity), yüksek düzeyde memnuniyet (high-intensity pleasure), utangaçlık (shyness), dikkat gerektiren odaklanma (attentional focusing), ketleyici kontrol (inhibitory control), düşük düzeyde memnuniyet (low-intensity pleasure), ve algısal hassasiyettir (perceptual sensitivity).

Tüm bu mizaç teorileri biyolojik temel, göreceli devamlılık ve çevreyle etkileşimi kabul etmektedir (Goldsmith, Buss, Plomin, Rothbart, Thomas, Chess, Hinde & McCall, 1987). Bundan dolayı çocuk mizacının çevreyle etkileşimi göz önünde bulundurulduğunda yetişkin mizacı ya da kişiliğini anlamada önemli bir faktör olduğu söylenebilir (Rothbart, Ahadi & Evans, 2000).

Yetişkin Mizacı ve Kişilikle İlişkisi

Bireysel farklılıklar hem mizaç hem de kişilik kuramcıları tarafından kabul edilmektedir (Strelau, 1987) ve bu farklılıklar bazen "mizaç" bazen de "kişilik" olarak isimlendirilebilmektedir (Shiner & Deyoung, 2011).

Mizacın biyolojik temelli (Rothbart et al., 2000) ve devamlılık gösteren bir yapı olmasına rağmen (Prior, Sanson, Smart & Oberklaid, 2000) kişinin yaşadıklarıyla da bir etkileşim içinde olduğu ve bu ikisi arasında çift yönlü bir ilişki olduğu belirtilmiştir (Rothbart et al., 2000). Bu ilişkiye benzer şekilde kişilik ile yaşantılar arasında da bir ilişki olduğuna vurgu yapılmıştır (Caspi, 1998). Tüm bunlardan yola çıkarak, mizaç ve kişiliğin tamamen birbirinden bağımsız olmadığı (McCrae et al, 2000) ve hatta örtüşen yapılar oldukları ifade edilmiştir (Goldsmith et al, 1987). Bunların da ötesinde mizacın kişilik oluşumunda başlangıç noktası olduğu (Digman, & Shmelyov, 1996; Prior et al., 2000) ve kişiliği anlamak için mizacın ilk basamak olduğu ileri sürülmüştür (Digman, & Shmelyov, 1996; Rothbart et al., 2000). Ancak kişiliğin gelişiminde öğrenme ve deneyimin de etkisi olduğu için mizaca göre daha detaylı bir gelişim planına sahip olduğu belirtilmiştir (Prior et al., 2000). Ayrıca belirli bilişleri, inançları ve değerleri de kapsadığı için kişiliğin mizaçtan da öte bir yapı olduğu ileri sürülmektedir (Evans & Rothbart, 2007).

Kişilik ve mizaç arasındaki bahsedilen ilişkilerle bağlantılı olarak, Evans ve Rothbart (2007) kişilik kuramlarıyla da örtüşen 5 boyutlu yetişkin mizaç modelini geliştirmişlerdir. Bu modele göre mizaç negatif duygulanım, dışadönüklük, çaba gerektiren kontrol, uyaranlara duyarlılık ve ilişkililik (affiliativeness) boyutlarından oluşmaktadır.

Uyuşma Düzeyi Teorisi (Goodness of Fit Theory)

Birtakım yaklaşımlara göre (psikoanalitik, davranışçı) ebeveynliğin çocuklar üzerinde çok büyük ve direkt bir etkisinin olduğu (Harris, 1995), ve ayrıca çocuk mizacının da ebeveynlik üzerinde etkisinin olduğu belirtilmiştir (Kiff, Lengua, & Zalewski, 2011). Dolayısıyla anne ve çocuk arasında çift yönlü bir ilişkinin var olduğu da savunulmaktadır(Clark, Kochanska & Ready, 2000).

Etkileşimci yaklaşıma göre birey ve çevre arasında çift yönlü bir ilişki bulunduğu için mizaç tek başına değerlendirilmemelidir (Kristal, 2005; Thomas, & Chess, 1977). Anne-çocuk ilişkisinde de annenin çocuğa karşı tutumları mizaç göz önünde bulundurulmadan yeterince iyi bir şekilde değerlendirilemeyecektir (Thomas & Chess, 1977). Uyuşma düzeyi kuramına göre çevre ile çocuğun mizacı ya da diğer özellikleri uyum içinde olursa iyi bir uyuşma yakalanmış olmaktadır. Böylece, çocuk açısından en uygun gelişim ortaya çıkacaktır. Ancak tersi söz konusu olursa da çevre ve çocuk arasındaki ilişkide bir uyumsuzluk meydana gelmektedir. Bu da çocuğun gelişimini olumsuz etkileyecektir (Thomas & Chess, 1977).

Ebeveynlik

Ebeveynlik stilleri farklı kuramcılar tarafından farklı şekillerde kategorilenmiştir (Becker, 1964; Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000; Maccoby, & Martin, 1983; Sears et al, 1957; Skinner, Johnson, & Snyder, 2005). Baumrind (1966) destek ve kontrol kavramları üzerinden ebeveynliği *demokratik, otoriter* ve *izin verici* olmak üzere üç boyuta ayırmıştır. Bu tipoloji üzerinden giderek Maccoby ve Martin (1983) de dört boyut belirlemiştir. Bu boyutlar içerisinde Baumrind'deki (1966) gibi yine demokratik ve otoriter boyutlar bulunmaktadır. Fakat izin verici boyutu da ikiye ayırıp *müsamahakar* ve *ihmalkar* şeklinde iki boyut üzerinden değerlendirmişlerdir. Demokratik ebeveynlikte çocuk merkeze alınır ve anne-çocuk arasında en uygun ilişki gözlenir. Koyulan kuralların mantığı çocukla paylaşılır (Baumrind, 1966), hem kontrol hem sıcaklık yüksek düzeyde sergilenir (Maccoby & Martin, 1983). Otorite ebeveynlikte ise ebeveynler çocuklarının bireyselliğine saygı duymazlar ve çocukla çatışma içine girdiklerinde itaat beklerler (Baumrind, 1966). Bu tarz ebeveynlikte kontrol yüksektik ancak sıcaklık düşüktür (Maccoby & Martin, 1983). İzin verici ebeveynlikte ise ebeveynler çocuğa çok az sınır koymaktadırlar. Ayrıca çocuğa cezalandırmayan ve kabul edici bir tarzda yaklaşırlar (Baumrind, 1966). Maccoby ve Martin'in (1983) kategorilediği müsamahakar ve ihmalkar ebeveynlik tarzlarının her ikisinde de düşük düzeyde kontrol vardır. Ancak müsamahakar ebeveynlerde sıcaklık yüksek düzeyde görülürken, ihmalkar ebeveynlerde düşük düzeyde görülmektedir.

Tüm bu ebeveynlik tarzlarından ayrı olarak duygusal istismar içeren ebeveynlik tarzı da literatüre eklenmiştir (Wolfe, McIsaac, 2011). Anne-çocuk

ilişkisinde en kötü uçta yer alan duygusal istismar ve ihmal (Glaser, 2002) çocukta ciddi davranışsal, duygusal (Glaser, 2002; 2008), bilişsel ve zihinsel problemlere yol açabilmektedir (Glaser, 2002). Bu tarz ebeveynlik çocuğun ihtiyaçlarının göz ardı edilmesini içermektedir. Ayrıca duyarsız ve etkisi olmayan sert bir ebeveynliğe de işaret etmektedir (Wolfe & McIsaac, 2011). Bu tarz ebeveynlik, sürekli olarak çocuğa yönelik aşağılayıcı ve eleştirel davranma, çocuğu tehdit etme (örn., terk etmekle), çocuğun ihtiyaçlarına kayıtsız kalma ve dolayısıyla bu ihtiyaçları karşılamama gibi davranışları içermektedir (Brassard & Donovan, 2006)

YETİŞKİN MİZAÇ ÖLÇEĞİ'NİN TÜRKÇE'YE ADAPTASYONU

Örneklem

Öncelikle Yetişkin Mizaç Ölçeği'nin Türkçeye adaptasyonu için yapılan çalışmanın örneklemi farklı meslek gruplarını içeren yaşları 17 ile 73 arasında değişen 269 kişiden oluşmaktadır. Ölçeğin Türkçeye adaptasyonu için açımlayıcı faktör analizi yapılmış ve güvenirlik katsayıları incelenmiştir.

Faktör Analizi

Yetişkin Mizaç Ölçeği'nin Türkçeye adaptasyonu için Varimax döndürme tekniği kullanılarak Açımlayıcı Faktör analizi yapılmıştır. Analiz dört boyuta zorlanmış ve toplamda 39 maddeden ve negatif duygulanım, dışadönüklük, çaba gerektiren kontrol ve uyaranlara duyarlılık olmak üzere 4 boyuttan oluşan bit ölçek elde edilmiştir. Hiçbir faktöre yüklenmeme, yüklendiği faktöre teorik olarak uymama ve iki faktöre birden yüklenme gibi sebeplerden dolayı 38 madde ölçekten çıkarılmıştır. Elde edilen alt boyutların güvenilirlik düzeyleri ise .65 ile .73 arasında değişmektedir.

YÖNTEM

Örneklem

Örneklem yaşları 36 ile 62 ay arasında değişen 205 çocuğun annelerinden ve öğretmenlerinden oluşmaktadır. Annelerin yaşları ise 23 ile 50 arasında değişmektedir.

Ölçekler

Bu çalışmada çocuk mizacını değerlendirmek için Çocuklar için kısa Mizaç Ölçeği ‘nden *sıcakkanlılık, sebatkarlık* ve *tepkisellik* boyutları; Colorado Mizaç Ölçeği’nden *yatıştırılabilirlik* ve Çocuk Davranış Ölçeği’ nden (Child Behaviour Questionnaire) de *algısal hassasiyet* boyutları alınarak oluşturulan ölçek kullanılmıştır. Yetişkin Mizaç Ölçeği’nin Türkçeye adaptasyonu yapıldıktan sonra da anne mizacını değerlendirmek için bu ölçek kullanılmıştır. Ebeveyn tutumlarını değerlendirmek için ise Ebeveyn Tutum Ölçeği ve Aile-Çocuk İlişkileri-Anne Formu’ndan alınan 10 madde kullanılmıştır.

Veri toplama

Tezin verilerini toplamak için ise Ankara yer alan 48 kreş aracılığıyla bu kreşlere devam eden çocukların annelerine ve öğretmenlerine ulaşılmıştır. Bu kreşlerdeki çocukların önce annelerine doldurmaları için çocuk mizacını, annenin kendi mizacını ve ebeveynlik tutumlarını değerlendirmesi için ölçekler dağıtılmıştır. Annelerdeki ölçekler topladıktan sonra ise öğretmenlere değerlendirmeleri için sadece çocuk mizaç ölçekleri dağıtılmıştır.

Korelasyon Analizi

Yapılan iki değişkenli korelasyon analizlerine göre çocuk mizaç özellikleri arasında, annenin mizaç özellikleri arasında ve birbirleriyle anlamlı korelasyonları bulunmuştur. Ayrıca, ebeveynlik stillerinin de birbirleriyle anlamlı korelasyonları bulunmuştur. Bunlara ek olarak, anne ve çocuk mizaç özelliklerinin ebeveynlik stilleriyle de arasında anlamlı korelasyonlar bulunmuştur.

SONUÇLAR

Çalışma kapsamında 3 set hiyerarşik regresyon analizi yapılmıştır. İlk 2 set analizde; annenin yaşı, eğitim düzeyi birinci, algılanan sosyoekonomik düzey ikinci aşamada kontrol değişkeni olarak analize eklenmiş, üçüncü aşamada çocuk mizaç özellikleri, bir sonraki aşamada da anne mizaç özellikleri analize dahil edilmiştir. Son aşamada ise çocuk-anne mizaç etkileşimleri de dahil edilerek bu değişkenlerle ebeveynlik stilleri arasındaki ilişkiye bakılmıştır. Son setteki analizde ise, yukarıda

bahsedilen analizlerden farklı olarak dördüncü aşamada çocuk mizaç özelliklerinin ikili etkileşimleri, son aşamada ise üçlü etkileşimleri analize dahil edilmiştir.

Çocuk ve Anne Mizaç Etkileşim Sonuçları

Demokratik Ebeveynlik

Demokratik ebeveynliği yordamada çocuğun algısal hassasiyeti ve yatıştırılabilirliği ile, annenin çaba gerektiren kontrolü ve dışadönüklüğü arttıkça annenin demokratik tutum sergileme ihtimali de artmaktadır. Ayrıca sebatkarlık aracı değişken olarak alındığında, sadece daha az sebatkar çocuklar için annenin çaba gerektiren kontrolü arttıkça demokratik ebeveynlik de artmaktadır.

Otoriter Ebeveynlik

Annenin eğitim düzeyi, çaba gerektiren kontrolü ve çocuğun algısal hassasiyeti arttıkça otoriter ebeveynliğin sergilenme ihtimali azalmaktadır. Ayrıca direkt etkilerden annenin negatif duygulanımı ve çocuğun tepkiselliği arttıkça da annenin bu tarz ebeveynliği gösterme ihtimali artmaktadır.

Anne ile çocuğun mizaç özelliklerinin birbirleriyle etkileşim sonuçlarına göre ise hassas olmayan çocuklarda annenin çaba gerektiren kontrolü arttıkça otoriter tutum azalmaktadır. Buna ek olarak yalnız öğretmenlerin değerlendirmelerine dayanarak hassas çocuklarda da aynı ilişki görülmüştür. Diğer bir sonuca göre de hassas olmayan çocuklarda annenin dışadönüklüğü arttıkça otoriterlik de artmaktadır. Benzer şekilde, sebatkar olmayan çocuklarda da dışaönüklük ile otoriterlik arasında pozitif ilişkili bulunmuştur.

Koruyucu Ebeveynlik

Annenin yaşı, eğitim düzeyi, dışadönüklüğü ve uyaranlara duyarlılığı koruyucu ebeveynlikle negatif yönde ilişkili bulunmuştur. Çocuğun algısal hassasiyeti ve annenin negatif duygulanımı arttıkça da otoriter ebeveynlik artmaktadır.

Anneden gelen sonuçlara göre sıcakkanlılığı düşük olan çocuklarda annenin negatif duygulanımı arttıkça koruyucu tutumun sergilenme ihtimali de artmaktadır. Öğretmenden gelen sonuçlara göre ise farklı bir etkileşim anlamlı bulunmuştur. Kolay yatıştırılamayan çocuklarda annenin dışadönüklüğü ile koruyuculuk arasında

negatif yönde bir ilişki bulunmuştur. Yani bu çocukların annelerinin dışadönüklüğü arttıkça koruyuculukları azalmaktadır.

İzinverici Ebeveynlik

Öğretmenden gelen sonuçlara göre tüm stepler anlamsız çıkmakla birlikte anne sonuçlarında steplerin anlamlılık düzeyleri farklılık göstermektedir. Bu nedenle, analizin beşinci değil dördüncü aşamasına göre, çocukların sebatkarlık düzeyi tüm analizlerde izin verici tutumla negatif yönde ilişkili bulunmuştur.

Duygusal İstismar ve İhmal İçeren Ebeveynlik

Annenin eğitim düzeyi ve çocuğun algısal hassasiyeti ile sebatkarlığı duygusal istismar ve ihmal içeren ebeveynlikle negatif yönde ilişkili bulunmuştur. Ayrıca, çocuğun sıcakkanlılığı, tepkiselliği ve de annenin negatif duygulanımı arttıkça bu tarz ebeveynliğin sergilenme ihtimali de artmaktadır.

Anne ve çocuk mizaç etkileşimlerine göre sıcakkanlılık düzeyi düşük çocuklarda da annenin çaba gerektiren kontrolü ile duygusal istismar ve ihmal içeren tutum arasında negatif bir ilişki bulunmuştur. Benzer şekilde, tepkisel çocuklarda annenin çaba gerektiren kontrolü arttıkça duygusal istismar ve ihmal içeren ebeveynlik azalmaktadır. Başka bir analize göre de daha az sebatkar çocuklarda ise annenin negatif duygulanımı arttıkça bu tarz ebeveynliğin sergilenme olasılığı da artmaktadır. Bu sonuçlara ek olarak öğretmen raporlarına dayanarak tepkisel olmayan çocuklarda annenin dışadönüklüğü arttıkça duygusal istismar ve ihmal içeren ebeveynliğin de arttığı görülmüştür.

Çocuk Mizaç Özellikleri Etkileşim Sonuçları

Demokratik Ebeveynlik

Çocuğun algısal hassasiyeti ve yatıştırılabilirliği demokratik ebeveynlikle pozitif yönde ilişkili bulunmuştur. Anlamlı bulunun üçlü etkileşim sonucuna göre ise, sıcakkanlılık düzeyi yüksek ve algısal hassasiyeti düşük çocuklarda yatıştırılabilirlik arttıkça demokratik tutumun sergilenme ihtimali de artmaktadır.

Otoriter Ebeveynlik

Annenin çocuğun hassasiyeti arttıkça otoriterlik azalırken, çocuğun tepkiselliği arttıkça otoriterlik artmaktadır. Hiç bir etkileşim sonucu ise anlamlı çıkmamıştır.

Koruyucu Ebeveynlik

Koruyucu ebeveynliği yordamada annenin yaşı ve eğitim düzeyi arttıkça bu ebeveynlik tarzı daha az sergilenmektedir. Çocuğun da tepkiselliği arttıkça bu tarz ebeveynliğin sergilenme ihtimali de artmaktadır.

Ayrıca çocuğun mizaç özelliklerinin birbirleriyle etkileşimlerinden elde edilen sonuçlara göre beş anlamlı sonuç bulunmuştur. Bunlardan bir tanesi ikili etkileşim iken diğerleri üçlü etkileşim sonuçlarıdır. İkili etkileşim sonucuna göre, sebatkar çocuklarda ise yatıştırılabilirlik arttıkça annenin koruyucu ebeveynlik sergileme ihtimali de artmaktadır.

Üçlü etkileşim sonuçlarından ilkinde, hem sıcakkanlılığın hem sebatkarlığın birlikte düşük ve yüksek olduğu iki grup için çocuğun tepkiselliği arttıkça annenin koruyucu ebeveynlik sergileme olasılığı da artmaktadır. İkinci olarak, sıcakkanlılık düzeyi düşük olup kolay yatıştırılamayan çocukların tepkiselliği arttıkça annenin koruyucu tutumu da artmaktadır. Üçüncü olarak, sebatkar ve kolay yatıştırılabilen çocukların tepkiselliği arttıkça annenin koruyucu tutumu da artmaktadır. Benzer şekilde sıcakkanlılık düzeyi düşük ancak sebatkar olan çocuklarda yatıştırılabilirlik arttıkça yine koruyucu tutum da artmaktadır.

İzin Verici Ebeveynlik

Bağımsız değişkenlerden direkt olarak anlamlı olan tek bir sonuç elde edilmiştir. Buna göre çocuk ne kadar sebatkar olursa annenin izin verici tutum sergileme ihtimali azalmaktadır. Çocuğun mizaç özelliklerinin etkileşim sonuçlarına göre ise sebatkar çocuklarda yatıştırılabilirlik arttıkça izin verici tutum azalmaktadır. Diğer bir sonuca göre, tepkisel çocuklarda da yine yatıştırılabilirlik arttıkça izin vericilik azalmaktadır. Benzer şekilde algısal hassasiyeti düşük çocuklarda da yatıştırılabilirlik ile izin verici tutum arasında da negatif bir ilişki bulunmuştur.

Duygusal İstismar ve İhmal İçeren Ebeveynlik

Demografik özelliklerden annenin eğitim düzeyi ve algıladığı sosyoekonomik düzey duygusal istismar ve ihmal içeren ebeveynlikle negatif yönde ilişkili bulunmuştur. Ayrıca çocuğun algısal hassasiyeti arttıkça duygusal istismar ve ihmal içeren ebeveynlik azalırken, tepkiselliği arttıkça bu tarz ebeveynlik de artmaktadır. Anlamlı bulunan bir tek etkileşim sonucuna göre, sebatkar olmayan çocuklarda yatıştırılabilirlik arttıkça duygusal istismar ve ihmal içeren ebeveynlik de artmaktadır.

TARTIŞMA

Analiz sonuçlarına göre annenin ve çocuğun mizaç özelliklerinin tek başlarına ebeveynlik üzerinde etkisi olmakla birlikte birbirleriyle etkileşimlerinin de yine ebeveynlik üzerinde etkisinin olduğu görülmüştür. Benzer şekilde, çocuğun kendi mizaç özelliklerinin birbirleriyle etkileşimi de ebeveynliği yordamaktadır. Ayrıca annenin ve çocuğun mizaç özelliklerine bağlı olarak bir uyum yakalamış olması ya da olmaması sergilenen ebeveynliğin pozitif ya da negatif olmasını etkilemektedir.

APPENDIX H

TEZ FOTOKOPİSİ İZİN FORMU

ENSTİTÜ

Fen Bilimleri Enstitüsü	
Sosyal Bilimler Enstitüsü	X
Uygulamalı Matematik Enstitüsü	
Enformatik Enstitüsü	
Deniz Bilimleri Enstitüsü	

YAZARIN

Soyadı: GÖLCÜK

Adı : MERVE

Bölümü: PSİKOLOJİ

TEZİN ADI: PREDICTION OF PARENTING STYLES FROM CHILD AND MATERNAL TEMPERAMENTAL CHARACTERISTICS

TEZİN TÜRÜ: Yüksek Lisans [X] Doktora [ ]

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir.	
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir.	
3. Tezimden bir (1) yıl süreyle fotokopi alınamaz.	X

TEZİN KÜTÜPHANEYE TESLİM TARİHİ: