

**Self-Regulation in Turkish Preschoolers: Relations with Family Context and Socio-  
Emotional Competence**

by

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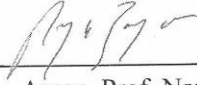
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and have found that it is complete and satisfactory in all respects,  
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## **STATEMENT OF AUTHORSHIP**

This thesis contains no material which has been accepted for any award or any other degree or diploma in any university or other institution. It is affirmed by the candidate that, to the best of her knowledge, the thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Signed

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## ABSTRACT

In the present study, we examined self-regulatory skills, namely, effortful control and executive function, in Turkish preschoolers ( $N = 186$ ) and their mediating roles in the associations between parenting and children's socio-emotional competence. We also investigated the roles of family socioeconomic status (SES) and maternal psychological well-being in these concurrent associations. Mothers' reports were used for maternal depressive symptoms, parenting behaviors, and children's effortful control. Individual assessment was utilized for executive function and socio-emotional competence was assessed via multiple methods (mother report, teacher report, and individual assessments). Structural equation modeling results showed that higher depressive symptoms and SES were significantly associated with responsiveness and power-assertiveness. The pathway extending from maternal depressive symptoms to children's effortful control was mediated by maternal power-assertiveness. Higher SES was also related to children's better executive function skills, and there was a marginally significant positive path from SES to children's effortful control through maternal power-assertiveness. However, none of the indirect pathways from SES and depressive symptoms to children's socio-emotional competence through self-regulation and parenting was significant. Similarly, executive function and effortful control did not mediate the relationship between parenting constructs and socio-emotional competence. The results indicated that moderate levels of depressive feelings experienced by mothers and socio-economic disadvantage presented a risk factor for self-regulation in young children through different mechanisms. These findings suggested that it is important to take precautions against adverse effects of socio-economic hardship and even relatively low levels of maternal depression.

*Keywords:* self-regulation, socio-emotional development, parenting, maternal depression, Turkish children, SES, culture

## ÖZET

Bu çalışma, Türkiye’deki çocuklarda yönetici işlevler ve ketleyici kontrol adı verilen öz-düzenleme becerilerini ve bu becerilerin ebeveynlik davranışları ve çocuğun sosyo-duygusal yetkinliği arasındaki aracı rolünü incelemiştir. Bununla birlikte, ailenin sosyo-ekonomik düzeyi (SED) ve annenin psikolojik esenliğinin bu ilişkiler üzerindeki etkileri de araştırılmıştır. Araştırma, Türkiye’de yaşayan 3-5 yaş arası 186 çocuk, aileleri ve öğretmenleriyle yapılmıştır. Yapısal eşitlik modellemesi sonuçları, annenin depresif duygu durumunun ve SED’in olumlu (sıcaklık, açıklayıcı akıl yürütme)ve olumsuz (cezalandırma, itaat bekleme) ebeveynlik davranışlarıyla anlamlı düzeyde ilişkili olduğunu göstermiştir. Annenin depresif duygu durumu, olumsuz ebeveynlik davranışları aracılığıyla çocukların ketleyici kontrol becerilerini anlamlı şekilde yordamıştır. Bunun yanında, SED’in çocukların yönetici işlevler becerileri ile olumlu yönde ilişkili olduğu bulunmuştur. SED’den çocukların ketleyici kontrol becerilerine giden yolda olumsuz ebeveynlik davranışlarının aracı rolü ise sınırda anlamlılık düzeyindedir. Bulgular, SED ve annenin depresif duygu durumundan çocukların sosyo-duygusal yetkinliğine uzanan yolda ebeveynlik davranışları ve öz-düzenleme becerilerinin aracı rolünün anlamlı olmadığını göstermiştir. Benzer şekilde, yönetici işlevler ve ketleyici kontrol becerilerinin ebeveynlik davranışları aracılığıyla sosyo-duygusal yetkinlik ile olan dolaylı ilişkileri de anlamlı sonuçlar vermemiştir. Araştırmanın bulguları, çocukların öz-düzenleme becerileri üzerinde ebeveynin psikolojik esenliğinin ve sosyoekonomik bağlamın farklı mekanizmalar aracılığıyla etkili olduğunu göstermesi bakımından önemli implikasyonlar ortaya koymaktadır.

*Anahtar Kelimeler:* Öz-düzenleme, sosyo-duygusal yetkinlik, ebeveynlik, annenin depresif duygu durumu, Türkiyeli çocuklar, SED, kültür

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## Chapter 1

### INTRODUCTION

Learning to effectively regulate one's own behavior pursuant to social standards is important for children's adjustment in the early years, as they step into the social field of preschool and confront the complex demands of relationships with others (von Suchodoletz, Trommsdorff, & Heikamp, 2011). A number of researchers in the literature have suggested that self-regulation has a pivotal role in socio-emotional adjustment (e.g., Eisenberg et al., 2001) and have posited relations of self-regulation to social experience, especially maternal socialization practices. Many studies have found significant relations of parenting behaviors to children's regulatory skills and socio-emotional outcomes (e.g., Eisenberg et al., 2001; Karreman, van Tuijl, van Aken, & Deković, 2006; Spinrad et al., 2012). Similar to the majority of research conducted in different subfields of psychology, studies investigating the development of regulation and socio-emotional skills in non-Western samples are scarce. It is, however, believed that development is culture bound, and parents' naïve theories of child development and socialization goals may diverge in different cultures (Garcia Coll, Akerman, & Cicchetti, 2000; Harkness, Super, & Van Tijen, 2000; Trommsdorff, 2009).

The sample of the current study was from a unique culture. Turkey is located in the halfway of Hofstede's individualism dimension (37<sup>th</sup> out of 93), closer to collectivistic cultures compared to individualistic ones (Hofstede, Hofstede & Minkov, 2010). However, individualistic patterns were likely to be observed in parenting practices of families with especially high socio-economic status (see Sen, Yavuz-Müren, & Yagmurlu, 2014). Hence, the relations of socialization context and child rearing to children's developmental outcomes in Turkish culture are sometimes similar (Yagmurlu & Altan, 2010) to those obtained from Western individualistic sample, and sometimes they show relatively different patterns (Baydar et al., 2014; Yagmurlu,

Sanson, & Koymen, 2005). In the present study, we investigated the role of children's self-regulatory skills, namely, effortful control and executive function, in the links between parenting and socio-emotional competence in Turkish children and explored how socioeconomic context and maternal psychological well-being (i.e., depressive symptoms) were associated with parenting, children's self-regulatory skills, and socio-emotional competence in Turkish preschoolers.

## Chapter 2

### LITERATURE REVIEW

#### 2.1 Self-Regulation and Socio-Emotional Competence

Social skills are intertwined with emotional development. Many components of emotional competency work together to allow children to mobilize personal and environmental resources in social interactions. Studies have suggested that children who are good at understanding emotions on others' faces and recognizing the emotions elicited in common social situations are more socially competent and responsive to peers and demonstrate more emphatic and prosocial behavior compared to children with poor emotion understanding skills (Denham et al., 2003; Izard et al., 2001). This close link between social and emotional skills has led developmentalists to consider these two domains together under the name of socio-emotional development (Krasnor & Denham, 2009). Socio-emotional competence in children is important not only for healthy interactions with peers and adults but also for functioning in other domains, such as school achievement and self-confidence, and in many contexts of life (Mendez, McDermott, & Fantuzzo, 2002; Pahl & Barrett, 2007).

In the process of developing social and emotional competence, a key skill that needs to be attained appears to be self-regulation, which refers to the ability to modulate attentional and emotional responses and related behaviors in socially appropriate and adaptive ways (Blair & Diamond, 2008; Raffaelli, Crockett, & Shen, 2005). Children with better self-regulation display lower levels of externalizing and internalizing behaviors and higher social competence (e.g., Hofer, Eisenberg, & Reiser, 2010).

Self-regulatory capacity involves diverse control mechanisms that allow an individual to manage attention, emotion, cognition, and behavior in an adaptive way to engage in goal directed actions (Blair & Diamond, 2008; Calkins & Howse, 2004). Some researchers emphasize the

temperamental basis of regulation (Rothbart & Bates, 2006; Spinrad et al., 2012) and study effortful control (the ability to voluntarily focus attention, shift attention, and inhibit or initiate behaviors as needed) as a chief regulatory aspect of temperament. Others (Miyake et al., 2000; Ponitz, McClelland, Matthews, & Morrison, 2009) focus on the cognitive mechanisms of regulation mostly known as executive functions, a complex and interrelated set of cognitive processes that includes the maintenance and manipulation of relevant information, inhibition of dominant responses, and mental set shifting. Effortful control and executive function share important features in terms of attentional processes and inhibitory control and both are integrative frameworks for investigating self-regulation (Liew, 2012; Zhou, Chen, & Main, 2012).

Inhibitory control is one of the central self-regulatory processes of both effortful control (e.g. Eisenberg, Smith, Sadovsky, & Spinrad, 2004) and executive function (e.g. Davidson, Amso, Cruess Anderson, & Diamond, 2006; Miyake et al., 2000) in children. Molecular genetic research revealed that similar genetic links, such as the dopamine D4 receptor gene, contribute to effortful control processes (e.g. Fan, Fossella, Sommer, & Posner, 2003) as well as performance during executive function tests requiring inhibition (e.g., Barnes, Dean, Nandam, O'Connell, & Bellgrove, 2011). Hence, at a finer-grained level, processes of effortful control may have similar features with executive function of inhibition. This similarity has also been reflected in the measurement of self-regulatory skills in the literature. Some researchers have used similar measures of inhibition (e.g. Stroop-like tasks) to assess effortful control (e.g. Lengua, Honorado, & Bush, 2007), and others have used them to measure executive function (Carlson, 2005). Studies on effortful control and executive function have mostly focused on different contexts. Effortful control research has centered more on emotion-laden contexts, including emotion-related regulation of behavior and social competence (e.g., Eisenberg, Liew, & Pidada, 2004). On the other hand, executive function research has focused more on emotion-neutral contexts,

comprising cognitive outcomes and academic adjustment (e.g., Fuhs, Nesbitt, Farran, & Dong, 2014). Stemming from different traditions of research, these important dimensions of self-regulation have rarely been investigated together. However, a few researchers have used an integrative framework and examined whether both aspects of self-regulation are important for enhancing early child development. For example, Blair and Razza (2007) reported that there was some overlap in the prediction of early academic skills from measures of both effortful control and executive functions. But despite this partial overlap, there were subtle differences and unshared elements between effortful control and executive functions, and they were also uniquely related to mathematics and literacy skills in preschool children. Thus, examining both aspects of self-regulation as complementary rather than incompatible may facilitate research exploring the role of self-regulation in child development (Liew, 2012).

Self-regulation mechanisms reflect the function of the anterior cingulate gyrus (Mirsky, 1996; Posner & Rothbart, 1998), which shows pronounced plasticity from 3 to 11 years of age (Davidson, Jackson, & Kalin, 2000). This plasticity suggests that in addition to biological factors, early environment also has an influence on the brain regions involved in self-regulation. Features of the rearing context and parental disciplinary behaviors are among the environmental characteristics commonly examined in relation to the development of self-regulation skills in early childhood (see Dennis, 2006; Karreman et al., 2006).

Maternal responsiveness, which involves a sensitive, warm, and accepting orientation to child signals (Darling & Steinberg, 1993), has been linked with better self-regulatory abilities such as effortful control (Spinrad et al., 2012), executive functions (Bernier, Carlson, & Whipple, 2010), and effective coping with negative emotions (Dennis, 2006). A positive mutual orientation between the mother and child is believed to influence how open the child is to parental socialization efforts and how much he or she wants to internalize parents' standards for



appropriate behavior (Grusec & Goodnow, 1994; Kochanska & Thompson, 1997). Thus, active guidance and support provided by responsive parents may facilitate the development of self-regulation in young children who do not yet have the full competency to independently modulate their attention, emotion, and behavior (Kochanska, Murray, & Harlan, 2000). Studies have shown that mothers' inductive discipline, sensitivity, and warmth predicted higher effortful control in children and in turn social competence, committed compliance, and lower levels of conduct behaviors (Choe, Olson, & Sameroff, 2013; Spinrad et al., 2012).

Parental power-assertiveness, characterized by anger, harshness, criticism, and intrusive control (Karreman et al., 2006), appears to increase the risk for low self-regulation and for social difficulties in children (Chang, Schwartz, Dodge, & McBride-Chang, 2003; Kochanska et al., 2000). These parenting practices may influence the early development of executive functions such as the ability to hold things in mind, inhibit impulse-driven responses, and plan and engage in goal-directed actions (Hughes & Ensor, 2009). The inverse relation between power-assertive parenting and self-regulatory skills may have implications for difficulties in children's socio-emotional adjustment. Chang et al. (2003) reported that harsh parenting was associated with poorer emotion regulation and in turn higher levels of aggressive behaviors in children. Eisenberg et al. (2001) also showed that mothers' negative emotional expressivity predicted parent- and teacher-reported externalizing problems (e.g., aggressive, delinquent behaviors) and social competence uniquely through regulation. When parents convey their standards of conduct in a threatening or punitive way, this is believed to increase feelings of overarousal or anger in the child, and the focus of the encounter moves away from the content of the parents' message (Grusec & Goodnow, 1994; Hoffman, 1982). This shift decreases the possibility that the child attends to appropriate parental behaviors that help in the modulation of thoughts, emotions, or behaviors. Although many studies have supported the expected adverse effects of harsh parenting

on children's regulatory abilities, most of them have focused on a single aspect of self-regulation, such as regulation of emotion or inhibitory control.

Besides their indirect relations through self-regulatory skills, parenting behaviors may also directly support or deter children's socio-emotional adjustment. Positive, accepting relationship with mothers may enhance children's capacity for forming and preserving positive relationships with others (e.g. Steelman, Assela, Swank, Smith, & Landry, 2002). Children may learn and practice social and emotional skills by modeling the parents' behavior, and by eliciting and reinforcing social behaviors of parents. Through this experience, children may learn strategies to interact with peers and resolving conflicts. For instance, Sprinrad et al. (2007) found that 18-month-old toddlers with supportive parents were less likely to exhibit externalizing behaviors. In another study, harsh parenting has been found to predict preschoolers' aggressive behaviors directly, in addition to its indirect prediction of aggression via emotion regulation (Chang et al., 2003).

## **2.2 Depressive Symptoms and Socio-Economic Status**

Contextual stress impairs families' ability to endure difficulties. Several models (e.g., Abidin, 1992; Conger et al., 1992) in developmental psychology have delineated how stress in the family might undermine relationship quality and family members' functional capacity over time, resulting in poorer parenting skills and suboptimal child development. Two factors that have a central role in these models are SES and the psychological well-being of the parents, particularly the mother. The family stress model (Conger et al., 1992) suggests that families with low financial capital and low human capital (knowledge, skills, and abilities embodied in people) are likely to experience high levels of stress in many domains of life. This stress may result in burdened coping resources and may aggravate the problems of parents, harsh parenting and increase difficulties in child adjustment.

Extensive research have documented the role of socio-economic disadvantage and maternal depression in child development, and revealed various pathways through which SES and depressive symptoms may be related to behavioral and socio-emotional outcomes of children in early years. These relations may be direct and mediated (see Bradley & Crown, 2002; Lovejoy, Graczyk, O'Hare, & Neuman, 2000). Socio-economic circumstances and depression may be associated with child outcomes directly through their physiological repercussions or indirectly through patterns of parenting behaviors.

Families who come from disadvantaged socioeconomic backgrounds may be exposed more to threatening, destabilizing life events and environmental stressors such as poor working conditions, low wages, and family conflict (Ackerman, Brown, & Izard, 2004; McLoyd, 1998). Hence, socio-economic risks may lead to heightened stress in families (Conger et al., 1992). Constant exposure to stress may result in sustained demands on neuroendocrine systems that influence how children respond to stress and regulate their behaviors and emotions. This may directly deteriorate children's self-regulatory competence, and also may relate to undesirable emotional expressions and behavioral problems (Akbuchi, Williams, & Adair, 1991; Evans & Kim, 2013).

SES has also been linked to child adjustment through parenting behaviors. The adversities and stress that families exposed to in disadvantaged socio-economic circumstances have been related to a sense of helplessness and hostility of parents (Gallo & Matthews, 1999) and to the use of physical punishment and disruptions in responsive parenting (Lengua et al., 2013; Mistry, Vandewater, Huston, & McLoyd, 2002). In turn, these disruptions in parenting have been associated with poorer outcomes throughout childhood, such as lower self-control, academic success, and social competence at school (Brody & Flor, 1998; McLeod & Shanahan, 1993). Lengua et al. (2013) found that mothers in low-income families displayed little scaffolding to

their 3-year-old children during play, which in turn predicted poor executive control at the age of 5. The opposite pattern has also been reported: Parents with higher education and more economic resources had a heightened sense of efficacy and were less vulnerable to stressors, which in turn was related to increases in their capacity to provide child-oriented parenting (Evans & Kantrowitz, 2002; Hoff, Laursen, & Tardif, 2002).

Maternal depression is another risk factor that has been related to a range of adverse child outcomes. There are many possible pathways by which maternal depressive symptoms have been associated with child adjustment including genetic, neurobiological (e.g., dysregulated stress regulation systems), and social (e.g., parenting) pathways. Depressed mothers tend to exhibit greater levels of negative emotions, have more maladaptive cognitions and attributions, and tend to be more self-focused compared to nondepressed mothers (Goodman, 2007). Thus, having a mother with depression can be considered as a life stressor for children in early years. Prolonged exposure to stressful environment may result in persistent disruptions of children's stress response systems. Such a recurring physiological reaction can influence brain development, interfere with young children's regulatory capacity, and increase the risk of emotional problems (Center on the Developing Child at Harvard University, 2009).

Besides its direct relation with child outcomes, maternal depression may be associated with child adjustment through social pathways such as parenting behaviors. Mothers who experience depressed affect express negative emotions toward their children more often, tend to be more critical and rejecting (Goodman & Brumley, 1990; Lovejoy et al., 2000), display less warmth and sensitivity, and use power-assertive disciplinary behaviors (Campbell et al., 2004; Conger et al., 1992). It is noteworthy that not only severe levels of depression but also subclinical or even mild levels of depression have significant adverse relations with child-rearing behaviors (Bettes, 1988; Gerdes et al., 2007). Experiencing depressive feelings may deteriorate mothers'

child rearing; which then may increase negative arousal in young children, and may hinder the development of child outcomes such as emotion regulation (Maughan, Cicchetti, Toth, & Rogosch, 2007), executive functions (Hughes, Roman, Hart, & Ensor, 2013), and effortful control (Choe et al., 2013). Intervention studies have also revealed that families living in high-risk circumstances (e.g., those with maternal mental health problems) benefitted from training to enhance parenting skills and that these improvements were reflected in children's positive behavioral outcomes (Chazan-Cohen et al., 2007; Webster-Stratton & Hammond, 1997).

The literature has indicated age-related differences in self-regulatory skills and socio-emotional adjustment of children during preschool years (e.g. Dennis, Brotman, Keng-Yen Huang, & Gouley, 2007; Garon, Bryson, & Smith, 2008). Moreover, differences among boys and girls were also documented in terms of socio-emotional competence and self-regulation (e.g. Matthews, Ponitz, & Morrison, 2009; Schmidt, Demulder, & Denham, 2002). Therefore, when investigating the relations between effortful control, executive function and socio-emotional skills, children's age and gender should be considered.

Research on child adjustment has been complicated by findings reporting different mechanisms from economic resources and the mental health of parents to children's well-being. Theories that have aimed to explain the impact of stress on family functioning and child development have paid special attention to SES and mostly emphasized the influence of SES on child adjustment through the psychological well-being of parents. However, extensions and variations of the original family stress theories are possible in different cultures (e.g., Behnke et al., 2008), and SES and depression may have unique influences on child outcomes (e.g., Nievar, Moske, Johnson, & Chen, 2014). Exploring the associations of SES and parental psychological wellbeing with child rearing and child outcomes in understudied societies would be helpful in elucidating these patterns.

### Chapter 3

#### PRESENT STUDY

As summarized previously, numerous studies have reported significant relations between self-regulation and social development in early childhood. However, few of them have examined whether self-regulatory skills play a role in the pathways that extend from SES and maternal psychological well-being to parenting behaviors and children's socio-emotional competence together, and even fewer have explored these relations in non-Western societies. The few studies conducted with non-U.S. samples (e.g., samples from China, Indonesia, Turkey) have mostly focused on one aspect of self-regulation, like effortful control or emotion regulation as a mediator in the links between parenting and behavioral problems (e.g., Eisenberg et al., 2004; Orta, Corapci, Yagmurlu, & Aksan, 2013; Zhou, Eisenberg, Wang, & Reiser, 2004). In the present cross-sectional study, we conceptualized self-regulation as a comprehensive construct and investigated the role of preschoolers' effortful control and executive function on the pathway from family stressors to socio-emotional competence in an understudied society.

The same parenting behaviors may have relatively different influences on children's development in different cultural groups depending on the meaning of those parenting practices and their normativeness (Lansford et al., 2005). Turkey is placed halfway between individualistic and collectivistic cultures (37th out of 93 countries), closer to collectivistic cultures (Hofstede et al., 2010). Hence, collectivistic norms (valuing obedience, gratefulness, and economic contributions to family) are highly valued in the Turkish population, but some individualistic elements (autonomy, self-reliance) also exist (Kagitcibasi, 2000). Individualistic tendencies may become prominent in parenting practices depending on SES and rural-urban differences of Turkish families (Sen et al., 2014). For instance, Yagmurlu, Citlak, Dost, and Leyendecker (2009) reported that low SES Turkish families highlighted the importance of obedience in child

socialization goals, while high SES Turkish families were likely to endorse autonomy and self-enhancement in their children. The average SES of the current study's sample was moderate to high (as documented in the results section). Thus, the parenting patterns of the present study's sample were expected to be similar to those presented from Western, individualistic cultures. Similarly, researchers examining the development of self-regulation in Turkish children have mostly indicated similar relations to what have been found in Western societies (e.g., Orta et al., 2013; Yagmurlu & Altan, 2010). Hence, in the present study, we formed our hypotheses in light of conceptualizing and findings in the literature based mainly on research conducted in Western contexts. We hypothesized that self-regulatory constructs, effortful control, and executive function would play mediating roles in the links between parenting behaviors and socio-emotional competence. Specifically, maternal responsiveness was hypothesized to predict higher levels of effortful control and executive function and, in turn, higher socio-emotional competence in children. In contrast, maternal power-assertiveness was expected to be associated with lower effortful control and executive function. Then, self-regulatory constructs were predicted to be positively associated with socio-emotional competence. We also proposed that two exogenous factors--maternal depressive symptoms and SES-- would be associated with children's effortful control and executive function and socio-emotional competence through mothers' responsive and power-assertive behaviors.

## Chapter 4

### METHOD

#### 4.1 Participants

The participants in the study were 186 preschool-age Turkish children (91 girls), their mothers, and teachers in the child care center or kindergarten (see Table 1 for descriptive statistics). The data were drawn from five big cities located in western and northwestern Turkey. A total of 97% of the children came from intact families. The mothers' education was diverse: 14% of mothers had graduated from only primary school, 7% had graduated from only secondary school, 20.4% had graduated from only high school, 46.2 % had a university degree and 12.4% had a graduate degree. Among the fathers, one was illiterate, 14% had a primary school diploma, 8% had graduated from only secondary school, 25.3% had graduated from only high school, 39.8% had a university degree and % 10 had a graduate degree. The average total monthly household income of the sample was ranging from 4.001 TL (\$1500) to 7.000 TL (\$2600). The economic status of the population in Turkey is modest, with a per capita GDP of \$10.526 in 2013 (compared to about \$51.703 in the US), and with severe income inequalities (Gini coefficient = .40) (Turkey Ministry of Development International Economic Indicators, 2013). Therefore, the average income level of the sample was relatively moderate to high with 24.2% of families had a total monthly household income below 2.000 TL (740\$), % 19.4 had 2001 (\$740) TL - 4000 TL (\$1.480), %23.7 had 4.000 TL (\$1.480), - 7.000 TL (\$2.600), and %32.8 had monthly income above 7.000 TL (\$2.600). Overall, the demographic information indicated that the sample came from diverse socioeconomic backgrounds (low, middle, and high).

#### 4.2 Measures

The mothers completed a background information form and a set of questionnaires that measured their depressive symptoms, parenting behaviors, and children's effortful control.



Table 1.

*Descriptive statistics for all study variables (N = 186)*

Variable	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Child's age (in months)	51.09	7.78	37.00	66.00
SES				
Education of mother	3.36	1.21	1	5.00
Education of father	3.23	1.22	0	5.00
Family income	3.72	1.62	1.00	6.00
Depressive symptoms	6.56	5.79	0	25.00
Responsiveness				
Warmth	4.70	.35	3.50	5.00
Inductive reasoning	4.46	.45	3.00	4.90
Power assertiveness				
Obedience demanding	2.69	.84	1.00	4.79
Punishment	1.72	.42	1.00	2.90
Effortful control				
Attention focusing	4.56	1.13	2.00	7.00
Attention shifting	3.36	1.19	1.00	6.00
Inhibitory control	5.17	.90	3.00	7.00
Executive function				
Executive function I	7.49	4.16	0	12.00
Executive function II	5.81	3.98	0	12.00
Socio-emotional competence				
Social competence (Parent reported)	2.76	.50	1.50	3.88
Social competence (Teacher reported)	2.94	.54	1.47	4.00
Emotional competence	33.47	10.55	4.00	48.00

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ .

Individual assessment was used to measure children's executive function, and socio-emotional competence was measured via multiple methods (mothers' report, teachers' report, and individual assessments).

**4.2.1 Depressive Symptoms.** Mothers' depressive symptoms were assessed using the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). The scale includes 21 items that are rated on a 4-point Likert scale. Studies (Hisli, 1989; Sahin, Sahin, & Heppner, 1993) with young adults indicated that the Turkish version of the Beck Depression Inventory is a reliable and valid instrument for measuring depressive symptoms ( $\alpha = .80$ ). Internal consistency of the Beck Depression Inventory was .85 in the current study.

**4.2.2 Responsiveness.** Maternal responsiveness was measured using the Warmth (nine items; e.g., "I often hug or hold my child for no particular reason") and Inductive Reasoning (12 items; e.g., "I try to explain to my child why certain things are necessary") subscales of the Child-Rearing Questionnaire (Paterson & Sanson, 1999; Yagmurlu & Sanson, 2009). The questionnaire used a 5-point Likert scale and had high internal consistency (.83 for Warmth, .85 for Inductive Reasoning).

**4.2.3 Power Assertiveness.** Maternal power-assertiveness was assessed using the Punishment (nine items; e.g., "I slap or hit my child to control his/her behavior") and Obedience-Demanding Behavior (six items; e.g., "I expect my child to do what he/she is told to do, without stopping to argue about it") subscales of the Child-Rearing Questionnaire (Paterson & Sanson, 1999; Yagmurlu & Sanson, 2009). Internal consistency scores for the two subscales were .80 and .74, respectively.

**4.2.4 Executive function.** To assess children's executive function, we used the Peg Tapping Task (Diamond & Taylor, 1996), which is a widely used measure (e.g., Orta et al., 2013; Razza & Blair, 2009). It required the child to hold a new rule in mind, detect the conflict between dominant and subdominant responses, and inhibit the natural dominant response. The task had two parts and allowed for the computation of two scores: Executive Function I and Executive Function II.

In the task, a wooden peg was presented and the child was instructed to tap twice right after the experimenter tapped once (Rule 1) and to tap once after the experimenter tapped twice (Rule 2). Practice trials were introduced until the child showed correct understanding of the rules; then he or she was administered a series of 12 test trials (Executive Function I). Next a new rule (Rule 3) was presented: not to tap after the experimenter tapped three times. After passing the practice trials the child was again administered a series of 12 test trials (Executive Function II). The addition of this new rule required holding three rules in mind, which heightened the complexity of the task. Higher scores in the more complex rule system of Executive Function II reflected greater capacity of executive skills (see Zelazo, Craik, & Booth, 2004, for a description of maximum rule complexity that children can master). Each correct tapping response was scored as 1 point, resulting in a maximum possible score of 12 for Executive Function I and II separately. The correlation between Executive Function I and II was high ( $r = .84, p < .01$ ).

**4.2.5 Effortful Control.** To assess children's effortful control, we asked mothers to rate on a 7-point Likert scale the items on the Attention Focusing, Attention Shifting, and Inhibitory Control subscales of the Turkish form (Batum & Yagmurlu, 2007) of the Children's Behavior Questionnaire (Rothbart, Ahadi, & Hershey, 1994; Rothbart, Ahadi, Hershey, & Fisher, 2001). The Attention Focusing subscale measured the child's tendency to maintain attentional focus on task-related issues (four items; e.g., "When practicing an activity, has a hard time keeping her/his mind on it"), Attention Shifting assessed the child's ability to shift attention between tasks (three items; e.g., "Is hard to get his/her attention when s/he is concentrating on something"), and Inhibitory Control measured the ability to plan and suppress inappropriate responses under instructions or in unusual circumstances (10 items; e.g., "Has a hard time in following instructions"). The total score for each subscale was computed by averaging the items. Internal consistency values were .61 for Attention Focusing, .54 for Attention Shifting, and .77 for

Inhibitory Control. Although internal consistency of attention shifting subscale was quite low, it was significantly correlated with attention focusing ( $r = .31, p < .01$ ).and inhibitory control ( $r = .21, p < .01$ ). Therefore, it was included in effortful control scale in the present analysis.

**4.2.6 Socio-Emotional Competence.** The socio-emotional competence of children was assessed comprehensively with mother and teacher reports of social competence and with individual tasks measuring emotional competence.

**4.2.6.1 Social competence.** Two scales were used to measure the social competence of children during peer play and during everyday interactions with peers and parents/teachers. The scales were completed by both mothers and teachers. Each scale included eight items rated on a 4-point Likert scale. To assess socially competent behavior during peer play, we used the Play Interaction subscale (e.g., “Shares toys with others”) of the Penn Interactive Peer Play Scale (Fantuzzo, Mendez, & Tighe, 1998). The Turkish version of the scale (Ozturk, 2011) was shown to be a reliable and valid tool (Etel & Yagmurlu, 2014). Scores for each item were averaged to obtain the Play Interaction score (for mother reports,  $\alpha = .75$ ; for teacher reports,  $\alpha = .82$ ). To assess social competency during general peer and teacher/parent interactions, we used the Social Competence subscale of the Social Competence and Behavior Evaluation Scale (LaFreniere & Dumas, 1996). The Turkish version of this scale is also reliable and valid (Corapci, Aksan, Arslan-Yalcin, & Yagmurlu, 2010; Etel & Yagmurlu, 2014). The Social Competence subscale score was calculated by averaging each item separately for mother and teacher reports (for mother reports,  $\alpha = .75$ ; for teacher reports,  $\alpha = .83$ ).

The Play Interaction and Social Competence subscale scores were highly and positively correlated (for mother reports,  $r = .67, p < .001$ ; for teacher reports,  $r = .78, p < .001$ ) and were averaged separately for mother and teacher reports to compute the total social competence score.

**4.2.6.2 Emotional competence.** Children's ability to label emotions and to understand situation-based emotions are two highly interrelated but distinct constructs of emotion knowledge. Emotion labeling develops in the early years as the first level of emotion understanding, and situation-based emotion understanding develops later as a more complex form of emotion knowledge (Bassett, Denham, Mincic, & Graling, 2012). Therefore, focusing on both emotion labeling and situational emotional knowledge is necessary for a comprehensive assessment of emotional competence.

In this study, we used the Affect Knowledge Test (Denham, 1986) to measure children's emotional competence. The Affect Knowledge Test assessed emotion knowledge by using puppets with four different pictures of emotion faces that illustrated happy, sad, angry, and afraid expressions. The task was composed of two subtests: emotion labeling and situation-based emotion knowledge.

For the emotion labeling subtest, four different pictures of emotion faces that illustrated happy, sad, angry, and afraid expressions were used. The experimenter laid out the four emotion faces so that they were facing the child in one straight row. First, the experimenter pointed to each emotion face and asked the child, "How does he/she feel?" and requested that the child identify emotion faces by naming them (verbally). Second, the experimenter said, "Show me the [fill in emotion] face," and asked the child to identify the emotion face by pointing to it (nonverbally). This procedure was repeated for all emotion faces. Next a training session took place to ensure that the child was able to identify each of the faces correctly.

The situation-based emotion knowledge subtest measured children's identification of emotions unequivocally appropriate to certain situations (stereotypical). For situations, eight vignettes were enacted by using puppets. In stereotypical situations, the puppet depicted the same emotion most people would typically feel (e.g., happiness when receiving ice cream).

After each vignette, the child was asked to identify the puppet's emotion both verbally and nonverbally (by placing an emotion face on the puppet that depicted the puppet's feeling in the situation).

The pilot testing showed that there were noticeable differences in the way the second subtest was given, as the administration relied on the acting ability of the experimenters. To reduce possible experimenter effects in this subtest, we prepared video clips that showed a female graduate student enacting the vignettes by using puppets in the stereotypical situations. Each child was presented with the video recordings of the puppet scenarios.

In both subtests, the child received 2 points for a correct verbal response, 2 points for a correct nonverbal response, and 1 point for verbally or nonverbally identifying the same valence as the correct response (e.g., "smiling" for happy; see Denham, 1986; Denham et al., 2012, for task details). So, the maximum score was 16 for the emotion labeling subtest and 32 for the situation-based emotion knowledge subtest. Scores for each item from these two subtests were summed to compose a total emotional competence score ( $\alpha = .74$  for the present study).

### 4.3 Procedure

The Affect Knowledge Test (Denham, 1986) was translated into Turkish for the present study by a group of bilingual researchers from the lab conducting this research. These scales were first tested in a small pilot sample ( $N = 5$ ). All the other measures were already available and previously used with Turkish mothers or children.

The data were collected after getting the approval of the University Ethics Committee and written informed consents of the parents and the directors of the childcare centers/kindergartens. For the children who did not attend to a preschool ( $n = 17$ ), the social competence scales were completed by an adult who knew the child well (e.g., grandparent, nanny). The children were visited in their preschools or homes for individual assessments. During the visit, the child was

first given the Peg Tapping Task and then the Affect Knowledge Task by a female experimenter in a separate and quiet room with no one else present (lasted about 30-35 minutes). At the end of the session, each child was given incentives (a t-shirt and a coloring book) regardless of his/her performance.

#### **4.4 Statistical methods**

For descriptive purposes, we first explored the relations of child's age and sex to major study variables. ANOVA analyses were conducted to examine the associations of child's sex with the study variables and correlations were computed to investigate the relations of age to the study variables. Then, to address our research questions, we used structural equation modeling (SEM) to simultaneously examine the relations among the study variables and to test the hypothesized mediational model. First, we tested the measurement models to explore whether the manifest variables related to latent constructs in the ways predicted, and then we tested the full structural model to investigate the hypotheses.

SEM was performed using Mplus 6.12 (Muthén & Muthén, 1998–2011). We tested the mediational role of executive function and effortful control in the relations between parenting and children's socio-emotional competence. Also, the pathways from SES and maternal depressive symptoms to children's socio-emotional competence via responsiveness, power-assertiveness and children's executive function and effortful control were examined. Finally, the relations from depressive symptoms and SES to effortful control and executive function through parenting constructs were tested. The model also included the direct paths from SES, depressive symptoms to effortful control and executive functions; and the paths from responsiveness and power assertiveness to socio-emotional competence.

We utilized maximum likelihood estimation for parameters. The model was composed of eight latent constructs with two control variables and 15 observed variables. The indicators of

SES were mother's education, father's education, and family income. Maternal report of depressive symptoms was the indicator for depressive symptoms. Responsiveness was indicated by mother-reported warmth and inductive reasoning; power assertiveness was indicated by mother-reported punishment and obedience-demanding behavior. Mother ratings of attention focusing, attention shifting and inhibitory control were the indicators of effortful control. Executive functions were indicated by individually assessed executive functions I and II tasks. Teacher- and mother-reported social competence and individual assessment of emotional competence were used as the indicators of the socio-emotional competence construct. Mother's report of child's age and sex were the indicators for age and sex. Finally, we composed a testing cooperation latent variable which was indicated by executive function I, executive function II and emotional competence. Test taking behaviors of children (e.g., task focus, fatigue and cooperation) may influence children's performance and the proper interpretation of observed scores from the assessment (Heionen, Aro, Ahonen, & Poikkeus, 2011; Meyer et al., 2001). Thus, for the indicators which were assessed using behavioral tests (executive function I, executive function II and emotional competence), we thought that cooperation of the child during these tests may be one of the factors that may account for the covariance among these three indicators, and we explicitly modeled a testing cooperation variable.

In order to determine the goodness of fit, Comparative Fit Index (CFI), Root Mean Square Error (RMSEA) and standardized root mean square residual (SRMR) were used. Hu and Bentler (1999) suggested that values close to .06 for RMSEA with 90% confidence intervals (CIs) within 0 to .10 indicate close approximate fit. Also, they reported that values greater than .95 for CFI and SRMR of 0.09 or lower represent good fit.



## Chapter 5

### RESULTS

ANOVA results indicated that there were significant sex differences in all indicators of socio-emotional competence (mother reported social competence, teacher reported social competence and emotional competence) and inhibitory control. Girls, compared to boys, had higher scores for mother's report of social competence ( $F(1, 185) = 15.51, p < .01$ ); teacher's report of social competence ( $F(1, 185) = 16.96, p < .01$ ), and emotional competence test ( $F(1, 185) = 6.12, p < .05$ ). Also, girls had higher levels inhibitory control abilities than boys ( $F(1, 185) = 14.14, p < .01$ ). In zero-order correlations, children's age was significantly correlated to all constructs except inductive reasoning, attention shifting, inhibitory control and mother reported social competence (see Table 2 for correlations).

#### 5.1 Measurement Models

As the first step in our analyses, we constructed and tested measurement models of children's socio-emotional competence, children's self-regulation- effortful control and executive function-, parenting –responsiveness and power assertiveness-, SES and testing cooperation.

In the first model, measurement model of the socio-emotional competence which was indicated by teacher- and mother-reported social competence and individual assessment of emotional competence was tested. Results from the measurement model revealed good fit to the data ( $\chi^2(3, N = 186) = 39.12, p < .001, CFI = 1.00, RMSEA = .00, (90\% CI = .00- .00), SRMR = .00$ ) and all the model-estimated loadings were significant in a positive direction. (see Table 3 for standardized factor loadings of all structural models). Second, the original measurement model for self-regulation, effortful control with its three indicators (attention focusing, attention shifting and inhibitory control) and executive function with its two indicators (executive function I and II)

Table 2.

*Correlations among all study measures (N = 186)*

Variables	Age	SES	1	2	3	4	5	6	7	8	9	10	11	12	13
Age	-														
SES	-.35***	-													
1. Depressive Symptoms	.15*	-.32***	-												
2. Warmth	-.16*	.25***	-.23**	-											
3. Inductive Reasoning	-.02	.25***	-.29***	.64***	-										
4. Obedience Demanding	.18*	-.25***	.28***	-.15*	-.12	-									
5. Punishment	.21**	-.15**	.43***	-.31***	-.24***	.50***	-								
6. Attention Focusing	-.18*	-.24***	-.30***	.13	.13	-.31***	-.24***	-							
7. Attention Shifting	-.01	.13	-.29***	.08	.08	-.23***	-.25***	.31***	-						
8. Inhibitory Control	.06	.18	-.32***	.20**	.24***	-.11	-.34***	.42***	.23**	-					
9. Executive Function I	.50***	.15*	-.07	.02	.11	-.06	.00	.02	.03	.26***	-				
10. Executive Function II	.45***	.22**	-.13	.05	.15*	-.01	-.01	.05	.10	.30***	.84***	-			
11. Social Competence (Parent)	.12	.07	-.36***	.31***	.39***	-.04	-.24***	.29***	.08	.47***	.17**	.26***	-		
12. Social Competence (Teacher)	.18*	.13	-.18**	.11	.19*	-.01	-.11**	.11	-.05	.17**	.26**	.28***	.35***	-	
13. Emotional Competence	.37**	.15*	-.22**	.11	.22**	-.10	-.17**	.15*	.13	.30***	.60***	.55***	.21**	.24***	-

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ .

Table 3.

*Standardized factor loadings for all measurement models (N = 186)*

Measurement Models	Variables	Standardized Factor Loadings
Socio-emotional Competence	Social competence (Parent reported)	.55 <sup>***</sup>
	Social competence (Teacher reported)	.63 <sup>***</sup>
	Emotional competence	.38 <sup>***</sup>
Self-Regulation	Effortful Control	
	Attention Focusing	.78 <sup>***</sup>
	Attention Shifting	.40 <sup>***</sup>
	Inhibitory Control	.53 <sup>***</sup>
	Executive Function	
	Executive Function I	.87 <sup>***</sup>
	Executive Function II	.95 <sup>***</sup>
Parenting	Inhibitory Control	.28 <sup>***</sup>
	Responsiveness	
	Warmth	.91 <sup>***</sup>
	Inductive Reasoning	.71 <sup>***</sup>
	Power Assertiveness	
	Obedience Demanding	.51 <sup>***</sup>
SES	Punishment	.99 <sup>***</sup>
	Mother's Education	.78 <sup>***</sup>
	Father's Education	.81 <sup>***</sup>
	Family Income	.74 <sup>***</sup>
Cooperation	Executive Function I	.96 <sup>***</sup>
	Executive Function II	.87 <sup>***</sup>
	Emotional Competence	.63 <sup>***</sup>

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ .

fit the data adequately ( $\chi^2(5, N = 186) = 17.39, p < .04, CFI = .96, RMSEA = .03, (90\% CI = .06-.17), SRMR = .06$ ). However, the modification indices suggested that loading inhibitory control indicator on executive function latent construct could improve model fit. This path concurs with the theory, since research have suggested inhibitory control as one of the core constructs of executive function (e.g. Davidson et al., 2006 ; Diamond, 2013; Miyake et al., 2000). Thus, we loaded inhibitory control manifest variable also on executive function. The final revised measurement model revealed good fit ( $\chi^2(3, N = 186) = 4.91, p > .05, CFI = .99, RMSEA = .06, (90\% CI = .00-.14), SRMR = .02$ ). The difference in chi-square between two models was significant ( $\Delta\chi^2(2) = 12.48, p < .005$ ), suggesting that the final revised model for self-regulatory constructs had a significantly better fit compared to original one. All manifest variables were significantly and positively related with their corresponding latent factors. However, the association between effortful control and executive function was not significant ( $r = .06, p = .54$ ). In the third model, the measurement of parenting constructs, responsiveness and power assertiveness, were tested. Responsiveness was indicated by mother-reported warmth and inductive reasoning; power assertiveness was indicated by mother-reported punishment and obedience-demanding behavior. The model fit the data fairly well ( $\chi^2(3, N = 186) = 4.91, p > .05, CFI = 1.00, RMSEA = .00, (90\% CI = .00-.00), SRMR = .03$ ). Model-estimated loadings of responsiveness and power assertiveness were significant in a positive direction, and there was a significant negative relation between two parenting constructs ( $r = -.34, p < .01$ ). Next, the measurement model for SES which was indicated by mother's education, father's education, and family income revealed good fit to the data ( $\chi^2(0, N = 186) = .00, p = .00, CFI = 1.00, RMSEA = .00, (90\% CI = .00-.00), SRMR = .00$ ) and all the model-estimated loadings were significant and positive. Finally, we tested measurement model of testing cooperation which was indicated by executive function I, executive function II and emotional competence. The model fit the data well

( $\chi^2(0, N = 186) = .00, p = .00, CFI = 1.00, RMSEA = .00, (90\% CI = .00- .00), SRMR = .00$ ). All manifest variables loaded significantly to testing cooperation latent variable in a positive way.

## 5.2 Structural Equation Model

As tests of measurement models suggested that the manifest variables related to latent constructs in the ways we predicted, we then tested the structural model in which SES and depressive symptoms were hypothesized to predict responsiveness and power assertiveness, in turn executive function and effortful control, and then socio-emotional competence. Additionally, we included age and sex as control variables on effortful control, executive function and socio-emotional competence.

The results of the SEM test of the estimated model are depicted in Figure 1, which includes standardized estimates of parameters. Overall, the model showed adequate fit to the data ( $\chi^2(107, N = 186) = 166.46, p < .01, CFI = .95, RMSEA = .055, (90\% CI = .04- .7), SRMR = .06$ ). All of the hypothesized parameter estimates in the structural model were significant except the estimates of the pathways from responsiveness and power-assertiveness to executive function, from power-assertiveness to socio-emotional competence, from responsiveness to effortful control, and from depressive symptoms to effortful control and executive function. Children's age was significantly related to executive function ( $\beta = .53, p = .00$ ) and socio-emotional competence ( $\beta = .24, p = .009$ ). Also, there were significant associations between children's sex and effortful control ( $\beta = -.27, p = .002$ ), and sex and socio-emotional competence ( $\beta = -.28, p = .002$ ). On both effortful control and socio-emotional competence measures, girls had higher scores compared to boys.

The results showed that higher depressive symptoms were associated with lower levels of responsiveness and higher levels of power-assertiveness. The paths from depressive symptoms to effortful control and executive function were not significant. However, the test of mediation

revealed that depressive symptoms significantly related to effortful control through power-assertiveness ( $\beta = -.03, p = .005$ ). Higher SES was related to higher levels of responsiveness and lower levels of power-assertiveness. Also, there was a significant, positive relation between SES and children's executive function. Although the direct path from SES to effortful control was not significant, the indirect path from SES to effortful control through power-assertiveness was marginally significant ( $\beta = .10, p = .058$ ). Among the relations between parenting and self-regulatory constructs, only the association between power-assertiveness and effortful control was significant and negative. Finally, higher levels of effortful control and executive function were related to higher levels of socio-emotional competence.

None of the indirect pathways from SES and depressive symptoms to children's socio-emotional competence through effortful control, executive function, and the parenting constructs was significant. Similarly, executive function and effortful control did not mediate the relation between parenting constructs and socio-emotional competence. However, responsiveness was directly and positively related to socio-emotional competence

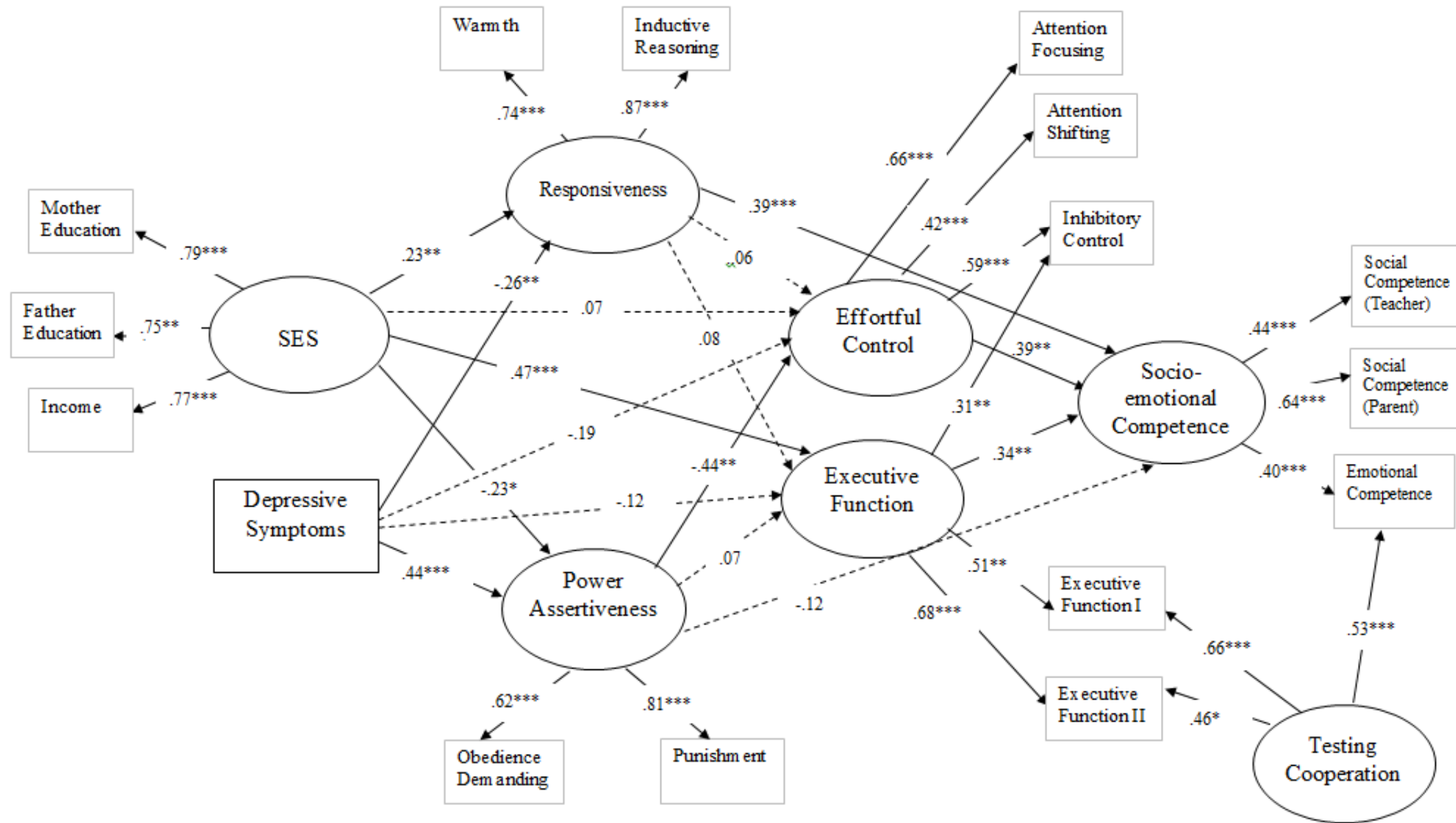


Figure 1. Standardized estimates in predicting socio-emotional competence. The dotted line represents a hypothesized but non-significant variable path. \*\*\*  $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ .

## Chapter 6

### DISCUSSION

In this study, we examined self-regulatory skills, namely effortful control and executive function, in Turkish preschool-age children and their mediating roles in the associations of parenting behaviors with children's socio-emotional competence. We also investigated the roles of socioeconomic context and maternal depression in these relations. We explored the associations of SES and depressive symptoms with children's self-regulation, and also tested if supportive and unsupportive parenting behaviors mediated the associations of these exogenous factors with children's self-regulation and socio-emotional competence. Self-regulation has received great deal of attention from researchers and has been identified as a key ability required for efficient cognitive and social functioning in different age groups (Kochanska et al., 2000; Raffaelli et al., 2005). However, to our knowledge, a limited number of studies has examined the role of self-regulation in the relations between multiple contextual stressors, parenting behaviors, and developmental outcomes in children, and even fewer conducted with non-Western samples.

The same parenting practices may have different meanings in different cultural groups; and the way parenting behaviors are perceived by children may change their relative impacts on child outcomes (Lansford et al., 2005; Yagmurlu et al., 2005). This recognition that culture and child development are related necessitates testing the developmental models in non-Western populations as well as the Western populations (Garcia Coll et al., 2000). To understand the functional mechanisms (*cultural contextualism*) in a non-western culture (Kagitcibasi, 2000; Szapocznik & Kurtines, 1993), we, in this study, examined the associations between major self-regulatory and socio-emotional competencies in young children, parenting, and rearing context in Turkey. While this study is not a cross-cultural one and therefore does not allow making



comparisons between Western and non-Western samples in terms of the patterns examined, it contributes to the literature by presenting results from an understudied sample.

The present study investigated an integrative framework of self-regulation encompassing effortful control and executive function perspectives. Inhibitory control was included as a component of both aspects of self-regulation. Previous research has suggested inhibitory control is one of the central components of both children's effortful control (e.g. Eisenberg, Smith et al., 2004) and executive function (e.g. Davidson et al., 2006; Miyake et al., 2000). Similar measures of inhibition (e.g. Stroop-like tasks) were used to measure effortful control (e.g. Lengua et al., 2007) and executive function (Carlson, 2005) in several studies. In the current study, the Children's Behavior Questionnaire (CBQ) was used to assess inhibitory control. Although CBQ was not explicitly designed as an assessment of executive function, the inhibitory control construct of effortful control assessed by the CBQ has been found to be significantly related to executive function in previous research (see Best, Miller, & Jones, 2009). Similarly, Cuevas, Hubble and Bell (2012) found significant positive associations between a parental-reported assessment developed to measure children's executive function (The Behavior Rating Inventory of Executive Function - Preschool Version; BRIEF-P) and inhibitory control measured by CBQ.

In the present study, even after children's age and gender were controlled, both effortful control and executive function were related to socio-emotional competence. These results are important because they indicated that the temperamentally based aspect and the more cognitively loaded aspect of self-regulation are both needed for maintaining social and emotional adjustment in preschool years. Mother reports for effortful control and behavioral measures for the most part of executive function were used in the present study. These different methods of measurement might also contribute to unique prediction of socio-emotional competence. The association between effortful control and executive function was not significant, suggesting that these two

aspects of self-regulation do not tap exactly the same processes. However, inhibitory control was both related to executive function and effortful control, thus there might be also some overlap between two aspects of self-regulation. These findings were parallel to the results of some earlier studies. For example, Blair and Razza (2007) reported that effortful control and executive function explained unique variance in math and literacy ability although there was overlap between them in predicting these academic outcomes.

Among the relations of self-regulatory constructs with parenting behaviors, only children's power-assertive parenting was significantly related with effortful control. Responsiveness was not associated with any of self-regulatory dimensions. This result was parallel to the findings of a meta-analysis study (Karreman et al., 2006) which showed that negative parental control (i.e. power-assertive limit-setting activities and coercive behaviors) were significantly and adversely related with children's self-regulation, while responsiveness, consisting of behaviors such as positive affect, sensitivity and warmth, was not significantly associated with self-regulation. It is important to note that, on parenting variables, there was little variability in measure scores. This was particularly true for responsiveness measures. Due to limited range of scores obtained for responsiveness ( $M = 4.70$ ,  $SD = .35$  for warmth;  $M = 4.46$ ,  $SD = .45$  for inductive reasoning), relations between responsive parenting and self-regulation may be less likely to appear.

Contrary to our expectations, effortful control and executive function did not mediate the links from parenting to socio-emotional competence. However, there was a direct positive association between responsiveness and socio-emotional adjustment. This result was similar to previous findings showing that mothers' responsiveness to their children was directly associated with social competence, including friendliness and empathic involvement with peers (Denham, Mitchell-Copeland, Strandberg, Auerbach, & Blair, 1997). When mothers display positive

reactions to their children's negative emotions, children have models for sympathetically responding to others' distress. Moreover, mothers who provide clear explanations in response to inappropriate behaviors may also promote their children's prosocial reactions to others' emotions and behaviors (Denham et al., 1997). Hence, responsive parenting might be directly related to positive social interactions and emotional well-being among preschoolers.

We also obtained evidence for the links of SES and depressive symptoms with parenting and child outcomes. The findings indicated that mothers' with higher depressive symptoms were more likely to display power assertion and less likely to display responsiveness in child rearing. There were no direct associations between mothers' depressive feelings and self-regulation. However, depressive symptoms were linked to lower levels of effortful control through power-assertive parenting. Individuals who suffer from depression are likely to engage in dysfunctional conflict resolution, prolonged processing of negative aspects of presented information, and maladaptive regulation of negative affect; also they are likely to experience persistent anger. Hence, they may react events with anger outbursts and exhibit exaggerated sense of frustration even in minor events. Mothers who experience such symptoms may show hostility, rejection of the child and may display power assertive discipline strategies. In prior research, when the child resisted her control attempts, mothers experiencing heightened depressed mood mostly failed to achieve mutually agreed compromise and effective parenting (Campbell, Pierce, March, & Ewing, 1991; Fendrich et al., 1990). Hence, mothers with depressive feelings may lack the skills to provide proper regulation modelling and training for their children through parenting, which then, may adversely influence regulatory capacity of children (Goodman & Gotlib, 1999).

Our analyses also indicated that family SES played an important role in parenting. As family SES increased, children were more likely to receive responsiveness from their mothers, and were less likely to be disciplined with a power assertive approach. Also, there was a direct

positive association between SES and executive function. Children in disadvantaged socio-economic conditions are likely to experience the chronic, physical and psychosocial stressors (Evans & Kim, 2013). These stressors may influence functions of prefrontal cortex (the key brain area involved in executive function) and executive functions through their impact on stress response systems.

The findings also demonstrated that there was a marginally significant mediated relation between SES and effortful control through power-assertive parenting. These results might suggest that although SES may influence preschoolers' self-regulatory skills directly, there was a trend that alternative factors such as power-assertive parenting may be influential on the pathway from SES to self-regulation. For example, lower parental education and income may limit children's opportunities to engage in structured, goal-directed activities within and outside the home (Bradley & Crown, 2002). Moreover, poor socio-economic conditions may reduce the likelihood that parents would provide an enriching and stimulating environment (e.g. provision of stimulating learning materials, telling stories), set high developmental goals for their children, and engage in competency promoting activities. This may result in fewer opportunities for the child to practice effortful control skills (Brody, Flor, & Gibson 1999). However, further support is needed to clarify these mechanisms from socio-economic circumstances to self-regulation.

Our study indicated that none of the hypothesized indirect links from SES or depressive symptoms to socio-emotional adjustment of preschoolers were significant. The pathway from SES to socio-emotional competence was not mediated by parenting and self-regulatory constructs. Similarly, depressive symptoms were not associated with socio-emotional competence through parenting and self-regulation. These findings may suggest that for the associations of SES and maternal depressive feelings, different mechanisms rather than through parenting and child's self-regulation may occur for Turkish preschoolers.

The findings presented here must be interpreted with the knowledge that this study had a cross-sectional design, and hence, causal conclusions are not warranted. We used the terms ‘predictors’ and ‘outcome’ in the statistical sense; and following from this, some of the findings were at times discussed in terms of one factor having an influence/role on another. Although developmental theory and previous findings suggest that it is plausible that the direction of influence is more from SES and psychological well-being to parenting and child outcomes, it would be more possible to delineate these intricate relationships with carefully designed, longitudinal studies. An additional limitation of our study might be the use of maternal self reports to assess parenting behaviors. Observations for parenting could be used to augment self-report assessments in future studies.

A particular strength of our study was the use of multiple and multi-informant methods to assess central aspects of self-regulation (attention, inhibitory control, executive functions) and socio-emotional development (social competency in different settings and affect knowledge) comprehensively. The two parenting dimensions examined in this research were formed from child-rearing behaviors shown to be important aspects of parenting in the Turkish family (Kagitcibasi, 2000; Yagmurlu & Altan, 2010). The variable ‘maternal responsiveness’ did not only tap mother’s affectionate and warm behaviors but also providing explanations to the child, reasoning. ‘Maternal power assertion’ included obedience-demanding behavior of the mother in addition to different forms of punishment, as the expectation for unquestioning obedience is shown to be a common form of power-assertive parenting in the Turkish culture (Kagitcibasi, 1982). SES was indicated not only by economic welfare but also educational levels of both parents. And as the indicator of maternal psychological well-being, we used self-reports of depressive feelings which could have significant implications for adequate parenting of young children.

Taken together, it appears that the behavioral and cognitive aspects of self-regulation have commonalities but they do not entirely overlap; and even when investigated together, each self-regulation skill is individually associated with socio-emotional competence. Moreover, the study suggested that parenting practices might exert their influence on child development differently: responsiveness had a more pronounced role on children's socio-emotional competence compared to power-assertion, whereas power-assertiveness was the only parenting dimension that was associated with children's self-regulation. The findings only partially supported the results of earlier research driven by theories that focus on stress in developmental contexts (Abidin, 1992; Conger et al. 1992). There was evidence for the relation of contextual factors to children's self-regulation through power assertive parenting; however, there were not significant relations between SES and depressive symptoms and children's socio-emotional competence through parenting and self-regulation.

The sample of the study was a non-clinical one, and the mothers reported experiencing mild levels of depressed affect. Nevertheless, even the variance within this restricted range was a significant predictor of the parenting and child variables in our model, providing support to previous research revealing that even subclinical/mild levels of maternal depression had significant effects on parenting (Gerdes et al., 2007) and child adjustment (Laurent et al., 2012). These findings have policy implications. Intervention studies designed to decrease parental depression and parenting quality (e.g. Feinberg, Kan, & Goslin, 2009) indicated that mothers with depression, including the ones who experienced mild forms of it, benefited from parent training programs. Parenting behaviors of mothers improved in quality, they became more engaged and attentive, and self-regulatory capacity of their children improved significantly, compared to a control sample. Our findings also suggested that self-regulation of Turkish children could benefit from interventions that target depressed affect of mothers.

Investigating two contextual factors, SES and maternal depression, together in our model allowed us to evaluate their individual predictive values over children's developmental outcomes. Our findings from an understudied sample partially supported and extended the existing literature by indicating particular divergent mechanisms of maternal psychological and family socio-economic factors that may disrupt or promote preschoolers' self-regulatory skills and also by indicating the roles of different aspects of self regulation and parenting in enhancing in socio-emotional adjustment in early childhood years.

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## Appendix A

### ANNE ANKET KİTAPÇIĞI

#### Genel Bilgiler:

Anketi doldurduğunuz tarih: Gün\_\_\_\_ Ay\_\_\_\_ Yıl\_\_\_\_

(Çocuğunuz herhangi bir yuvaya devam ediyorsa):

Kurumun adı: \_\_\_\_\_ Sınıf: \_\_\_\_\_

#### Çalışmaya Katılan Çocuk ile İlgili Sorular:

1. Çocuğunuzun adı ve soyadı: \_\_\_\_\_

2. Çocuğunuzun doğum tarihi: Gün\_\_\_\_ Ay\_\_\_\_ Yıl\_\_\_\_

3. Çocuğunuzun cinsiyeti (lütfen işaretleyiniz): Erkek  Kız

4. Çocuk dışarıda anaokuluna/okul öncesi kuruma devam ediyor mu? Evet  Hayır

5. Çocuğunuzun ilk kez anaokuluna/kreşe başladığı tarih: Ay\_\_\_\_ Yıl\_\_\_\_

6. Çocukta tanısı konulmuş herhangi bir gelişimsel sorun var mı? (örnek: otizm, Down sendromu-mongolizm, dikkat eksikliği, öğrenme güçlüğü, hiperaktivite)

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7. Bu çalışmada yer alan çocuğunuz **dışında** evde sizinle birlikte yaşayan başka bir çocuğunuz/çocuklarınız var mı?

Hayır

Evet, (Lütfen aşağıdaki tabloyu doldurunuz)

Çocuğunuzun Adı	Cinsiyeti	Doğum Yılı



Çocuğun Sağlığı ve Gelişimi ile İlgili Sorular:

10. Çocuğunuzun geçirdiği önemli bir kaza, ameliyat veya ciddi bir hastalık var mı?

Lütfen belirtiniz:

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11. Çocuğunuzun bilinen önemli bir kronik (devamlı) sağlık sorunu (örnek: kalça çıkığı, astım, kalp, şeker, romatoid artrit, depresyon) ve/veya sürekli kullanması gereken ilaçlar var mı?

Lütfen belirtiniz:

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12. Aşağıda yer alan durumlar kronik (devamlı) ve ileri derecede çocuğunuzda varsa lütfen yanına işaret koyunuz:

Kekeleme problemi (Şimdi veya geçmişte)	
Konuşma gecikmesi (şimdi veya geçmişte)	
Altını ıslatma (sürekli olarak çiş-kaka tutamama)	
Nörolojik sorun (epilepsi vb.)	
Bağışıklık sistemi hastalığı	
Ciddi engel (görme, işitme, ortopedik vb engel.)	

13. Çocuğunuzun son 6 aydır sürekli olarak kullandığı bir cihaz veya alet var mı? (örnek: gözlük, atel, koltuk değneği vb.)

Lütfen belirtiniz: \_\_\_\_\_

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14. Çocuğunuzun evde bakıcısı var mı? Evet  Hayır

14.a. Evet ise; haftada kaç saatini onunla geçiriyor? \_\_\_\_\_

15. Evde konuşulan dil nedir? \_\_\_\_\_

15.a. Bakıcının çocuğunuzla konuştuğu dil nedir? \_\_\_\_\_

16. Çocuğunuzun evde sürekli beraber yaşadığı tüm yetişkinleri (anne, baba, nine, dede, teyze, amca vb.) lütfen sıralayınız:

	Çocukla olan yakınlığı/ akrabalık ilişkisi	Yaş (yaklaşık olarak)
1		
2		
3		
4		
5		

### Anne ile ilgili bilgiler

1. Annenin doğum tarihi: Gün\_\_\_\_\_ Ay\_\_\_\_\_ Yıl\_\_\_\_\_

2. Annenin eğitimi

Okuma yazma bilmiyor	0	Liseden terk	5
İlkokuldan terk veya okuma-yazma bilmiyor	1	Lise mezunu	6
İlkokul mezunu	2	Yüksek okul mezunu (2 yıllık)	7
Ortaokuldan terk	3	Üniversiteden terk	8
Ortaokul mezunu	4	Üniversite mezunu (4 yıllık)	9
Uzmanlık derecesi var (yüksek lisans, doktora veya tıpta uzmanlık gibi)			10

3. Anne şu anda çalışıyor mu? (uygun olan seçeneğın altındaki rakamı daire içine alınız)

Evet (Tam zamanlı, haftada 40 saat)	Evet (Yarı-zamanlı, haftada 20-25 saat )	Hayır (Çalışmıyor)
1	2	3

4. Annenin şu anki medeni hali (uygun olan seçeneğın altındaki rakamı daire içine alınız)

Evli	Boşanmış veya dul	Ayrı yaşıyor	Yeniden evlenmiş
1	2	3	4

**Baba ile ilgili bilgiler**

5. Babanın doğum tarihi: Gün\_\_\_\_\_ Ay\_\_\_\_\_ Yıl\_\_\_\_\_

6. Babanın eğitimi

Okuma yazma bilmiyor	0	Liseden terk	5
İlkokuldan terk veya okuma-yazma biliyor	1	Lise mezunu	6
İlkokul mezunu	2	Yüksekokul mezunu (2 yıllık)	7
Ortaokuldan terk	3	Üniversiteden terk	8
Ortaokul mezunu	4	Üniversite mezunu (4 yıllık)	9
Uzmanlık derecesi var (yüksek lisans, doktora veya tıpta uzmanlık gibi)			10

7. Baba şu anda çalışıyor mu? (uygun olan seçeneğin altındaki rakamı daire içine alınız)

Evet (Tam zamanlı, haftada 40 saat)	Evet (Yarı-zamanlı, haftada 20-25 saat )	Hayır (Çalışmıyor)
1	2	3

8. Babanın şu anki medeni hali (uygun olan seçeneğin altındaki rakamı daire içine alınız)

Evli	Boşanmış veya dul	Ayrı yaşıyor	Yeniden evlenmiş
1	2	3	4

9. **Hane halkının** toplam geliri (evde sürekli yaşayan tüm bireylerin toplam kazancı):

Ayda 630 TL'nin altında	1
Ayda 630 – 1000TL	2
Ayda 1001 –2000 TL	3
Ayda 2001 – 4000 TL	4
Ayda 4001 – 7000 TL	5
Ayda 7001 – 12000 TL	6
Ayda 12000 TL'nin üzerinde	7

## Appendix B

## SOSYAL BECERİ ÖLÇEĞİ

**Bölüm A**

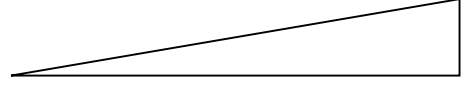
Aşağıda, çocukların **serbest oyun zamanında yaşitlarına** gösterdikleri bazı davranışlar yer almaktadır. Lütfen her bir ifadeyi dikkatlice okuyunuz ve söz konusu davranışı (**bu çalışmada yer alan**) çocuğunuzun son **6 ay içerisinde** ne sıklıkla yaptığını işaretleyiniz. Soruları cevaplarırken çocuğunuzun söz konusu davranışı "**oyun zamanında**" ne kadar yaptığını düşününüz. Eğer çocuk anlatılan davranışı **hiçbir zaman** yapmıyorsa 1'i; **bazen** yapıyorsa 2'yi; **sık sık** yapıyorsa 3'ü; **her zaman** yapıyorsa 4'ü işaretleyiniz.

	Hiçbir zaman	Bazen	Sık sık	Her zaman
1. Diğer çocuklara oyun sırasında yardımcı olur.	1	2	3	4
2. Oyun zamanında kavga veya tartışma başlatır.	1	2	3	4
3. Oyun zamanında diğerleri tarafından dışlanır.	1	2	3	4
4. Oyunda sırasını beklemeyi reddeder.	1	2	3	4
5. Oyun oynayan çocukların çevresinde dolanır, aralarına girmeye tereddüt eder.	1	2	3	4
6. Oyuncaklarını paylaşır.	1	2	3	4
7. Oyun zamanında içe kapanır.	1	2	3	4
8. Oyun zamanında amaçsızca çevrede dolanır.	1	2	3	4
9. Diğer çocukların oyunla ilgili fikirlerini reddeder.	1	2	3	4
10. Oyun zamanında diğer çocuklar tarafından görmezden gelinir/yok sayılır.	1	2	3	4
11. Oyun sırasında gereksiz yere gevezelik eder, konuşur.	1	2	3	4
12. Oyun sırasında arkadaşları arasında çıkan anlaşmazlıkları yatıştırmaya çalışır.	1	2	3	4
13. Oyun zamanında başkalarının eşyalarına zarar verir.	1	2	3	4
14. Oyun sırasında başkalarıyla farklı görüşte olduğunu kavga etmeden ifade eder.	1	2	3	4
15. Oyuna çağrıldığında katılmayı reddeder.	1	2	3	4

	<b>Hiçbir zaman</b>	<b>Bazen</b>	<b>Sık sık</b>	<b>Her zaman</b>
16. Oyuna girebilmek için başkasının yardımına ihtiyaç duyar.	1	2	3	4
17. Oyun sırasında başkalarına sözlü olarak sataşır.	1	2	3	4
18. Oyun sırasında ağlar, mızımızlanır, huysuzluk eder.	1	2	3	4
19. Diğerlerini oyuna katılmaları için çağırır, onları teşvik eder.	1	2	3	4
20. Oyun sırasında başkalarının elindekileri (eşya ya da oyuncak) zorla alır.	1	2	3	4
21. Oyun sırasında birilerinin canı yandığında veya üzülüklerinde onları teselli eder.	1	2	3	4
22. Oyun kurallarını anlayıp takip etmede zorlanır.	1	2	3	4
23. Herhangi bir oyuna başlayabilmek için bir yetişkinin yönlendirmesine ihtiyaç duyar.	1	2	3	4
24. Başkalarının oyununu bozar.	1	2	3	4
25. Oyun zamanında mutsuz görünür.	1	2	3	4
26. Oyun zamanında saldırgandır.	1	2	3	4
27. Oyun sırasında olumlu duygular gösterir (örn: güler, kahkaha atar).	1	2	3	4
28. Oyun kurma konusunda yaratıcıdır.	1	2	3	4
29. Oyunu ve arkadaşlarını yönetmek ister.	1	2	3	4
30. Arkadaşlarıyla oynarken bir etkinlikten başka bir etkinliğe geçmesi gerektiğinde uyumsuz davranıp düzeni bozar.	1	2	3	4

**Bölüm B**

Aşağıda, çocukların **genel olarak** gösterdikleri bazı **duygu ve davranışlar** yer almaktadır. Lütfen her bir ifadeyi dikkatlice okuyunuz ve söz konusu duyguyu veya davranışı (**bu çalışmada yer alan**) çocuğunuzun **son 6 ay içerisinde “genel olarak”** ne sıklıkla yaptığını işaretleyiniz. Eğer çocuğunuz anlatılan davranışı **hiçbir zaman** yapmıyorsa 1’i; **bazen** yapıyorsa 2’yi; **sık sık** yapıyorsa 3’ü; **her zaman** yapıyorsa 4’ü işaretleyiniz.



	<b>Hiçbir zaman</b>	<b>Bazen</b>	<b>Sık sık</b>	<b>Her zaman</b>
31. Yüz ifadesinden duygularını anlamak zordur.	1	2	3	4
32. Zorda olan bir çocuğu teselli eder ya da ona yardımcı olur.	1	2	3	4
33. Kolaylıkla hayal kırıklığına uğrayıp sinirlenir.	1	2	3	4
34. Faaliyeti kesintiye uğradığında kızar. (örneğin; yemek zamanı elindeki oyunu vb. bırakması gerektiğinde kızgınlık gösterir.)	1	2	3	4
35. Huysuzdur, çabuk kızıp öfkelenir.	1	2	3	4
36. Gündelik işlerde yardım eder (örneğin; sofrayı kurarken, ev toplanırken yardımcı olur.)	1	2	3	4
37. Çekingen ve ürkektir; yeni ortamlardan ve durumlardan kaçınır (örneğin; yeni biriyle tanıştığında, yeni bir oyun öğrenilirken vb.).	1	2	3	4
38. Genel olarak üzgün, mutsuz ya da depresiftir.	1	2	3	4
39. Yaşlıları arasında çekingendir ya da yaşlılarıyla olmaktan huzursuz görünür.	1	2	3	4
40. En ufak bir şeyde bağırır ya da çığlık atar.	1	2	3	4
41. Hareketsizdir, oynayan çocukları uzaktan seyreder.	1	2	3	4
42. Anlaşmazlıklara çözüm yolları arar.	1	2	3	4
43. Yaşlılarından ayrı, kendi başına kalır.	1	2	3	4
44. Diğer çocukların görüşlerine önem verir.	1	2	3	4

	<b>Hiçbir zaman</b>	<b>Bazen</b>	<b>Sık sık</b>	<b>Her zaman</b>
45. Diğer çocuklara vurur, onları ısırır ya da tekmeler.	1	2	3	4
46. Yaşlılarıyla yaptığı faaliyetlerde veya oyunlarda onlarla iş birliği yapar.	1	2	3	4
47. Diğer çocuklarla anlaşmazlık yaşar.	1	2	3	4
48. Genel olarak halsiz ve yorgun görünür.	1	2	3	4
49. Oyuncaklara iyi bakar, oyuncakların kıymetini bilir.	1	2	3	4
50. Yaşlılarıyla faaliyetlere katılmayı reddeder ya da faaliyet sırasında konuşmaz.	1	2	3	4
51. Kendinden küçük çocuklara karşı dikkatlidir.	1	2	3	4
52. Yaşlıları arasında fark edilmez, siliktir.	1	2	3	4
53. Diğer çocukları istemedikleri şeyleri yapmaya zorlar.	1	2	3	4
54. Annesine kızdığı zaman ona vurur ya da çevresindeki eşyalara zarar verir.	1	2	3	4
55. Genel olarak endişeli görünür.	1	2	3	4
56. Makul açıklamalar yapıldığında, söyleneni kabul eder.	1	2	3	4
57. Annesinin söylediklerine karşı çıkar.	1	2	3	4
58. Cezalandırıldığında (örneğin; herhangi bir şeyden yoksun bırakıldığında) başkaldırır, karşı koyar.	1	2	3	4

## Appendix C

## ÇOCUK DAVRANIŞLARI ANKETİ

Bu ankette çocukların davranışları ile ilgili çeşitli ifadeler yer almaktadır. Ankette yer alan soruların doğru ya da yanlış cevapları yoktur. Çocuklar, bu ifadelerde sözü geçen davranışlar bakımından birbirlerinden farklılık gösterebilmektedir. Bizim amacımız bu farklılıkları daha iyi anlamaktır.

Lütfen son **6 ayı** göz önünde bulundurarak, çocuğunuzun aşağıda tarif edilen durumlar karşısında nasıl davrandığını en iyi gösteren şıkkı işaretleyiniz.

	Tamamen yanlış	Oldukça yanlış	Biraz yanlış	Ne doğru Ne yanlış	Biraz doğru	Oldukça doğru	Tamamen doğru
1. Oyuncak toplama gibi işler bitene kadar onunla uğraşmaya devam eder.	1	2	3	4	5	6	7
2. Dokunduğu nesnelerin pürüzlü ya da pürüzsüz olduğunun hemen farkına varır.	1	2	3	4	5	6	7
3. Genellikle bir faaliyete aceleyle, düşünmeden girer.	1	2	3	4	5	6	7
4. Ağrı hissetmek canını çok sıkır.	1	2	3	4	5	6	7
5. Annesi veya babası yeni bir kıyafet giydiğinde veya dış görünüşünde bir değişiklik olduğunda bunun farkına varır.	1	2	3	4	5	6	7
6. Başkaları konuşurken bazen sözlerini keser.	1	2	3	4	5	6	7
7. Bir şeye konsantre olmuşken dikkatini çekmek zordur.	1	2	3	4	5	6	7
8. Ne istediğine çabucak karar verir ve yapmaya koyulur.	1	2	3	4	5	6	7
9. Bir faaliyete aklını vermekte zorlanır.	1	2	3	4	5	6	7



	Tamamen yanlış	Oldukça yanlış	Biraz yanlış	Ne doğru Ne yanlış	Biraz doğru	Oldukça doğru	Tamamen doğru
10. Üstü ısladığında veya üşüdüğünde oldukça rahatsız olur.	1	2	3	4	5	6	7
11. Bir şey yapmaya karar vermeden önce genellikle durup düşünür.	1	2	3	4	5	6	7
12. Oldukça alçak seslerin bile farkına varır.	1	2	3	4	5	6	7
13. Başka bir şey yapması söylendiğinde yapmakta olduğu işi bırakmakta çok zorlanır.	1	2	3	4	5	6	7
14. Etrafta ilgisini dağıtan sesler olduğunda bir faaliyete konsantre olmakta zorlanır.	1	2	3	4	5	6	7
15. Bazen resimli bir kitaba gömülür ve uzun süre bakar/okur.	1	2	3	4	5	6	7
16. Dışarı çıkmaya hevesliyken, bazen heyecan ve telaşla üstüne uygun kıyafetleri (örn: palto) giymeden fırlar.	1	2	3	4	5	6	7
17. Yemeğe gelirken oyununu kolayca bırakır.	1	2	3	4	5	6	7
18. Oturma odasındaki yeni eşyaları ve değişiklikleri hemen fark eder.	1	2	3	4	5	6	7
19. Durup düşünmeden aklına ilk geleni söyleme eğilimi vardır.	1	2	3	4	5	6	7
20. Canını acıtabileceği yerlerde temkinli davranır.	1	2	3	4	5	6	7
21. Onunla konuştuğumda bazen beni duymuyor gibi görünür.	1	2	3	4	5	6	7
22. Hiç bir işi tamamlamadan birinden diğerine geçer.	1	2	3	4	5	6	7

	Tamamen yanlış	Oldukça yanlış	Biraz yanlış	Ne doğru Ne yanlış	Biraz doğru	Oldukça doğru	Tamamen doğru
23. Anne ve babasının yüz ifadelerini hızlıca fark eder.	1	2	3	4	5	6	7
24. Küçük bir kesik veya çürük keyfini oldukça kaçırrır.	1	2	3	4	5	6	7
25. Parçaların üst üste konmasını veya eklenmesini gerektiren uğraşılara (lego gibi) kendini verir ve uzun süre çalışır.	1	2	3	4	5	6	7
26. İsteddiği bir şeyi (ör: oyuncak) hemen elde etmek ister.	1	2	3	4	5	6	7
27. Hikâye dinlerken ilgisi kolayca dağılır.	1	2	3	4	5	6	7
28. Nesnelerdeki ufak lekeleri, kirleri bile fark eder.	1	2	3	4	5	6	7
29. Bir faaliyetten diğerine kolaylıkla geçer.	1	2	3	4	5	6	7
30. Çok parlak ışık veya renklerden rahatsız olur.	1	2	3	4	5	6	7
31. Yeni bir faaliyeti deneyen en son çocuklardan biridir.	1	2	3	4	5	6	7
32. İstendiğinde, yapmakta olduğu işi kolaylıkla bırakabilir.	1	2	3	4	5	6	7
33. Yemek, sigara veya parfüm gibi kokuları genellikle fark eder.	1	2	3	4	5	6	7
34. İlginç bir oyuncakla oynarken çevresiyle ilgilenmez.	1	2	3	4	5	6	7
35. Söylenildiğinde sesini alçaltabilir.	1	2	3	4	5	6	7

	Tamamen yanlış	Oldukça yanlış	Biraz yanlış	Ne doğru Ne yanlış	Biraz doğru	Oldukça doğru	Tamamen doğru
36. Yünlü giysiler, kıyafetlerdeki etiketler gibi pürüzlü/sert maddelerin cildine değmesinden rahatsızlık duyar.	1	2	3	4	5	6	7
37. Hareketlerini kontrol etmesi gereken oyunlarda (deve-cüce vb) iyidir.	1	2	3	4	5	6	7
38. Talimatları takip etmekte zorlanır.	1	2	3	4	5	6	7
39. Yeni bir faaliyete başlamadan önce beklemesi söylendiğinde bekleyebilir.	1	2	3	4	5	6	7
40. Azıcık canı yansa bile hemen ağlar.	1	2	3	4	5	6	7
41. Bir şey için sırada beklemekte zorlanır.	1	2	3	4	5	6	7
42. Yerinde kıpırdamadan oturması söylendiğinde, bunu yapmakta güçlük çeker (örn: sinemada, sınıfta).	1	2	3	4	5	6	7
43. Tehlikeli olduğu söylenen yerlere yavaş ve temkinli yaklaşır.	1	2	3	4	5	6	7
44. Dikkatli olması gereken yerlerde (örn: karşıdan karşıya geçerken) temkinli değildir.	1	2	3	4	5	6	7
45. “Hayır” dendiğinde yapmakta olduğu şeyi kolayca bırakabilir.	1	2	3	4	5	6	7
46. Çok yüksek ve cızırtılı seslerden rahatsız olur.	1	2	3	4	5	6	7
47. Bir şeyi yapmaması gerektiği söylendiğinde, genellikle içinden gelen dürtüye karşı koyabilir.	1	2	3	4	5	6	7

## Appendix D

## ANNE ÇOCUK YETİŞTİRME ANKETİ

Şimdi okuyacağınız cümleler çocuk yetiştirmeye ait bazı davranışları anlatmaktadır. Bu araştırmada yer alan çocuğunuza yönelik olarak bu davranışları ne sıklıkla gösterdiğinizi düşününüz. Her bir ifadeyi “**hiçbir zaman**”, “**çok seyrek**”, “**bazen**”, “**çoğu zaman**” veya “**her zaman**” seçeneklerinden birisini kullanarak işaretleyiniz. Soruların doğru veya yanlış bir cevabı yoktur. Amacımız, yalnızca annelerin çocuk yetiştirme konusundaki davranışlarını öğrenmektir.

	<b>Hiçbir Zaman</b>	<b>Çok Seyrek</b>	<b>Bazen</b>	<b>Çoğu Zaman</b>	<b>Her Zaman</b>
1. Çocuğumun kendisine söyleneni açıklamasız yapmasını beklerim.	1	2	3	4	5
2. Çocuğumun daha iyi davranmasını sağlamak için ona tokat atarım.	1	2	3	4	5
3. Çocuğum korkmuş ya da üzüntülü olduğu zaman, onu rahatlatır ve ona anlayışlı davranırım.	1	2	3	4	5
4. Ondan istediğim bir şeyi, çocuğumun oyalanmadan hemen yapmasını beklerim.	1	2	3	4	5
5.Çocuğumdan bir şey istediğimde, onun isteklerine ya da itirazlarına aldırım.	1	2	3	4	5
6. Çocuğuma sevgimi, onu kucaklayarak, öperek ve sarılarak ifade ederim.	1	2	3	4	5
7. Çocuğumun, anne ve babasına sorgusuz itaat etmesini beklerim.	1	2	3	4	5
8. Çocuğumun davranışını kontrol etmek için ona tokat atar veya vururum.	1	2	3	4	5
9. Belirli bir neden olmaksızın, çocuğumu kucaklar veya sarılırım.	1	2	3	4	5
10. Çocuğuma, davranışlarının sonuçlarını açıklarım (örneğin; birisine vurursa onun canı acır veya sıcak tencereye dokunursa eli yanar gibi)	1	2	3	4	5
11. Çocuğum, yanlış davrandığında ona bağırırım.	1	2	3	4	5
12. Çocuğuma bazı şeylerin neden gerekli olduğunu açıklamaya çalışırım.	1	2	3	4	5

13. Çocuğuma, onun beni ne kadar mutlu ettiğini söylerim.	1	2	3	4	5
14. Çocuğum yanlış davrandığında fazla açıklama yapmadan, onu yanımdan uzaklaştırırım.	1	2	3	4	5
15. Çocuğumun, kendisine söyleneni tartışmasız yapmasını isterim.	1	2	3	4	5
16. Çocuğumla, günlük konuşmalar sırasında insanların nasıl hissettiği hakkında konuşuruz.	1	2	3	4	5
17. Çocuğumla benim, sıcak ve çok yakın olduğumuz anlar vardır.	1	2	3	4	5
18. Yanlış davrandığı zaman çocuğuma, sevdiği bir şeyi yasaklarım (Televizyon seyretmek ya da arkadaşlarıyla oynamak gibi).	1	2	3	4	5
19. Çocuğumu dinlemek ve onunla bir şeyler yapmaktan zevk alırım.	1	2	3	4	5
20. Çocuğuma, kurallara neden uyması gerektiğini açıklarım.	1	2	3	4	5
21. Canımı sıktığı zaman, kendimi çocuğumdan uzaklaştırırım.	1	2	3	4	5
22. Çocuğumun canını sıkan/mutlu eden olaylar olduğunda hislerini benimle paylaşmasını isterim, onunla bu konuda konuşurum.	1	2	3	4	5
23. Çok kötü davrandığında, çocuğuma fiziksel ceza veririm; örnek, tokat atarım.	1	2	3	4	5
24. Çocuğuma, neden cezalandırıldığını veya kısıtlandığını açıklarım.	1	2	3	4	5
25. Çocuğumu kucaklamayı ve öpmeyi severim.	1	2	3	4	5
26. Çocuğumun davranışını düzeltmek için ona fiziksel ceza veririm (örneğin: sarsarım, vururum, çimdik atarım).	1	2	3	4	5
27. Çocuğuma, kuralların nedenini açıklarım.	1	2	3	4	5

28. Çocuğum mutlu olduğunda da, endişeli olduğunda da kendimi ona yakın hissedirim.	1	2	3	4	5
29. Çocuğum itaatkâr davranmadığı zaman, ona tokat atarım.	1	2	3	4	5
30. Çocuğum yanlış davrandığı zaman, onunla mantıklı bir şekilde konuşur ve olayın üzerinden geçerim.	1	2	3	4	5
31. Çocuğumla şakalaşır ve oyun oynarım.	1	2	3	4	5
32. Çocuğum itiraz etse bile, önüne koyduğum yemeği sonuna kadar yemesini sağlarım.	1	2	3	4	5
33. Çocuğum birini üzdüğü zaman bu olayın nedenleri ve sonuçları hakkında konuşuruz.	1	2	3	4	5

Lütfen tüm soruları yanıtladığınızdan emin olunuz.

## Appendix E

## ANNE DUYGU DURUM ÖLÇEĞİ

Aşağıda kişilerin ruh durumlarını ifade ederken kullandıkları bazı cümleler verilmiştir. Her madde, bir çeşit ruh durumunu anlatmaktadır. Her maddede o durumun derecesini belirleyen 4 seçenek vardır. Lütfen bu seçenekleri dikkatle okuyunuz. Son bir hafta içindeki (şu an dahil) kendi ruh durumunuzu göz önünde bulundurarak, size en uygun olan ifadeyi işaretleyiniz.

1.

- a) Kendimi üzgün hissetmiyorum.
- b) Kendimi üzgün hissediyorum.
- c) Her zaman için üzgünüm ve kendimi bu duygudan kurtaramıyorum.
- d) Öylesine üzgün ve mutsuzum ki dayanamıyorum.

2.

- a) Gelecekte umutsuz değilim.
- b) Gelecek konusunda umutsuzum.
- c) Gelecekte beklediğim hiçbir şey yok.
- d) Benim için gelecek olmadığı gibi bu durum düzelmeyecek.

3.

- a) Kendimi başarısız görmüyorum.
- b) Herkesten daha fazla başarısızlıklarım oldu sayılır.
- c) Geriye dönüp baktığımda, pek çok başarısızlıklarım olduğunu görüyorum.
- d) Kendimi bir insan olarak tümüyle başarısız görüyorum.

4.

- a) Her şeyden eskisi kadar zevk alabiliyorum.
- b) Her şeyden eskisi kadar zevk alamıyorum.
- c) Artık hiçbir şeyden gerçek bir zevk alamıyorum.
- d) Beni doyan hiçbir şey yok. Her şey çok can sıkıcı.

5.

- a) Kendimi suçlu hissetmiyorum.
- b) Arada bir kendimi suçlu hissettiğim oluyor.
- c) Kendimi çoğunlukla suçlu hissediyorum.
- d) Kendimi her an için suçlu hissediyorum.

6.

- a) Cezalandırılıyormuşum gibi duygular içinde değilim.
- b) Sanki, bazı şeyler için cezalandırılabilmişim gibi duygular içindeyim.
- c) Cezalandırılacakmışım gibi duygular yaşıyorum.
- d) Bazı şeyler için cezalandırılıyorum.

7.

- a) Kendimi hayal kırıklığına uğratmadım.
- b) Kendimi hayal kırıklığına uğrattım.
- c) Kendimden hiç hoşlanmıyorum.
- d) Kendimden nefret ediyorum.

8.

- a) Kendimi diğer insanlardan daha kötü durumda görmüyorum.
- b) Kendimi zayıflıklarım ve hatalarım için eleştiriyorum.
- c) Kendimi hatalarım için her zaman suçluyorum.
- d) Her kötü olayda kendimi suçluyorum.

9.

- a) Kendimi öldürmek gibi düşüncelerim yok.
- b) Bazen, kendimi öldürmeyi düşünüyorum ama böyle bir şeyi yapamam.
- c) Kendimi öldürebilmeyi çok isterdim.
- d) Eğer fırsatımı bulursam kendimi öldürürüm.

10.

- a) Herkesten daha fazla ağladığımı sanmıyorum.
- b) Eskisine göre şimdilerde daha çok ağlıyorum.
- c) Şimdilerde her an ağlıyorum.
- d) Eskiden ağlayabilirdim. şimdilerde istesem de ağlayamıyorum.

**11.**

- a) Eskisine göre daha sinirli veya tedirgin sayılmam.
- b) Her zamankinden biraz daha fazla tedirginim.
- c) Çoğu zaman sinirli ve tedirginim.
- d) Şimdilerde her an için tedirgin ve sinirliyim.

**12.**

- a) Diğer insanlara karşı ilgimi kaybetmedim.
- b) Eskisine göre insanlarla daha az ilgiliyim.
- c) Diğer insanlara karşı ilgimin çoğunu kaybettim.
- d) Diğer insanlara karşı hiç ilgim kalmadı.

**13.**

- a) Eskisi gibi rahat ve kolay kararlar verebiliyorum.
- b) Eskisine kıyasla, şimdilerde karar vermeyi daha çok erteliyorum.
- c) Eskisine göre, karar vermekte oldukça güçlük çekiyorum.
- d) Artık hiç karar veremiyorum.

**14.**

- a) Eskisinden daha kötü bir dış görünüşüm olduğunu sanmıyorum.
- b) Sanki yaşlanmış ve çekiciliğimi kaybetmişim gibi düşünüyorum ve üzülüyorum.
- c) Dış görünüşümde artık değiştirilmesi mümkün olmayan ve beni çirkinleştiren değişiklikler olduğunu hissediyorum.
- d) Çok çirkin olduğumu düşünüyorum.

**15.**

- a) Eskisi kadar iyi çalışabiliyorum.
- b) Bir işe başlayabilmek için eskisine göre daha fazla çaba harcıyorum.
- c) Ne iş olursa olsun, yapabilmek için kendimi çok zorluyorum.
- d) Hiç çalışmıyorum.

**16.**

- a) Eskisi kadar rahat ve kolay uyuyabiliyorum.
- b) Şimdilerde eskisi kadar kolay ve rahat uyuyamıyorum.
- c) Eskisine göre 1 veya 2 saat erken uyanıyor ve tekrar uyumakta güçlük çekiyorum.
- d) Eskisine göre çok erken uyanıyor ve tekrar uyuyamıyorum.

**17.**

- a) Eskisine göre daha çabuk yorulduğumu sanmıyorum.
- b) Eskisinden daha çabuk ve kolay yoruluyorum.
- c) Şimdilerde neredeyse her şeyden kolay ve çabuk yoruluyorum.
- d) Artık hiçbir şey yapamayacak kadar yoruluyorum.

**18.**

- a) İştahım eskisinden pek farklı değil.
- b) İştahım eskisi kadar iyi değil.
- c) Şimdilerde İştahım epey kötü.
- d) Artık hiç İştahım yok.

**19.**

- a) Son zamanlarda pek kilo kaybettiğimi sanmıyorum.
- b) Son zamanlarda istemediğim halde iki buçuk kilodan fazla kaybettim.
- c) Son zamanlarda beş kilodan fazla kaybettim.
- d) Son zamanlarda yedi buçuk kilodan fazla kaybettim.

**20.**

- a) Sağlığım beni pek endişelendirmiyor.
- b) Son zamanlarda ağrı, sızı, mide bozukluğu, kabızlık gibi sıkıntılarım var.
- c) Ağrı, sızı gibi bu sıkıntılarım beni epey endişelendirdiği için başka şeyleri düşünmek zor geliyor.
- d) Bu tür sıkıntılar beni öylesine endişelendiriyor ki, artık başka şeyleri düşünmüyorum.

**21.**

- a) Son zamanlarda cinsel yaşamımda dikkatimi çeken bir şey yok.
- b) Eskisine göre cinsel konularla daha az ilgileniyorum.
- c) Şimdilerde cinsellikle pek ilgili değilim.
- d) Hiç cinsel istek duymuyorum.



**Appendix F****YÖNETİCİ İŞLEVLER DEĞERLENDİRMELERİ****2. Ritim Tutma**

Araştırmacı: “Şimdi başka bir oyuna geçelim. Bu kalemleri tıklararak bir ritim oyunu oynayacağız. Öncelikle bu kalemlerden hangisini istersin?”

“Şimdi eğer masaya böyle bir kere tıklarırsam (tıklar ve bitirince kalemi havada tutar), senin iki kere tıklarmanı istiyorum (Çocuğun doğru yapmasını sağlar). Aferin, aynen böyle” (Tebessüm).

“Eğer böyle iki kere tıklarırsam (iki defa tıklar), senin sadece bir kere tıklarmanı istiyorum (Çocuğun doğru yapmasını sağlar). Aferin, aynen böyle” (Tebessüm).

İki kez tek ve çift tıklar alma alıştırmaları yaparlar. Araştırmacı, çocuğun doğru yapmasına yardımcı olur, ona ne kadar iyi olduğu konusunda olumlu geribildirim verir, heyecan gösterir: “Harika! Sen bu oyunu nasıl oynayacağını biliyorsun. Haydi, şimdi gerçekten oynayalım.”

Bir İki İki Bir İki Bir

Araştırmacı: “Benimle çok güzel oynuyorsun hadi biraz daha oynayalım. Unutma ben bir kere tıklarınca sen iki kere, ben iki kere tıklarınca sen bir kere tıklarıyorsun.”

İki Bir Bir İki Bir İki

Araştırmacı: “Aferin... Hadi biraz daha zorlaştıralım bu oyunu. Bakalım daha zor bir ritmi oynayabilecek misin? Şimdi, eğer böyle bir kere tıklarırsam (tıklar), senin sadece iki kere tıklarmanı istiyorum (Çocuğun doğru yapmasını sağlar), iki kere tıklarırsam (tıklar) senin bir defa tıklarmanı istiyorum (Çocuğun doğru yapmasını sağlar), ama 3 kere tıklarırsam senin hiiiiiiç tıklarmanı istemiyorum. Hadi bir deneme yapalım. (Bir İki Üç deneme yaparlar). “Aferin, sen bu oyunu öğrenmişsin”.

Bir İki Üç İki Bir Üç

Arařtırmacı: “Benimle çok güzel oynuyorsun hadi biraz daha oynayalım. Unutma ben bir kere tıkladınca sen iki kere, ben iki kere tıkladınca sen bir kere tıkladıyorsun, ben üç kere tıkladınca, sen hiç tıkladılmıyorsun.”

Üç İki Bir İki Bir Üç

Arařtırmacı: “Aferin çok güzel oynadın benimle.”

NOT: Çocuk eđer “Kaç tane vurdun hatırlamadım/anlamadım” derse “Olabilir, devam edelim” diyoruz; eđer “Kuralı hiç hatırlamıyorum” derse kuralı hatırlatıyoruz.

## Appendix G

## DUYGU BİLGİSİ TESTİ

**Gerekli Malzemeler: Duygu bilgisi videoları; Dört yüz ifadesi; 2 çocuk şekli (Ali/Ayşe)**

Dört farklı duygunun (mutlu, üzgün, kızgın, korkmuş) olduğu testte, öncelikli olarak her bir duygu için çocuğun bilgisi incelenir, sonrasında da öğretme bölümü yapılır.

## İFADE EDİCİ DUYGU

**Şimdi, bu oyunda sana farklı yüzler göstereceğim. Ve bu yüzlerle ilgili sorular soracağım.**

[Yüz kartları, **mutlu-üzgün-kızgın-korkmuş** olacak biçimde yan yana dizilir.]

**Bak, burada 4 tane kart var. Peki şimdi bana söyler misin bu nasıl hissediyor?**

[Kartları sırasıyla göstererek çocuğa nasıl ifade ettiğini söyletin. Doğru cevap için 2 puan, aynı değerdeki yanlış duyguya 1 puan, karşıt değerdeki duyguya ise 0 puan verin. Ayrıca muhakkak çocuğun cevabını aşağıda yer alan ilgili bölüme yazın.]

MUTLU	ÜZGÜN	KIZGIN	KORKMUŞ

[Eğer çocuk duygu yerine davranış söylerse (örneğin, kızgın için bağıryor derse) **PEKİ NASIL HİSSEDİYOR?** diye tekrar sorulur.]

## ALICI DUYGU

**Hadi şimdi kartları karıştırıyoruz.**

[Kartları rastgele karıştırıp tekrar dizin.]

**Peki, şimdi bana “mutlu” suratı göster bakalım.** [Cevabı puanlandırın.]

**Peki, şimdi bana “üzgün” suratı göster bakalım.** [Cevabı puanlandırın.]

**Peki, şimdi bana “kızgın” suratı göster bakalım.** [Cevabı puanlandırın.]

**Peki, şimdi bana “korkmuş” suratı göster bakalım.** [Cevabı puanlandırın.]

[Doğru cevap için 2 puan, aynı değerdeki yanlış duyguya 1 puan, karşıt değerdeki duyguya ise 0 puan verilir.]

MUTLU	ÜZGÜN	KIZGIN	KORKMUŞ

## ÖĞRETME BÖLÜMÜ

**Burada 4 tane farklı yüz var ve her biri farklı bir duyguyu gösteriyor. Bak bu yüz nasıl hissediyor?**

[Suratlardaki her duygu, yüz ve seslendirme ile canlandırılır. Mesela, mutlu ifadesinde suratla gülme hakimken, korkmuş ifadesinde korku ifadesine hızlı nefes alışverişler eşlik eder.]

[Kartları sırayla gösterip çocuğun nasıl hissettiğini cevaplamasını beklenir. Doğru cevaplamazsa, düzeltilir. Mesela, çocuk mutlu ifadesi için üzgün diyebilir. Bu ifade mutlu hissediyor diye düzeltilir. Ya da çocuk gülüyor diyebilir. Peki nasıl hissediyor diyerek tekrar sorulur.]

[Eğer çocuk tüm duyguları ilk seferde doğru adlandırır, direkt teste geçilir. Ancak duygulardan birini bile adlandıramazsa, doğru söylemediği duygu söylenir, dört kart tamamlanır. Örneğin, mutlu-üzgün-kızgın-korkmuş sıralamasında üzgün kartı için “ağlamaklı” derse, “peki nasıl hissediyor, bana duygunun adını söyler misin?” diye sorulur. Eğer “mutsuz vb.” Gibi bir cevap verirse, “bu yüz üzgün hissediyor” deyip, kızgın ve ardından korkmuş kartına geçilir. Dört kart tamamlandığında, 2. tekrara geçilir. Eğer 2. tekrarda hepsini doğru söylerse direkt teste geçilir. Eğer burada da hata yaparsa, 3. tekrara geçilir. 3. tekrar son turdur. Burada hata olursa tekrar devam edilmez, direkt teste geçilir. Amaç, 3. tekrar sonunda her şeyi öğrenmesidir.]

**Şimdi sana bilgisayardan bazı hikayeler izleteceğim. Bu hikayelerle ilgili sorular soracağım. Hadi izleyelim.**

[Dört yüz ifadesini bilgisayarın önüne mutlu-üzgün-kızgın-korkmuş yan yana olacak şekilde dizilir. Çocuğun cinsiyetine göre kullanılacak Ali ya da Ayşe karakterini ise çocuğun görmeyeceği şekilde bilgisayarın yanına yerleştirilir.]

[Kız çocuk için Ayşe hikayesi, erkek çocuk için ise Ali hikayesini açılır.]

[Toplamda 8 hikaye vardır. Her hikayeden sonra sorulacak sorular sırasıyla şu şekilde olmalıdır:]

**Bak, AYŞE/ALİ şimdi burada. Bu hikayede AYŞE/ALİ nasıl hissediyor, söyle bakalım?**  
[Eğer gösterirse] **Şimdi bir de söyle bakalım, duyayım.**

**Peki, AYŞE/ALİ’ye bir yüz ver bakalım. (Anlamazsa, Ayşe bu hikayede nasıl hissediyor, Ayşe’ye bir yüz ver bakalım?)**

[Burada dizilen dört yüz ifadesinden bir tanesini göstermesi beklenir.]

İfade edici: “Nasıl hissediyor? Söyle bakalım.”				Alıcı: “Bana _____ suratı göster bakalım.”			
Mutlu	Üzgün	Kızgın	Korkmuş	Mutlu	Üzgün	Kızgın	Korkmuş
<p><b>Öğretme:</b> “Burada 4 tane farklı yüz var ve her biri farklı bir duyguyu gösteriyor.” diyerek yüzleri ifade eden duygular beden dili, yüz ifadesi ve tonlama kullanarak çocuğa öğretilir (mutlu, üzgün, kızgın, korkmuş). Öğretme yapıldı mı?</p>							
<p><b>1. MUTLU:</b> AYŞE/ALİ: “Merhaba! Ben Ayşe /Ali. Bu benim erkek/kız kardeşim. Aaa! Bana dondurma verdi. Mmmm.. (MUTLU) Sözel cevap: _____ Seçtiği yüz: Mutlu: _____ Üzgün: _____ Kızgın: _____ Korkmuş: _____</p>				<p><b>5. MUTLU</b> AYŞE/ALİ:” Annem geliyor. Beni hayvanat bahçesine götüreceksin. Hadi AYŞE/ALİ hayvanları görmeye gidelim. Filleri severim. Hadi gidiyoruz. (MUTLU) Sözel cevap: _____ Seçtiği yüz: Mutlu: _____ Üzgün: _____ Kızgın: _____ Korkmuş: _____</p>			
<p><b>2. ÜZGÜN:</b> AYŞE/ALİ: “Eve gidiyoruz.” KARDEŞ: “Seni yere düşürecekim!!” AYŞE/ALİ: Ahh!! Acıdı!!Ahh!! (MUTSUZ) Sözel cevap: _____ Seçtiği yüz: Mutlu: _____ Üzgün: _____ Kızgın: _____ Korkmuş: _____</p>				<p><b>6. ÜZGÜN</b> AYŞE/ALİ: “Bisiklete bineceğim. Bisikletim nerede? Birisini almış! Yok! Birisi onu çalmış!” (ÜZGÜN) Sözel cevap: _____ Seçtiği yüz: Mutlu: _____ Üzgün: _____ Kızgın: _____ Korkmuş: _____</p>			
<p><b>3. KIZGIN:</b> AYŞE/ALİ: “Bu kuleyi az önce yaptım. Onu gerçekten çok beğendim. Güzel görün müyor mu?” KARDEŞ: “Hayır! Bence iğrenç. Onu yıkacağım! ( yıkılma sesi)” AYŞE/ALİ: (KIZGIN) Sözel cevap: _____ Seçtiği yüz: Mutlu: _____ Üzgün: _____ Kızgın: _____ Korkmuş: _____</p>				<p><b>7. KORKMUŞ:</b> AYŞE/ALİ Yalnızdırlar. AYŞE/ALİ: “Burası gerçekten çok karanlık. Etrafta kimse yok. (korkulu nefes alma) Sözel cevap: _____ Seçtiği yüz: Mutlu: _____ Üzgün: _____ Kızgın: _____ Korkmuş: _____</p>			

**4. KORKMUŞ**

AYŞE/ALİ: “ŞŞŞŞŞŞ!! AYŞE/ALİ uyuyor.”

AYŞE/ALİ: “ Ooo rüya görüyorum. Beni bir kaplan kovalıyor!!!! Aaa hayır!!” (KORKMUŞ)

Sözel cevap: \_\_\_\_\_

Seçtiği yüz: Mutlu: \_\_\_\_\_ Üzgün: \_\_\_\_\_ Kızgın: \_\_\_\_\_

Korkmuş: \_\_\_\_\_

**8. KIZGIN**

AYŞE/ALİ: “Lahanayı (Ispanak olarak değiştirilebilir) hiç sevmem”

Anne: “Yemek zorundasın, o kadar!”

AYŞE/ALİ: ! Hayır yaa! Hayır! (MAD-inatçılık yaparak kızmak)

Sözel cevap: \_\_\_\_\_

Seçtiği yüz: Mutlu: \_\_\_\_\_ Üzgün: \_\_\_\_\_ Kızgın: \_\_\_\_\_

Korkmuş: \_\_\_\_\_

