Summary
Examination of Delay of Gratification of Preschool Children in Relation to Parenting Attitudes and Gender

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Self-regulation is one of the major skills in early childhood (Zimmerman, 2008). Studies addressing the role of parent-child interaction on self-regulation indicate that parental sensitivity and controlling, and behavioural and communication patterns have an impact on the child’s ability to regulate emotions and behaviours (Kopp, 1982; Maccoby & Martin, 1983; Mittal, Russell, Britner, and Peake, 2013).

Self-regulation and self-control, two related concepts, are sometimes used interchangeably by researchers. However, self-regulation is used as an umbrella term that includes self-control, whereas self-control is considered a more goal-directed, deliberate, and conscious altering of the self (Baumeister, Vohs & Tice, 2007). As a component of self-control, the variable of this study, “delay of gratification” is also defined as an early form of self-regulation by Funder, Block, and Block (1983). Beginning with the groundbreaking study of Mischel (1958, 2014) and then the studies of his colleagues (Casey et al., 2011; Mischel, Ebbesen, and Rascol-Geiss, 1972; Mischel, Shoda, and Rodriguez, 1989; Mischel et al., 2010; Shoda, Mischel, and Peake, 1990), many studies in the literature have found that the capacity to delay immediate gratification is an important variable to predict social and academic skills, personality traits, impulsivity or aggressive behaviours throughout the life-span (Calkins & Fox, 2002; Derryberry, 2002; Lonigan et al., 2017; Russell, Lee, Spieker, and Oxford, 2016; Stenseng, Belsky, Skalicka, and Wichstrom, 2015). For instance, some studies have shown that children who can delay their gratification in order to reach future goals in preschool years have better cognitive, emotional, and social skills during adolescence (Funder et al., 1983; Herzberger & Dweck, 1978; Mittal et al., 2013; Price-Williams & Ramirez, 1974), and have better adjustment in adulthood (Mischel et al., 2010).

There are studies in the literature addressing the relationship between certain characteristics of children such as age, gender, academic success, impulsivity or aggression, and the delay of gratification behaviour (Herzberger & Dweck, 1978; Hong, Doan, Lopez, and Evans, 2017; Jacobsen, Huss, Fendrich, Kruesi, and Ziegenhain, 1997; Mittal et al., 2013; Mischel et al., 1989; Price-Williams & Ramirez, 1974; Poland, Monks, and Tsermentseli, 2015; O’Toole, Monks, and Tsermentseli, 2017). Developmentally the ability to delay the gratification increases with age (Mischel et al., 1989); however, individual differences in the delay of gratification remain similar throughout of life (Ayduk et al., 2000). A controversial finding about the delay ability is that whether there is a gender difference in children’s delay of gratification or not. Although some studies have found a gender difference in delaying gratification in favour of girls (Bjorklund & Kipp, 1996; Hong et al., 2017; Jacobsen, 1998), others have reported that there is no gender difference in children’s delay of gratification (Cemore & Herwig, 2005; Price-Williams & Ramirez, 1974; Silverman, 2003). Some authors suggested that there were methodological problems in certain studies revealing a gender difference (Silverman, 2003). Due to these arguments in the literature, gender was considered as a variable in this study to test the delay of gratification of Turkish preschoolers.

Parents are an important source of the socialization process for pre-school children. The relationship between parenting and children’s developmental outcomes has been broadly studied in the literature, especially focusing on Baumrind’s (1966; 1971b) “warmth/responsiveness” and “control/monitoring” dimensions. Baumrind (1966) described three basic types of parenting: authoritative, authoritarian, and permissive. Maccoby and Martin (1983) introduced a fourth type in their study as rejecting/
neglecting parenting. There is a consistent finding in the literature that warmth/responsiveness parenting across cultures is an important factor for children’s well-being and behavioural adjustment (Abu Taleb, 2013; Baumrind, 1971a, 1971b; Bornstein, 2012; Cheah, Leung, Tahseen, and Schultz, 2009; Healey, Flory, Miller, and Halperin, 2011; Maccoby and Martin, 1983). Democratic parenting, which involves not only warmth and sensitivity but also age appropriate controlling and demands from the child, is consistently related to self-reliant, self-controlled, and explorative children. Studies based on cultural differences on authoritarian parenting have controversial results on children’s developmental outcomes (Chao, 2001; Deater-Deckard et al., 2011; Kağıtçıbaşı, 2005, 2007). Authoritarian parenting, characterized as low sensitivity, harsh discipline and high psychological controlling in the west, has been linked to children’s impaired cognitive abilities (Pears & Moses, 2003), and aggressive (Baumrind, 1967; Hart, Nelson, Robinson, Olsen, and McNeilly-Choque, 1998) and internalizing behaviors (Williams et al., 2009). However, authoritarian parenting in some cultures is defined as controlling with strict rules and demanding obedience, but also as being warm and receptive to children’s reactions (e.g., Chao, 2001; Deater-Deckard et al., 2011; Kağıtçıbaşı, 2007). The literature shed light on this issue through a number of consistent results indicating that children of parents who show low sensitivity, high control, and demandingness, and harsh discipline have more externalizing and internalizing problems, low self-esteem, and high anxiety. Similarly, permissive parenting is also found to be related to social incompetency, problematic peer relations, and externalizing problems of children (Barber & Olsen, 1997; Darling & Steinberg, 1993).

Parenting attitude is an important social factor for the child’s capacity to regulate his/her emotional and behavioural responses in accordance with societal demands. Many studies in the literature have pointed out that parental warmth and responsiveness are related to longer delay of gratification in children (e.g., Dornbusch, Ritter, Leiderman, Roberts, and Fraleigh, 1987; Makkar & Arya, 2017; Mauro & Harris, 2000; Mischel, Shoda, and Peake, 1988; Mittal et al., 2013; Russell, Londhe, and Britner, 2013). Furthermore, children whose parents have age-appropriate demands and controlling show high effortful control (Houck & LeCuyer-Maus, 2004; Kochanska, Murray, and Harlan, 2000), while parents’ harsh physical punishment, low warmth and responsiveness were found to be related to children’s low effortful control (Moilanen, Shaw, Dishion, Gardner & Wilson, 2010).

Although there are many theses and researches on self-regulation and self-control in Turkey (e.g., Batum & Yaşmurlu, 2007; Ertürk, 2013; Harma, 2008; Metin, 2010; Metin Orta et al., 2013; Ulaşan-Özgüle, 2011), there are few studies focusing specifically on the delay of gratification (Hasçuhadar & Çaşkun, 2018; Kelç & Alisinaoğlu, 2018) in the literature in Turkey. Thus, this study aims to analyze the differences in the delay of gratification behaviours of pre-school children (36-60 months of age) depending on mothers’ parenting attitudes and child gender in the Turkish sample. Since even the cultural aspects of parenting and child-rearing are changing according to the sociohistorical process, this study provides updated information to the literature by examining the delay of gratification behaviours and their relation to parenting attitudes in Turkey.

Method

Participants

Participants of the study consisted of 73 mothers and their pre-school children (35 female, 38 male, \(M_{\text{age}} = 49.68\) months, \(SD = 7.94\)) who live in Ankara. Most of the mothers, whose ages ranged from 18 to 45 years-old, graduated from high school (\(N = 26\)) or university (\(N = 34\)) (Table 1).

Measures and Procedure

The mothers were asked to complete a self-administered questionnaire, including the measures of Parents Attitude Scale (Karabulut Demir & Şendil, 2008) and Demographic Information Form. As a dependent variable, Mischel and Ebbesen’s (1970) “Delay of Gratification Paradigm” task was used to measure the delay length of three critical behaviours (touching, tasting, and eating). Each child was given the instruction that either they wait for the researcher to return the room and have two marshmallows, or they ring the bell and let the researcher come back to the room and get one marshmallow. The children were video-recorded during the procedure, and two researchers coded the delay periods of three behaviours independently. The children were coded as the first, the second and the third as to whether they touched, tasted or ate the marshmallow between 0-4.59 minutes, 5-9.59 minutes or within the last 10-15 minutes, respectively. The results of the interrater reliability for these three behaviours indicated high correlation coefficients (\(r = 1.00\) for touching, \(r = .97\) for tasting, and \(r = .98\) for eating). The mothers’ parenting attitudes were determined by computing scores for each subscale (authoritarian, democratic, overprotective, and permissive) in the Parents Attitude Scale (Karabulut Demir & Şendil, 2008). After the standardization of the scores of each parenting subscale, the median score of each dimension was computed. Then, each mother was assigned to a parenting attitude category using the criteria that if she had
a higher score than the median score on the authoritarian subscale and a lower score than the median score on the other three subscales, she was categorized as an authoritarian mother. As a result of this assignment, there were 19 democratic, 19 authoritarian, 17 overprotective, and 18 permissive mothers.

**Results**

A 4 (Parental Attitudes) X 2 (Child Gender) MANOVA was performed on the touching, tasting and eating behaviours as dependent variables. The results indicated that mothers’ parenting attitudes had main effect on dependent variables (Hotelling’s Trace = .37, $F_{4,185} = 2.57, p < .01, \eta^2 = .11$), and there is no main effect for child gender (Hotelling’s Trace = .03, $F_{4,185} = .53, p > .05, \eta^2 = .03$) or interaction effect between child gender and mothers’ parenting attitudes (Hotelling’s Trace = .02, $F_{4,185} = 1.14, p > .05, \eta^2 = .05$).

The analyzes revealed that there is no significant difference between children’s touching behaviours depending on the mothers’ parenting type ($F_{3,65} = 2.08, p = .08, \eta^2 = .09$). Furthermore, the delay of tasting ($F_{3,65} = 6.06, p = .001, \eta^2 = .22$) and eating behaviours ($F_{3,65} = 5.39, p = .002, \eta^2 = .20$) differed according to the parenting attitudes (Table 2). For the tasting behaviour, the children of the democratic ($M = 10.28, SD = 1.31, p = .008$) and authoritarian mothers ($M = 10.28, SD = 1.28, p = .002$) had waited longer than the children of the permissive mothers ($M = 3.39, SD = 1.35$). Consistent with this finding, the children of the democratic ($M = 13.38, SD = 1.31, p = .002$) and authoritarian mothers ($M = 11.62, SD = 1.28, p = .004$) waited longer to eat the marshmallow than the children of the permissive mothers ($M = 6.49, SD = 1.35$).

**Discussion**

In the present study, the delay of gratification behaviours of pre-school children was examined in relation with mothers’ parenting attitudes and child gender. The results suggested that there is no gender difference on the delay of gratification behaviours of preschoolers, which is consistent with some previous studies in the literature (Cemore & Herwing, 2005; Price-Williams & Ramirez, 1974). The result of the current study has supported the researches that found no gender difference. However, a recent study (Hong et al., 2017) showed that girls have a longer delay of gratification than boys, and child’s activity level mediated between gender and the delay of gratification. For future studies, some other mediator variables, such as the child’s fantasy play ability, should be considered to understand the gender difference.

The significant findings of this study pointed out that preschoolers whose mothers have democratic or authoritarian attitudes delay their gratification longer than the children of permissive mothers to reach a more desirable reward in terms of tasting or eating behaviours. Consistent with the literature (e.g., Buri, 1998; Dornbusch et al., 1987; Makkar & Arya, 2017; Portes, Dunham, and Williams, 1986), democratic parenting has found to be related to children’s controlling themselves for a preferable reward. Although the findings regarding the children of the authoritarian mothers are contradictory with some of the findings in the literature (e.g., Cabrera, Shannon, and Tamis-LeMonda, 2007; Houck & Le Cuyer-Maus, 2004), it was concluded that the authoritarian mothers in this sample could be defined as authoritarian-democratic depending on the culture (e.g., Chao, 1994; Kağıtçıbaş, 2005). As previously mentioned by many authors (Chao, 1994; Kağıtçıbaş, 2005; Metin Orta & Sümer, 2016), cultural expectations and interpretations about parenting practices are related to different child developmental outcomes. The authoritarian mothers in the current study have higher expectations and demandingness from their children, but they also display high responsiveness and warmth to their children. Therefore, both democratic and authoritarian mothers’ children receive appropriate parenting so that they learn to regulate their behaviours according to the social demands. Finally, in parallel with the earlier studies, findings of this study supported that permissive parenting is related to the shortest delay of pre-schoolers’ tasting or eating behaviours (Buri, 1998; Dornbusch et al., 1987; Mauro & Harris, 2000). The participant children’s delay duration for touching behavior did not differ depending on the mothers’ parenting attitudes. It was considered that even though it is not permitted to take or eat, mothers may be allowing their children to touch what they wonder and using it as a control strategy. Although such strategies are not found as effective on delaying gratification (Mauro & Harris, 2000; Russell et al., 2013), the children of democratic and authoritarian mothers’ children were still more successful in waiting for the grand prize.

In conclusion, the present study demonstrated that mothers’ positive parenting attitudes are related to pre-schoolers’ longer delay of gratification in the Turkish sample. However, contrary to the results of some studies, the findings of this study also indicated that authoritarian parenting has a positive contribution to the delaying of gratification behaviour in our culture. While it is acknowledged that there are some limitations of this study regarding the sample size and measurement tools, its scope and findings are believed to be encouraging for further studies.