American Journal on Intellectual and Developmental Disabilities Parenting Styles in Enhancing Self-Determination of Children with Intellectual and Developmental Disabilities --Manuscript Draft--

Manuscript Number:	AJIDD-D-21-00086R1
Article Type:	Research Report
Keywords:	children with intellectual and developmental disabilities, families, overprotectiveness, parenting styles and practices, self-determination
Corresponding Author:	Bekir Fatih Meral, Ph.D. Sakarya University & University of Kansas Lawrence, Kansas UNITED STATES
First Author:	Bekir Fatih Meral, Ph.D.
Order of Authors:	Bekir Fatih Meral, Ph.D.
	Michael L. Wehmeyer
	Susan B. Palmer, Ph.D.
	Anil Bilge Ruh, MA
	Engin Yilmaz, Ph.D.
Manuscript Region of Origin:	TURKEY
Abstract:	Parenting styles and practices are crucial in promoting the self-determination of children. The purpose of the current study was to investigate the role of parenting styles and practices in enhancing the self-determination of children with/without IDD. The present study was carried out with a sample of 243 parents of children with/without IDD in Turkey. The results indicated that an authoritative parenting style and autonomy-supportive parenting practices positively affect the degree of child self-determination, while permissive and overprotective parenting practices may limit child opportunities in fostering self-determination. The study results also showed that urbanization, higher income, and higher education level of parents positively impacted the degree of child self-determination. Parents of typically developing children when compared with children with ID and ASD. On the other hand, parents of children with mild disabilities reported a higher level of self-determination than both children with moderate and severe disabilities. The results were discussed within the cultural context of the current sample.

1

PARENTING STYLES & SELF-DETERMINATION

Abstract

Parenting styles and practices are crucial in promoting the self-determination of children. The purpose of the current study was to investigate the role of parenting styles and practices in enhancing the self-determination of children with/without IDD. The present study was carried out with a sample of 243 parents of children with/without IDD in Turkey. The results indicated that an authoritative parenting style and autonomy-supportive parenting practices positively affect the degree of child self-determination, while permissive and overprotective parenting practices may limit child opportunities in fostering self-determination. The study results also showed that urbanization, higher income, and higher education level of parents positively impacted the degree of child self-determination. Parents of typically developing children when compared with children with ID and ASD. On the other hand, parents of children with mild disabilities reported a higher level of self-determination than both children with moderate and severe disabilities. The results were discussed within the cultural context of the current sample.

Keywords: children with intellectual and developmental disabilities, families, overprotectiveness, parenting styles and practices, self-determination.

Parenting Styles and Practices in Enhancing Self-Determination of Children with Intellectual and Developmental Disabilities

Parenting styles and practices play a pivotal role in the development of the self-determination of children with intellectual and developmental disabilities (IDD). Self-determination refers to the volitional actions of a person within a societal context (Shogren et al., 2015; Wehmeyer, 2005, Wehmeyer et al., 2011) and such social contexts vary across the world from individualistic to collectivistic. Such social norms and cultural contexts play an important role in childrearing practices and the degree to which children have opportunities to learn to be self-determined. Parenting styles and practices across cultures will vary regarding the degree of autonomy or dependency creating opportunities that are part of the environment (Erwin & Schreiber, 1999; Jensen, 2010; Shogren & Turnbull, 2006; Shogren, 2011).

Although the parental styles and practices might play a key role in fostering self-determination of children with IDD, such effort investigating effect of parenting in infusing self-determination skills is limited, particularly in relation to diverse cultures (Carter et al., 2013; Shogren, 2011; Shogren & Wehmeyer, 2017; Zhang, 2005; Zheng et al. 2015). In this regard, this study proposes to examine the possible effects of parenting styles and practices in promoting the self-determination of children with IDD in Turkey (Türkiye).

Self-determination is a psychological construct embodying the notions of autonomy, decision making, goal setting, and a sense of purpose within the developmental process across the life span (Deci & Ryan, 1985; Wehmeyer et al., 2017; Zhang & Benz, 2006). Enhancing self-determination is frequently a goal of disability policy, services, and support and is linked to improved quality of life of individuals with disabilities (Nota et al., 2007; Turnbull et al., 2003; Wehmeyer, 2007). For these reasons, considerable research and several intervention programs or models have been developed to enhance the self-determination of people with disabilities (e.g., Mithaug et al., 2003; Shogren et al., 2012; Wehmeyer et al., 2004). The most prominent theories or models of self-determination and self-determined action (e.g., Ryan and Deci's Self-Determination Theory, 2000; Shogren et al., Causal Agency Theory, 2015) primarily highlight the volitional and causal actions of individuals, although, Mithaug's Self-Determined Learning Theory (2003) focused on the impact of immediate environment and parents in the development of self-determination skills as well as the child's personal capacity (Garrels, 2019). Considering the development of self-determination skills are closely related to given options or opportunities by the immediate environment (Erwin et al., 2009), investigating the effect of parenting practices in fostering the self-determination of children with/without IDD is a valuable effort. In this sense, the orientation of the current study assessing parenting practices in promoting child self-determination leads to the use of the parent form of the American Institutes for Research Self-Determination Scale - Parent Form (AIR-SD-PF) which is a version of evaluation of children's self-determination from parental perspectives (Wolman et al., 1994; Mithaug et al., 2003). There is a limited opportunity when considering the options for measurement of child self-determination depending on parental aspects among self-determination scales

such as the Arc's Self-Determination Scale (Wehmeyer, 1996) or the Self-Determination Inventory (Shogren et al., 2017) in the field of IDD. Indeed, recently the most prominent and contemporary assessment tools in the IDD field are the Student Report (SDI:SR, Shogren et al., 2020) and the Adult Report (SDI:AR, Shogren et al., 2021) of the Self-Determination Inventory (SDI) depending on Causal Agency Theory (Shogren et al., 2015), which were not yet adapted to Turkish culture and still limited access to a validated version of the Parent Report of SDI (Dean et al., 2021). However, considering the ecological perspective of Mithaug's SD theory, the AIR-SD-PF has the potential to represent the role of families in fostering self-determination in the current culture. Given that parenting practices play a crucial role in supporting the foundational skills that are important to the development of self-determination, including goal setting, planning, problem-solving, expressing personal preferences, choice-making, decision-making, self-advocacy, and self-management (Palmer, 2010; Shogren et al. 2015), it stands to reason that the degree to which children are provided opportunities and support at home and in the community becomes important. As such, the role of parents in enhancing child self-determination needs to be better understood, since these foundational skills can be nurtured by adults during early childhood (Palmer et al., 2013). Although it is evident that the foundational skills leading to later self-determination are shaped by parenting styles and practices in early childhood (Erwin & Brown, 2003; Abery & Zajac, 1996), studies examining such parenting styles and practices in fostering self-determination among children with disabilities are still limited (Jensen, 2010, Carter et al., 2013; Zhang, 2005). Undoubtedly, families and parenting practices play a crucial role in the acculturation of children within the societal context as well as in addressing children's intellectual, psychological, social, emotional, and biological needs (Cuceloglu, 2002; Kooraneh & Amirsardari, 2015). Acknowledging that the child's personal characteristics and capacities have a reciprocal impact on parenting practices, parents are certainly a critical factor in enabling children to navigate and be successful in their environment and broader contexts (Abery & Zajac, 1996; Kagitcibasi, 2007). Therefore, parenting styles and practices are important factors to consider in describing the development of self-determination.

Almost every family including families with children with disabilities around the world desire to ensure that their children can become self-determined and pursue a more autonomous life. On the other hand, how self-determination is understood may vary depending on a family's culture and where they live (Chu, 2018; Kalyanpur & Harry, 2012; Shogren, 2011). Compared with Western culture, many countries within Eastern cultures, including Turkey, emphasize that personal goals or building greater autonomy should be consistent with family and cultural values and keeping family ties strong or maintaining family harmony (Chan & Chen 2011; Chu 2018; Kagitcibasi, 2007; Kalyanpur & Harry, 2012; Zhang et al. 2005). In this regard, the current cultural values and beliefs of Turkish families may influence, differently from a Western country, how self-determination is defined and promoted for children with disabilities. Indeed, the balance or tension between the universality and cultural adaptability of self-determination is indicated by some theories or conceptual frameworks. For example, Self-Determination Theory (SDT) uses the etic-emic distinction (Deci & Ryan, 2000; Reeve et al., 2018). The etic approach assumes the universal capacity of the self-determination concept in relation to an individual's experiences of autonomy, competence, and relatedness. On the other hand, the emic approach asserts the cultural adaptability of self-determination concept in a specific cultural context that is mutually related to individual characteristics or personality (Burtaverde et al., 2018). Therefore, understanding selfdetermination by combining the etic-emic approach including universal and culturally sensitive factors might be more appropriate for a better understanding of self-determination in the Turkish context (Kottak, 2006). In fact, a similar effort has been specifically conceptualized in the Turkish cultural context by the "Autonomous-related self" model, intended to explain how a child's autonomy, and a more broadly a child's self-determination, is understood within parent and child relationship based on Turkish cultural norms (Kagitcibasi, 2005, 2007). For example, this model suggests that parents support their child's autonomy in the construction of the self differently from the "ultimate autonomy" of the Western culture, while they protect relatedness between child and parent. Two prominent features of this model are the cultural interpretation of self-determination and the continuum of psychological needs between parents and a child depending on relatedness in promoting the self-determination of children. Furthermore, one of the international indicators intending to conceptualize cultural differences among countries is the "individualism index of cultural dimensions" (Hofstede, 2003). According to this index, the individualism index (IDV) values of 50 countries indicated Turkey is the 28th country on this list when ranking high to low individualism. Unsurprisingly, Western countries such as the USA, Australia, the Netherlands, and Belgium were at the top of the list. However, Turkey has a higher ranking than Latin American countries and Asian countries. Turkey is generally classified as being a collectivistic culture, but such ranks provide a clue about the cultural position of Turkey between collectivism and individualism (for an overview, see Kagitcibasi, 1994; Kagitcibasi, 2007). As people may be individualist and collectivist at the same time, similarly a country, in a national context, maybe individualist and collectivist at the same time (Green et al., 2005). Therefore, considering cultural differences is valuable in evaluating and promoting child self-determination. Probably, the most obvious appearance of cultural differences in childrearing practices and enhancing child self-determination are parenting styles and practices.

Parenting styles and practices shape the emotional bond between a parent and a child, which can vary depending on parental control and the type of authority applied by parents toward their children (Leung & Tsang Kit Man, 2014). Two important issues in considering the impacts of parenting on self-determination are parenting styles and practices in relation to parental bonding. Parenting styles have been investigated most frequently by using Baumrind's typology (Baumrind, 1967, 1991) that includes three categories of parenting style: authoritative, authoritarian, and permissive (Moilanen et al., 2014; Olivari et al., 2015). Parenting style is mainly conceptualized depending on authority type in parent-child interaction (Grolnick, 2003), and has been applied within cross-cultural samples to understand the effect of parental childrearing practices in child development (Delvecchio et al., 2020; Jensen, 2010; Olivari et al., 2015). The three basic parenting styles emphasize degrees of parental control over their children in their child rearing practices and socialization processes (Baumrind & Thompson, 2002; Delvecchio et al., 2020). *Authoritarian* parents have high control and parent in a structured manner but have low involvement in the child's activities and express less affection toward their child (Baumrind, 2013). In the authoritarian parenting style, strict parenting and punishment may lead to lower child self-esteem and the

child seeking approval before acting (Baumrind et al., 2010). The absence of explanations about the reason for an inhibition when a limit or rule is set is another characteristic of the authoritarian parenting style. Authoritarian parents, expect children to obey rules without question. On the other hand, *authoritative* parents tend to exert control through more democratic ways and show high acceptance of the child and, thus, enrich children's involvement (Olivari et al., 2015). Their responsiveness and levels of demand are established in ways that emphasize promoting the child's autonomy (Baumrind et al., 2010). Authoritative parents highly value individuality and encourage independence as well as emphasize relationships with their children (Kuppens & Ceulemans, 2019). In contrast to other parenting styles, *permissive* parents are highly responsive to their children, but they exert very low control over their children's behaviors, set few rules, and let their children regulate their own actions without interfering (Olivari et al., 2015; Palut, 2009).

Apart from parenting styles, overprotective or autonomy-supportive parenting practices based on the emotional bond between parents and children are important in providing more or fewer opportunities to foster the self-determination and other independent living skills at home and immediate environment (Ryan et al., 2006; van der Kaap-Deeder et al., 2015). Although parental bonding pointing to emotional ties among children and their parents is typically evaluated by using a lens of the child (Parker et al., 1979), parental bonding was assessed based on the proxy report from the parental perspective in the current study. *Parental overprotection or overprotective parenting practices* refer to excessive maternal or paternal protection toward the child, given the developmental stages and capacity of the child (Thomasgard et al., 1995). Some research supports the presence of higher-level parental overprotectiveness in parents of children with disabilities than among typically developing children (see Holmbeck et al., 2002). Parental overprotection has been accepted as detrimental to the development of autonomous functioning (Siqueland et al., 1996; Holmbeck et al., 1995; Parker, 1983). At the first glance, some features of overprotective parents toward their children--such as protection from harm, bad experiences, or disappointments--are accepted as typical parenting practices. However, overly broad parental overprotection detrimentally impacts a child's level of independent functioning and autonomy

(Parker, 1983). There is a thin line between protecting a child and limiting opportunities to foster the selfdetermination of children. Where this line is drawn also depends upon the culture. In contrast, *autonomysupported parenting or autonomy-supportive parenting practices* aim to provide rich opportunities that support autonomy and greater independence. This type of parenting suggests active support on the part of parents to improve their child's capacity and his/her autonomous functioning (Joussemet et al., 2008; Ryan et al., 2006). Although relatedness is still a key concept in autonomy-supported parenting, promoting autonomy including self-rule and volition is also a key element in fostering child's selfdetermination (Kagitcibasi, 2005). Given that autonomy is a key concept in promoting self-determination (e.g., Deci & Ryan, 2000; Kagitcibasi, 2005; Shogren et al., 2015, Vansteenkiste et al., 2010, Wehmeyer, 2007), autonomy-supportive parenting is an optimal parenting practice, whereas parental overprotection is a less desirable form of parenting in enhancing child self-determination (van der Kaap-Deeder et al., 2015).

A large body of research emphasizes the importance of school in fostering the self-determination of children with intellectual disability or autism, but there has been limited attention focused on the pivotal role of parents in promoting the self-determination of children with intellectual disability or autism (Carter et al., 2013; Zhang, 2005). Overall, there is still much to know about how families can best foster their children's self-determination (Shogren & Turnbull, 2006). Importantly, parenting styles and practices should be investigated in terms of their impact on self-determination within the context of the child's cultural milieu. This study investigates the impacts of parenting styles and practices in promoting self-determination of children with intellectual disability and autism as well as typically developing peers in Turkey. Considering the social context as playing an important role in parenting practices (Bronfenbrenner, 1986; Olivari et al., 2015), research assessing the parenting styles and practices may shed light on the socio-cultural context in promoting the self-determination of children with and without IDD. In this sense, measuring parenting styles or practices must also reflect the culture in which children are raised. As such, the purpose of this study was to explore parental reports of authoritative, authoritarian, and permissive parenting styles of parents of children with IDD and their typically developing counterparts, considering the potential role of overprotective and autonomy-supportive parenting practices in promoting the self-determination of children with/without IDD in Turkey. In this study, potential differences were also examined depending on, families' urbanization, income, education, father and mother perception, children's gender, disability status, and severity of disability in the parental evaluation of parenting styles and practices in enhancing the self-determination of their children. Accordingly, our two research questions were: (1) What are the influences of parenting styles and practices in promoting the self-determination of children with and without IDD? and (2) What are the potential differences in the parental perception of parenting styles and practices in fostering selfdetermination of their children depending on identified socio-demographic characteristics?

Method

Participants

The participants were 243 parents of children with/without IDD enrolled in general and special education schools in Turkey. Parent participated voluntarily and without compensation, and the sample was constituted using convenience sampling from parents of children with/without IDD who lives in two different regions of Turkey. The inclusion criteria for parent involvement was that they had to be primary caregivers of their a school-aged child with/without IDD. The children with/without IDD were continuing their education in five different settings in two regions of Turkey. These educational settings included general and special education services in primary/elementary grades, secondary/middle school and high school, special education centers for 1st and 2nd grades, special education vocational schools, and one Guidance and Research Centre (GRC). Table 1 summarizes the characteristics of parents and their 91 children with intellectual disability (ID), 71 children with autism spectrum disorder (ASD), and 81 children without disability (typically developing or TD). To be included, participant parents must have had a school-age child with ID, ASD, or be TD who was receiving special or general education services. Parents and school administrators provided information about the child's diagnosis (type of disability) and the severity of impairment through the educational evaluation report provided by the Guidance and Research Centers (GRCs), which used the DSM-5 criteria (APA, 2013). The GRCs are the single

authorized governmental organization of Turkey in the educational assessment system (Ministry of National Education, 2011). There are 220 GRCs having the overall and centralized responsibility to provide educational evaluation, diagnosis, and orientation services for individuals who require special education services and their families in 81 cities of Turkey (Ministry of Education, 2016). The children with IDD in this study were diagnosed and severity of their disability was classified before data collection, via an educational assessment report reporting intelligence test score, such as the Stanford Binet (Roid 2003), the WISC-R IV (Wechsler 2003), the Leiter-R (Roid and Miller 1997), or the ASIS (Sak et al., 2016). The GRCs deliver the educational assessment report including diagnostic information about type and severity of disability to parents and school administrations. There is a limitation in the evaluation of adaptive behaviors (social, practical, or conceptual) by using adaptive behavior scales such as the Vineland Adaptive Behaviour Scales (Vineland-II; Sparrow et al. 2005), the Adaptive Behavior Assessment System-Second Edition (ABAS-II; Harrison & Oakland 2003), or the Diagnostic Adaptive Behavior Scale (DABS; Tasse' et al., 2016) in Turkey. Yet, the GRCs use the Ankara Developmental Screening Inventory (ADSI; Sezgin, Erol, & Savasir, 1993) to partially assess the adaptive behaviors in Turkey.

Mothers ranged in age from 24 to 64 years (Mean = 41.13 years; SD = 6.75), whereas fathers' ages ranged from 30 to 72 years (Mean = 44.95 years; SD = 7.66). The highest education level of mothers was primary (elementary & secondary) school (n = 74, 30.5%), with other mothers who could read and write but had not graduated (n = 68; 28.0%). The average income of families was \$640 (range \$73 - \$2569), mostly living in urban area (n = 177; 72.8%). Children ranged in age from 6 to 24 years (Mean = 12.91; SD = 4.17) and severity of disability for children with ID and ASD were mild (n = 67; 27.6%), moderate (n = 82; 33.7%), and severe (n = 13 severe; 5.3%). See Table 1 for additional demographics of families and their children. [Insert Table 1 about here]

Measures

Parents completed the following measures to rate their parenting styles and practices, and their child's self-determination. A brief sociodemographic form was used to collect parent and child characteristics.

The AIR Self-Determination Scale - Parent Form. Since the Mithaug's self-determination theory is consistent with the person-environment fit approaches (e.g., the ecological model, social model of disability, strength-based model) delineating presented opportunities by the immediate environment in enhancing the self-determination of a person with IDD, we used the measurement tool of AIR-SD-PF developed according to this theory. The AIR-SD scale measures the personal capacity and environmental opportunities in promoting self-determination (Shogren et al. 2008). Using this scale seems more relevant to the aims of the current study considering that parenting practices have a pivotal role in enriching or limiting the environmental opportunities to be self-determined of a child. In this study, parents completed the AIR Self-Determination Scale - Parent Form (AIR-SD/PF; Wolman et al., 1994) to rate their child's capacity and opportunity to be self-determined (Wolman et al., 1994; Mithaug et al., 2003). The AIR-SD/PF is one of the three versions (teacher-report, student-report, and parent-report) of the AIR-SD scale developed based on the Self-Determined Learning Theory (Mithaug et al., 2003), which has been utilized across cultures (e.g., Carter et al., 2013; Chou et al., 2017; Garrels & Granlund, 2018; Mumbardó-Adam et al., 2018; Wong et al., 2017). The scale consists of 18 items within three sub-domains assessing the child's capacity for self-determination (6 items), opportunities at home for the child to self-determine (6 items), and opportunities at school for the child to self-determine (6 items), and measures the parental appraisals of self-determination of their children with and without IDD. Parents responded on a 5-point Likert-type scale ranging from 1 = never to 5 = always. The Turkish adaptation and psychometric validation of the scale (Turkmen-Aslan & Ozmete, 2015) had a Cronbach's alpha coefficient of .90. In the current study, the Cronbach's alpha for the whole scale was .87 with subdomain coefficients of .95, .75, and .91 respectively. In this study, the construct validity of the AIR-SD/PF was also tested by using confirmatory factor analysis (CFA). The LISREL (Joreskog & Sorbom, 2004) results showed moderately acceptable fit indexes including goodness of fit index (GFI) = .83; adjusted goodness of fit index (AGFI)

= .78; comparative fit index (CFI) = .95; normed fit index (NFI) = .92; root mean square error of approximation (RMSEA) = .10; and $x^2/df = 3.43$.

The Parenting Style Questionnaire. The Parenting Style Questionnaire (PSQ) was developed based on Baumrind's typology (1967, 1991) identifying three types of parenting styles - authoritative, authoritarian, and permissive. The PSQ (Robinson et al., 1995, 2001) contains 30 items rated by 6 Likert options ranging from 1 = never to 6 = always. The highest score indicates the dominant parenting style. Cronbach's alpha coefficients for each parenting style were authoritative, $\alpha = .91$; authoritarian $\alpha = .86$; and permissive, $\alpha = .75$. In the Turkish validation internal reliability coefficients for sub-domains were .71, .84., and .38, respectively (Onder & Gulay, 2009). Cronbach's alpha for the authoritative, authoritarian, and permissive parenting styles were .87, .86, and .71 respectively in the current study.

The Parenting Bonding Instrument (PBI)'s - Overprotection Subscale. The Parental Bonding

Instrument (PBI) is a 25-item questionnaire measuring a child's bonding with his/her parents. It has two subscales: care and overprotection or control (Parker et al., 1979; Parker, 1983). The current study used only the Overprotection or Control subdomain of PBI (Overprotective, 7 items and Autonomy-Supportive, 6 items). In this study, parents reported whether they are overprotective or autonomy-supportive towards their children by using the overprotection subdomain of PBI as proxy report rather than using the child's report. Therefore, we used the PBI as a parent proxy-report to self-identify parenting practices in child-rearing. Ratings ranged from very like = 3, moderately like = 2, moderately unlike = 1, or very unlike = 0 for overprotective parenting practices and reversely for autonomy-supportive parenting practices. Cronbach's alpha was .87 for the form for mothers and .89 for the father form as validated by Kapci and Kucuker (2006) in the current culture. Cronbach's alpha was obtained as .64 in the current study.

Procedure

To obtain research approval, two authors of the current study contacted school administrators of special education and general education schools in Turkey. After receiving each school administrator's approvals, blank survey forms including study measures and socio-demographic sheet were distributed to

parents and collected again by the research team. The informed consent of participants was obtained orally to respond to cultural concerns of signing an official document in Turkey (Tufts - Office of The Vice Provost for Research, 2020). Since data were collected from February through May 2020, responses for one-third of the surveys were gained from telephone calls and video chat programs due to the COVID-19 pandemic.

Analysis

First, to examine the overall profile of parenting styles and practices involving authoritative, authoritarian, and permissive as well as overprotected and autonomy-supportive parenting practices in fostering self-determination of children with and without IDD, descriptive statistics showing means (M) and standard deviations (SD) were examined and correlations among variables were calculated. Then, we used the regression analysis to delineate the effect of each independent variable operationalized by using parenting styles and practices on outcome variables presented with overall self-determination and its subdomains. Given the parenting practices and personal features of child potentially effecting the degree of child self-determination (e.g., Zhang, 2005; Shogren, 2011), we tested the possible differentiations depending on categorical variables depicted with family characteristics in promoting self-determination by using *t*-tests and one-way analyses of variance (ANOVA). In this regard, we tested the group differences derived from demographic characteristics in parenting styles and practices, and selfdetermination scores. Prior to conducting differential or predictive analysis, we tested homogeneity of variance and normal distribution of variables (Tabachnick & Fidell, 2007). Analyses were carried out using IBM SPSS Statistic 22 (IBM Corp 2013) with statistical significance set at p < 0.05.

Results

Effects of Parenting Styles and Practices on Child Self-Determination

Parents indicated that the overall level self-determination of their children with and without IDD was moderately high (M = 62.33, SD = 10.97); in other words, 69.2% of parents reported that "*sometimes*" or "*almost always*" their children show the relevant skills and have the provided opportunities by home or school in promoting self-determination. Parents most highly reported that their

children have the opportunities at home (M = 23.14, SD = 3.65) and secondly at school (M = 22.09, SD = 4.81). The lowest ratings given by parents was the subdomain of child's capacity (M = 17.03, SD = 6.83) in self-determination skills. As shown in Table 2, the mean score of the authoritative parenting style (M = 66.64, SD = 7.36, converted M = 5.12 ranged from 1 to 6 in Likert scale) among parents was higher than authoritarian parenting style (M = 40.65, SD = 12.11, converted M = 3.12) and permissive parenting style (M = 10.62, SD = 4.26, converted M = 2.65), whereas the mean score of the authoritarian style was higher than permissive parenting style among parents of children with ID, ASD, and TD. Parents also reported that they were autonomy-supportive (M = 11.16, SD = 3.07) rather than overprotective (M = 9.48, SD = 4.97) in parenting practices (see Table 2).

We examined the correlations among the study variables prior to testing group differences and conducting multiple linear regression analysis (see Table 2). Correlation results indicated that overall selfdetermination of children was positively correlated with authoritative parenting style ($r = .41^{**}, p < .01$), whereas negatively correlated with permissive parenting style ($r = -.43^{**}$, p < .01). In the current study, a significant association between overall self-determination and authoritarian parenting style (r = -12, p =.06) was not found, although the relationship was negative. The results showed that there was a significant negative association between overall self-determination and overprotective parenting practices $(r = -.36^{**}, p < .01)$, while there was a significant positive relationship between overall self-determination and autonomy-supportive parenting practices ($r = .35^{**}$, p < .01). Also, some correlations showed associations between self-determination subdomains and parenting styles and practices. First, the results showed the significant positive relationship of a child's self-determination capacity with authoritative parenting style ($r = .28^{**}$, p < .01) and autonomy-supportive parenting practices ($r = .25^{**}$, p < .01), whereas significant negative relationship with permissive parenting style ($r = -.51^{**}$, p < .01) and overprotective parenting practices ($r = -.51^{**}$, p < .01). Results indicated that there was not a significant association between the child's self-determination capacity and authoritarian parenting style (r = -.10, p =.11). Second, the self-determination opportunities of child at home were positively correlated with authoritative parenting style ($r = .48^{**}$, p < .01) and autonomy-supportive parenting practices ($r = .31^{**}$, p

< .01), whereas this subdomain was negatively correlated with authoritarian parenting style ($r = -.15^{**}$, p < .05), permissive parenting style ($r = -.28^{**}$, p < .01) and overprotective parenting practices ($r = -.23^{**}$, p < .01). Third, a significant positive association was found between the self-determination opportunities of child at school and authoritative parenting style ($r = .17^{**}$, p < .01) as well as autonomy-supportive parenting practices ($r = .18^{**}$, p < .01). There were not significant correlations with authoritarian parenting style (r = -.02, p = .75), permissive parenting style (r = -.03, p = .55), and overprotective parenting practices (r = .06, p < .31) in the current study. [Insert Table 2 about here]

We used multiple linear regression analyses to investigate predictive effects of parenting styles and practices in promoting self-determination as well as self-determination capacity and opportunities of children with/without IDD (see Table 3). The regression results of parents ratings on study variables indicated the predictors consisting of three parenting styles and two parenting practices explained 32.2% of the total variance, $R^2 = .32$, F(4, 234) = 27.796, p < .001 in fostering children's overall selfdetermination. Authoritative parenting style significantly and positively predicted the children's overall self-determination ($\beta = .25$, p < .001), as did autonomy-supportive parenting practices ($\beta = .17$, p < .001). In contrast, permissive parenting style ($\beta = -.22$, p < .001) and overprotective parenting practices ($\beta = .$.16, p < .01) significantly and negatively predicted children's overall self-determination. Since authoritarian parenting style was not significantly correlated with children's overall self-determination, it was omitted from the regression model. The results showed the substantial effects of authoritative parenting style as well as autonomy-supportive parenting practices in promoting the self-determination of children with/without IDD.

In predicting children's self-determination capacity by independent variables, regression models indicated that the predictors explained 37.2% of the total variance, $R^2 = .37$, F(4, 236) = 34.923, p < .01. Permissive parenting style ($\beta = -.30$, p < .001) and overprotective parenting practices ($\beta = -.33$, p < .01) significantly and negatively predicted the child's self-determination capacity. However, authoritative parenting style ($\beta = .10$, p = .08) and autonomy-supportive parenting practices ($\beta = .07$, p = .20) did not significantly predicted child capacity in relation to self-determination skills. The results especially

underlined the importance of be less permissive and less overprotective in enhancing the selfdetermination capacity of children.

The regression model explained 27.2% of the variance of children's self-determination opportunities at home $R^2 = .27$, F(5, 233) = 17.391, p < .01. Authoritative parenting style ($\beta = .40$, p < .000) and autonomy-supportive parenting practices ($\beta = .13$, p < .05) significantly and positively predicted the child's self-determination opportunities at home. However, the regression model did not indicate any significant predictive relationship of this variable with authoritarian parenting style ($\beta = -.03$, p = .59), permissive parenting style ($\beta = -.06$, p = .33), and overprotective parenting practices ($\beta = -.09$, p = .15). On the other hand, the regression model explained .04% of the variance of self-determination opportunities at school, $R^2 = .04$, F(2, 237) = 5.960, p < .01, while just autonomy-supportive parenting practices significantly and positively predicted the child's self-determination opportunities at school ($\beta = .14$, p < .05). The results verified the key role of authoritative parenting style in enhancing the selfdetermination opportunities at home and how important to be autonomy-supportive associated with providing self-determination opportunities for the child either at home or at school. [Insert Table 3 about here]

Influences of Parent and Child Characteristics on Self-Determination, Parenting Styles and Practices

In this study, by using independent *t*-tests and one-way analyses of variance (ANOVA), we analyzed differentiated influences of categorical variables consisting of parent's and child's characteristics on the dependent variables including (1) overall self-determination, (2) child's self-determination capacity, (3) self-determination opportunities of child at home, (4) self-determination opportunities of child at school, (5) authoritative parenting style, (6) authoritarian parenting style, (7) permissive parenting style, (8) overprotective parenting practices, and (9) autonomy-supportive parenting practices. The independent variables for the *t*-tests were urban/rural divide groups (urban families vs. rural families or urbanization), income (below than average vs. higher than average), parental perception groups (mother vs. father), gender of child groups (female vs. male), and age category of child (children

of 7-14 aged vs. youth of 15-22 aged). The independent variables in the one-way ANOVAs were disability status of the child (ID, ASD, or TD), severity of disability (mild, moderate, or severe), and education level of mother and father separately (college/university/upper degree, high school 9th-12th grade, primary education including elementary 1st-5th grade and secondary 6th-8th grade, and not graduated/could read and write). Cohen's *d* effect sizes indicating < .20 or less = very small, .20 < .50 = small, .50 < .80 = medium, and .80 or more = large effects for t-tests and partial eta squared (η^2_p) showing small = .01, medium = .06, and large = .14 effects for ANOVAs were calculated to detect the level of influence of categorical variables on outcome variables (Cohen et al., 2003). Since some distinct differences in homogeneity of segments or nonsignificant mean differences, the results of *t*-test or ANOVA analysis could not be performed or be reported for some variables such as marital status (married, divorced, and widowed), employee status of mothers (homemakers, employed or not employed), types of family (nuclear, extended, and single parent), mother's age categories (aged lower than average vs. aged higher than average).

Independent *t*-tests results on the nine dependent variables depending on urbanization between urban families and rural families indicated significant differences on six dependent variables: overall selfdetermination level of the child (t = 6.668, p < .000, Cohen's d = .86); self-determination capacity of the child (t = 9.085, p < .000, Cohen's d = 1.17); self-determination opportunities of the child at home (t =4.834, p < .000, Cohen's d = .62); authoritarian parenting (t = -3.006, p < .003, Cohen's d = .38); permissive parenting (t = -5.889, p < .000, Cohen's d = .75); and overprotective parenting (t = -8.081, p <.000, Cohen's d = 1.04) in child rearing practices. Results indicated the positive influences of urbanization on the degree of overall self-determination as well as level of self-determination capacity of child and obtained self-determination opportunities from home. Furthermore, *t*-test results showed that urbanization could be a preventative factor on authoritarianism, permissiveness, and overprotectiveness in child upbringing practices in comparison to rural families.

The *t*-tests calculating differentiation of study variables depending on income level between lower-income and higher-income families revealed significant differences. Lower-income parents scored

significantly lower than higher-income parents in fostering their children's overall self-determination (t = -4.384, p < .000, Cohen's d = .56), enhancing child's self-determination capacity (t = -5.710, p < .000, Cohen's d = .73), and improving self-determination opportunities at home (t = -3.951, p < .000, Cohen's d = .51). There was not a significant difference on self-determination school opportunities (t = .839, p = .40) between both income groups. Lower-income families tented to less authoritative (t = -3.438, p < .000, Cohen's d = .44), but more authoritarian (t = 5.472, p < .000, Cohen's d = .70) and more permissive (t = 5.021, p < .000, Cohen's d = .64) then higher-income families. Also, lower-income families indicated that they were more overprotective (t = 6.048, p < .000, Cohen's d = .77), but less autonomy-supportive (t = -1.643, p < .000, Cohen's d = .21) in parenting practices than higher-income parents. Considering Cohen's d effect sizes ranging from .21 to 1.17, urbanization, and income influenced parental ratings on children's self-determination, parenting styles, and parenting practices. In this study, the significant differences were not calculated deriving from parental perception groups (mother vs. father), gender of child groups (female vs. male), and age category of child (children of 7-14 aged vs. youth of 15-22 aged) on outcome variables.

One-way ANOVAs on the nine dependent variables among education status of parents (college/university/upper degree; high school/9th-12th; primary school including elementary/1st-5th & secondary/6th-8th; and not graduated/could read and write) yielded nine significant variations for mothers and eight significant variations for fathers at the .05 significant level, respectively: overall selfdetermination (F = 11.027, p < .001, $\eta_p^2 = .11$ for mothers; F = 11.108, p < .001, $\eta_p^2 = .11$ for fathers), child's self-determination capacity (F = 30.667, p < .001, $\eta_p^2 = .27$ for mothers; F = 24.520, p < .001, $\eta_p^2 = .22$ for fathers), self-determination opportunities of child at home (F = 8.494, p < .001, $\eta_p^2 = .09$ for mothers; F = 11.381, p < .001, $\eta_p^2 = .05$ for fathers), self-determination opportunities of child at school (F= 2.847, p < .05, $\eta_p^2 = .03$ for mothers; F = 3.681, p < .01, $\eta_p^2 = .11$ for fathers), authoritative parenting style (F = 3.614, p < .01, $\eta_p^2 = .04$ for mothers; F = 6.266, p < .001, $\eta_p^2 = .07$ for fathers), authoritarian parenting style (F = 8.954, p < .001, $\eta_p^2 = .09$ for mothers; F = 5.066, p < .05, $\eta_p^2 = .05$ for fathers), permissive parenting style (F = 12.482, p < .001, $\eta_p^2 = .13$ for mothers; F = 12.739, p < .001, $\eta_p^2 = .13$ for fathers), overprotective parenting practices (F = 19.424, p < .001, $\eta^2_p = .18$ for mothers; F = 13.388, p < .001, $\eta^2_p = .12$ for fathers), and autonomy-supportive parenting practices (F = 2.915, p < .05, $\eta^2_p = .03$ for just mothers). A post hoc Bonferroni test showing significant mean differences (MD) indicated that both parents (mothers and fathers) with higher education levels were more supportive in promoting overall self-determination of their children and enhancing self-determination capacity of their child's than parents with lower education levels. Bonferroni results also showed that parents with higher education levels defined themselves as more authoritative, less authoritarian, and less permissive as well as more autonomy-supportive and less overprotective than parents with lower education levels. The partial eta squared (η^2_p) ranging from .03 to .27 indicated that the education level of parents was significantly effective with different levels on parental evaluation of their children's self-determination in relation to their parenting styles and practices.

ANOVA results indicated that there was a significant effect of disability status of children for overall self-determination of child (F = 27.1550, p < .001, $\eta_{p}^2 = .18$), child's self-determination capacity (F = 77.566, p < .001, $\eta_{p}^2 = .39$), self-determination opportunities of child at home (F = 11.212, p < .001, $\eta_{p}^2 = .08$), and also permissive parenting styles (F = 25.303, p < .001, $\eta_{p}^2 = .17$) and overprotective parenting practices (F = 17.617, p < .001, $\eta_{p}^2 = .13$). Post hoc analyses using the Bonferroni method found significant mean differences (MD) among parents of children with ID, ASD, and TD. Parents of children with ID referred a higher overall self-determination (MD = 4.62, p < .05) and child's self-determination capacity (MD = 3.94, p < .05), than parents of children with ASD, whereas they scored lower self-determination opportunities of children with ASD scored lower overall self-determination (MD = -11.73, p < .05) and child's self-determination capacity (MD = 2.72, p < .05) and practices, parents of children with ID reported that they were more permissive (MD = 2.72, p < .05) and more overprotective (MD = 2.33, p < .05) than parents of children with TD. but less permissive (MD = -11.76, p < .05) and less overprotective (MD = -2.19, p < .05) than parents of children with TD, but less permissive (MD = -1.76, p < .05) and less overprotective (MD = -2.19, p < .05) than parents of children with TD, but less permissive (MD = -1.76, p < .05) and less overprotective (MD = -2.19, p < .05)

permissive (MD = 4.48, p < .05) and more overprotective (MD = 4.52, p < .05) than parents of children with TD. Indeed, higher scores showing the degree of self-determination in relation to parenting styles and practices were generally in favor of parents of children with TD. The partial eta squared (η^2_p) ranging from .08 to .39 revealed that the disability status of children had from medium to large impacts on child self-determination and parental outcome variables.

One-way ANOVA results indicated significant differences depending on severity of disability for overall self-determination (F = 26.594, p < .001, $\eta_p^2 = .25$), self-determination capacity (F = 23.821, p < .001, $\eta^2_p = .22$), self-determination opportunities at home (F = 12.350, p < .001, $\eta^2_p = .13$), selfdetermination opportunities at school (F = 3.939, p < .05, $\eta^2_p = .04$), and also permissive parenting styles $(F = 6.347, p < .05, \eta^2_p = .08)$ and overprotective parenting practices $(F = 3.772, p < .05, \eta^2_p = .04)$. The Bonferroni post hoc test showing the significant differences of parental appraisals revealed that overall self-determination of children with mild disabilities was higher than both children with moderate disabilities (MD = 10.37, p < .05) and children with severe disabilities (MD = 13.65, p < .05); personal capacity of self-determination of children with mild disabilities was higher than both children with moderate disabilities (MD = 6.23, p < .05) and children with severe disabilities (MD = 5.94, p < .05); selfdetermination opportunities at home of children with mild disabilities was higher than both children with moderate disabilities (MD = 2.37, p < .05) and children with severe disabilities (MD = 4.07, p < .05). Parents of children with mild disabilities also reported that they were less permissive (MD = -2.26, p < -2.26.05) and less overprotective (MD = -2.07, p < .05) than parents of children with moderate disabilities. The partial eta squared (η^2_p) ranging from .04 to .25 showed the influence of severity of disability at different levels on parental assessment of their children's self-determination, parenting styles and practices.

Discussion

Research and practice emphasize the role of parents in the development of their children's selfdetermination (Shogren & Turnbull, 2006; Zhang et al., 2010). Investigating the influence of parenting styles and practices in promoting self-determination has been identified as an important topic for research (Carter et al., 2013; Zhang, 2005), but such research has been limited (Shogren, 2011). This study attempted to contribute to this literature base by examining the influence of parenting styles and practices in fostering the self-determination of children with IDD. To that end, the purpose of the present study was to explore the relationship between parenting styles and practices and the self-determination of children with and without IDD in Turkey. In this study, group differences deriving from parent and child characteristics were examined using parental reports of parenting styles and practices in enhancing the self-determination of their children. The study findings also extend the current understanding of selfdetermination in a non-Western culture as well as in the broader study of self-determination related to parenting styles and practices.

The current study suggested that for Turkish parents, authoritative parenting style and autonomysupportive parenting practices are predictive of their child's level of self-determination. There are some differences in the operationalization of the self-determination construct in the Turkish context when compared with Western countries, with a particular emphasis emerging from family values and cultural codes in fostering the self-determination of children with disabilities (Shogren & Wehmeyer, 2017; Zhang et al. 2010). The study results supported the suggestion that Turkish parents want their child to become more self-determined, taking into the cultural context of context mix of individualism and collectivism in Turkey (Kagitcibasi, 2005, 2007, Palut, 2009). Relatedly, study findings were consistent with how selfdetermination is operationalized within non-Anglo European cultures, such as the Dine (Navajo) culture (Frankland et al., 2004), Chinese parents (Chu, 2018; Zhang et al., 2005; Zheng et al., 2015), Arab parents (Alrabiah, 2021), and Hispanic parents (Shogren, 2012). Accordingly, this study suggests that most families expect their children to be self-determined and independent even though the self-determination depending on families' values or cultural codes is diversely operationalized by families across cultures. Self-determination is a well-rooted concept in European-American cultures, which originated from normalization and independence movements (Frankland et al., 2004; Shogren & Turnbull, 2006; Zhang & Benz, 2006). However, Turkey swinging between collectivism and individualism is not a pure Western country, and its society does not completely share the same cultural values as European-American cultures. For example, parents from non-Western contexts (Chinese, Arab, or Turkish) consistently with

their collectivist culture highly value family ties, dependence/interdependence, and obedience when they promote their children's self-determination skills (Alrabiah, 2021; Kagitcibasi, 2007; Zheng et al., 2015). Additionally, parenting practices of Turkish society should be evaluated within Mediterranean culture valuing collectivism and interdependence (Palut, 2009). On the other hand, Turkey is not a pure Eastern country as well even though many similarities with Chinese, Arabic, or Persian cultures. Turkey is at the crossroad between Europe and Asia. Considering the geographical location, the religion (Islam), and the democratic and constitutional structure of the country, a rough classification asserting whether Turkey has solely a collectivist or individualistic society should be avoided. Turkey's unique cultural, linguistic, historical, religious, sociopolitical, and economic characteristics show that it is a Eurasian and transition country. In this sense, the forms of self-determination concept should be evaluated from a cross-cultural perspective including Turkey (Chu, 2018; Shogren 2011; Zhang et al. 2005; Zhang et al. 2010).

Second, the current study showed the positive relationship between authoritative parenting style and autonomy-supportive parenting practices with children's self-determination, contrasted with the negative relationship between permissive parenting style and overprotective parenting practices on the self-determination of children. Since the home environment contributes or restricts children's capacities and opportunities for self-determination (Wehmeyer, 2005; Palmer et al., 2013), family professionals should emphasize the importance of authoritative parenting and providing an autonomy-supportive environment by families to facilitate the development of self-determination (Cavendish, 2017; van der Kaap-Deeder et al., 2015). Adults provide the context in which children develop and autonomy-support enables them to become more self-determined (Wehmeyer et al., 2004). Our results align with a few studies (e.g., Holmbeck et al., 1995; Parker, 1983; van der Kaap-Deeder et al., 2015), which also showed why parents should balance between permissive and overprotective parenting in terms of their child's autonomy or, more broadly, their child's overall self-determination. Parental tendencies in child upbringing practices play a critical role in promoting self-determination (Wehman, 1998). This study indicated that why parental efforts to strike a balance between their authority and child dependency or independency (Palut, 2009) are important. One of the best descriptions of tension between supporting the child's autonomy versus overprotectiveness in Turkish culture is the Autonomous-Related Self Model (see Kagitcibasi, 2005, 2007). This model represents the balance parents seek between the construction of self and family considerations in operationalizing self-determination in collectivist cultures. The model asserts that modernization, urbanization, and enculturation have been melting the economic connectivity of traditional Turkish parents with their children who are seen potentially as a guarantee to care for them in the future. Although this transformation changes the commitment from economic to psychological one in the family (Kagitcibasi, 2005, 2007), the dependency on the family is still more valued than the independence of the child in Turkish culture. Indeed, the being more proactive in valuing or encouraging the independence among European American parents than did culturally diverse parents was confirmed by other studies including the examples of Chinese parents (Zhang et al., 2010), Turkish parents (Yaman et al., 2010), or Samoan parents (Leake & Boone, 2007). Therefore, parenting practices depending on current cultural codes might vary from Western culture in infusing self-determination skills in Turkey (Palut, 2009).

Third, research investigating demographic factors may contribute to a better understanding of the roles of parent and child characteristics within a cultural context in the development of self-determination (Cavendish, 2017). In addition to the dynamic tensions of culture, the degree of self-determination and positive or negative parenting, factors such as education level, disability status, or severity of disability are also important. Our findings showed that parents of children with ID rated the self-determination of their children at a higher level than did parents of children with ASD, but not than did parents of children with TD. Results also indicated that families of children with mild levels of impairment rated a higher level of self-determination than parents of children with other levels of impairment. Our findings in relation to personal characteristics impacting individual self-determination capacity are consistent with other studies (e.g., Cavendish, 2017; Wehmeyer, 2005; Zhang, 2005). Undoubtedly, parental expectations are influenced by their child's disability or without disability and the severity of that disability, which plays a role in the degree to which they provide environmental opportunities that can foster skills related to later self-determination (Carter et al., 2013; Palmer et al., 2013; Wehmeyer & Garner, 2003). This

study also found that urban families with higher income and higher education were more likely to report positive parenting strategies in enhancing child self-determination. As asserted by a limited number of studies (see Zhang, 2005), higher socioeconomic status and sociocultural contexts where families live influence parental appraisals of their children's self-determination independent from broader codes of culture in which the study was conducted. Therefore, given that the socioeconomic and sociocultural features of families were among the most prominent factors in parental ratings of self-determination skills of their children with IDD in this study, it again speaks to the need to create programs that are culturally responsive to improve the development of self-determination (Shogren & Turnbull, 2006; Shogren, 2011).

The present study has three basic limitations. First, we used a convenience sample within which to collect data. As such, the results cannot be generalized beyond the current sample. Additionally, even though Turkey has seven regions, we collected data in only two regions of the country. Because of this unequal distribution of participants within Turkey, the results cannot be interpreted as representative of all families of children with or without disabilities in Turkey. Second, as the measurement is bounded by the capacity of a scale or inventory, assessing the relationship between self-determination and parenting style is limited due to using concepts of Western literature (Darling & Steinberg, 1993). By using Western concepts and scales translated from Eastern culture, we focused on extending the concept of parenting and self-determination. For example, this study used Baumrind's parenting styles typology based on middle-class Western culture (Dwairy et al., 2006). However, this study extended the understanding of self-determination in general, even if conducted in Turkey, by using similar measurement applications. Third, a third of the data were collected during the COVID-19 pandemic lockdown, which might have affected parental opinions. Although we did not expect differences in parental reports, the time of data collection might have affected parental responses.

In conclusion, examining parenting styles and practices provided a lens into promoting child selfdetermination in Turkey. Our findings pertaining to authoritative and autonomy- supportive parenting revealed a transition from more collectivistic social norms to some individualistic goals for parents who support their children to be more self-determined in the more dynamic cultural context of Turkey. The present study confirmed this transition in how parents valued the self-determination of their children consistent with literature in non-Western contexts. Aligning with the current study's results, culturally responsive training, and support programs should be developed to promote self-determination skills at home (Brotherson et al., 2008; Shogren & Turnbull, 2006) as well as at school (Carter et al., 2013). Thus, a flexible self-determination perspective should consider culture to understand child self-determination within each family's unique value system (Shogren & Turnbull, 2006; Shogren, 2011) rather than solely within a broader cultural perspective.

References

- Abery, B., & Zajac, R. (1996). Self-determination as a goal of early childhood and elementary education.In D. Sands & M. Wehmeyer (Eds.), *Self-determination across the life span* (pp. 169-196). Paul H.Brookes Publishing Co.
- Alrabiah, A. H. (2021) Self-determination in Male Children with Intellectual Disabilities: Perceptions of Parents from Saudi Arabia. *Research in Developmental Disabilities 115*, 104011. https://doi.org/10.1016/j.ridd.2021.104011
- American Psychological Association (APA). (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing
- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, 75, 43-88.
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. Journal of Early Adolescence, 11, 56-95.

Baumrind, D., & Thompson, R. A. (2002). The ethics of parenting. In M. H. Bornstein (Ed.), Handbook of Parenting: Vol. 5. Practical Issues in Parenting (2nd ed., pp. 3-34). Lawrence Erlbaum Associates.

- Baumrind, D., Larzelere, R. E., & Owens, E. B. (2010). Effects of preschool parents' power assertive patterns and practices on adolescent development. Parenting, Science and Practice, 10(3), 157-201. https://doi.org/10.1080/15295190903290790
- Baumrind, D. (2013). Is a pejorative view of power assertion in the socialization process justified? *Review* of General Psychology, 17(4), 420-427. <u>https://doi.org/10.1037/a0033480</u>
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22, 723-742. <u>https://doi.org/10.1037/0012-1649.22.6.723</u>
- Brotherson, M. J., Cook, C. C., Erwin, E. J., & Weigel, C. J. (2008). Understanding self-determination and families of young children with disabilities in home environments. *Journal of Early Intervention*, 31(1), 22-43. <u>https://doi.org/10.1177/1053815108324445</u>
- Burtaverde, V., de Raad, B., & Zanfirescu, A-S. (2018). An emic-etic approach to personality assessment in predicting social adaptation, risky social behaviors, status striving and social affirmation. *Journal of Research in Personality*, *76*, 113–123. <u>https://doi.org/10.1016/j.jrp.2018.08.003</u>
- Carter, E. W., Lane, K. L., Cooney, M., Weir, K., Moss, K. C., & Machalicek, W. (2013) Parent Assessments of Self-determination Importance and Performance for Students with Autism or Intellectual Disability. American Journal on Intellectual and Developmental Disabilities, 118(1), 16– 31. <u>https://doi.org/10.1352/1944-7558-118.1.16</u>
- Cavendish, W. (2017). The Role of Gender, Race/Ethnicity, and Disability Status on the Relationship Between Student Perceptions of School and Family Support and Self-Determination. *Career Development and Transition for Exceptional Individuals, 40*(2), 113-122.

https://doi.org/10.1177/2165143416629359

Chan, S., & Chen, D. (2011). Families with Asian roots. In E. W. Lynch & M. J. Hanson (Eds.), Developing cross-cultural competence (4th edition): A guide for working with children and their families (pp. 234–318). Paul H. Brookes.

- Chou, Y-C., Wehmeyer, M. L., Shogren, K. A., Palmer, S. B., & Lee, J. (2017) Autism and Self-Determination: Factor Analysis of Two Measures of Self-Determination. *Focus on Autism and Other Developmental Disabilities*, 32(3), 163–175. <u>https://doi.org/10.1177/1088357615611391</u>
- Chu, S-Y. (2018) Family voices: promoting foundation skills of self-determination for young children with disabilities in Taiwan. Asia Pacific Education Review, 19, 91–101. https://doi.org/10.1007/s12564-018-9519-8
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003) *Applied multiple regression/correlation analysis for the behavioral sciences*. (3rd Ed.). Routledge.

Cuceloglu, D. (2002) Human and Behavior. 11th ed. Istanbul, Remzi Publishing.

- Darling, N. & Steinberg, L. (1993). Parenting Style as Context: An Integrative Model Psychological Bulletin, 113(3), 487-496
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour*. Plenum.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the selfdetermination of behavior. *Psychological Inquiry*, *11*, 227-268.

https://doi.org/10.1207/S15327965PLI1104_01

- Dwairy, M., Achoui, M., Abouserie, R., Farah, A., Sakhleh, A. A., Fayad, M., & Khan, H. K. (2006). Parenting Styles in Arab Societies: A First Cross-Regional Research Study. *Journal of Cross-Cultural Psychology*, 37(3), 230–247. <u>https://doi.org/10.1177/0022022106286922</u>
- Erol, N., Sezgin, N., & Savasir, I. (1994). Validity studies of the Ankara Developmental_Screening Inventory. 23rd International Congress of Applied Psychology, Madrid, Spain.
- Erwin, E. J., & Brown, F. (2003). From theory to practice: A contextual framework for understanding self-determination in early childhood environments. *Infants & Young Children, 16,* 77-87.
- Frankland, H. C., Turnbull, A. P., Wehmeyer, M. L., & Blackmountain, L. (2004). An exploration of the self-determination construct and disability as it relates to the Dine (Navajo) culture. *Education and Training in Developmental Disabilities*, 39, 191–205.

- Garrels, V., & Granlund, M. (2018) Measuring self-determination in Norwegian students: adaptation and validation of the AIR Self-Determination Scale. *European Journal of Special Needs Education*, 33(4), 466-480. <u>https://doi.org/10.1080/08856257.2017.1342420</u>
- Garrels, V. (2019). *Promoting self-determination for adolescents with mild intellectual disability*. Unpublished Doctoral Dissertation, University of Oslo, Sweden.
- Green, E. G. T., Deschamps, J-C., & Páez, D. (2005). Variation of individualism and collectivism within and between 20 countries: A typological analysis. *Journal of Cross-Cultural Psychology*, 36(3), 321-339. <u>https://doi.org/10.1177/0022022104273654</u>
- Grolnick, W. S. (2003) *The psychology of parental control: How well meant parenting backfires*. NJ: Lawrence Erlbaum Associates.
- Harrison, P. L., & Oakland, T. (2003). Adaptive behavior assessment system (2nd ed.). Western Psychological Services.
- Hofstede, G. (2003). *Cultural Dimensions*. Liuc.it. https://my.liuc.it/MatSup/2016/A86047/3%20Multicultural%20schools.pd
- Holmbeck, G. N., Paikoff, R. L., & Brooks-Gunn, J. (1995) Parenting adolescents. In M. H. Bornstein (Ed.), *Handbook of parenting* (Vol. 1, pp. 91–118). Erlbaum.
- Holmbeck, G. N., Johnson, S. Z., Wills, K. E., McKernon, W., Rose, B., Erklin, S., & Kemper, T. (2002)
 Observed and Perceived Parental Overprotection in Relation to Psychosocial Adjustment in
 Preadolescents with a Physical Disability: The Mediational Role of Behavioral Autonomy. *Journal* of Consulting and Clinical Psychology, 70(1), 96–110. <u>https://doi.org/10.1037//0022-006X.70.1.96</u>

IBM Corp. (2013) IBM SPSS Statistics for Windows, Version 22.0. IBM Corp.

Jensen, M. M. (2010) Exploring Relationships Among Parenting Styles, Choices, and Family Quality of Life Among Chilean Parents of Pre-schoolers with and without Developmental Disabilities. (Unpublished Master Thesis). McGill University, Canada

Joreskog, K., & Sorbom, D. (2004). Interactive LISREL®. Scientific Software International, Inc.

Joussemet, M., Landry, R., & Koestner, R. (2008) A Self-Determination Theory Perspective on Parenting. *Canadian Psychology*, 49(3), 194–200. <u>https://doi.org/10.1037/a0012754</u>

Kalyanpur, M., & Harry, B. (1999). Culture in special education. Brookes

- Kagitcibasi, C. (1994). A critical appraisal of individualism and collectivism. Toward a new formulation.
 In U. Kim, H. C. Triandis, C. Kagitcibasi, S-C. Choi, & G. Yoon (Eds.), *Individualism and collectivism. Theory, method, and applications* (pp. 52-65). Sage.
- Kagitcibasi, C. (2005) Autonomy and Relatedness in Cultural Context. Implications for Self and Family. *Journal of Cross-Cultural Psychology*, *36*(4), 403-422. <u>https://doi.org/10.1177/0022022105275959</u>
- Kagitcibasi, C. (2007). *Family, self, and human development across cultures: Theory and applications*. (Revised Second Edition). L. Erlbaum (Taylor & Francis).
- Kottak, C. P. (2006). *Mirror for humanity: A Concise Introduction to Cultural Anthropology*. Mc Graw-Hill
- Kapci, E. G., & Kucuker, S. (2006) The Parental Bonding Instrument: Evaluation of Psychometric
 Properties with Turkish University Students (Ana Babaya Baglanma Olcegi: Turk Universite
 Ogrencilerinde Psikometrik Ozelliklerinin Degerlendirilmesi). *Turkish Journal of Psychiatry (Turk Psikiyatri Dergisi)*, 17(4), 286-295
- Kooraneh, A. E. & Amirsardari, L. (2015) Predicting Early Maladaptive Schemas Using Baumrind's Parenting Styles. *Iranian Journal of Psychiatry and Behavioral Sciences*, 9(2), e952. <u>https://doi.org/10.17795/ijpbs952</u>
- Kuppens, S. & Ceulemans, E. (2019) Parenting Styles: A Closer Look at a Well-Known Concept. Journal of Child and Family Studies, 28(1), 168–181. <u>https://doi.org/10.1007/s10826-018-1242-x</u>
- Leake, D., & Boone, R. (2007). Multicultural perspectives on self-determination from youth, parent, and teacher focus groups. *Career Development for Exceptional Individuals, 30*, 104-11. <u>https://doi.org/10.1177/08857288070300020101</u>
- Leung, C., & Tsang Kit Man, S. (2014) Parenting Style. In: Michalos A.C. (eds) *Encyclopedia of Quality* of Life and Well-Being Research. Springer. <u>https://doi.org/10.1007/978-94-007-0753-5_2071</u>

- Ministry of National Education (2011) *Organisation of the Turkish Education System-2011*. Republic of Turkey Ministry of National Education (MoNE) Strategy Development Department.
- Mithaug, D. E., Mithaug, D. K., Agran, M., Martin, J. E., & Wehmeyer, M. L. (Eds.) (2003). Selfdetermined learning theory: Construction, verification, and evaluation. Lawrence Erlbaum Associates.
- Mumbardó-Adam, C., Guàrdia-Olmos, J., & Giné, C. (2018) Assessing self-determination in youth with and without disabilities: The Spanish version of the AIR self-determination scale. *Psicothema*, 30(2), 238-243. https://doi.org/10.7334/psicothema2017.34
- Moilanen, K. L., Rasmussen, K. E., & Padilla- Walker, L. M. (2015). Bidirectional associations between self- regulation and parenting styles in early adolescence. *Journal of Research on Adolescence*, 25(2), 246–262. <u>https://doi.org/10.1111/jora.12125</u>
- Nota, L., Ferrari, L., Soresi, S., & Wehmeyer, M. L. (2007). Self-determination, social abilities, and the quality of life of people with intellectual disability. *Journal of Intellectual Disability Research*, 51, 850–865. <u>https://doi.org/10.1111/j.1365-2788.2006.00939.x</u>
- Olivari, M. G., Wahnb, E. H., Maridaki-Kassotaki, K., Antonopoulou, K., & Confalonieri, E. (2015) Adolescent Perceptions of Parenting Styles in Sweden, Italy, and Greece: An Exploratory Study. *Europe's Journal of Psychology*, 11(2), 244-58. https://doi.org/10.5964/ejop.v11i2.887
- Onder, A., & Gulay, H. (2009). Reliability and validity of Parenting Styles & Dimensions Questionnaire. *Procedia Social and Behavioral Sciences*, 1, 508-514.
- Palut, B. (2009) A review on parenting in the Mediterranean countries. *C.U. Journal of Social Science* (*C.Ü. Sosyal Bilimler Dergisi*), 35(2), 242-247
- Palmer, S. B. (2010) Self-Determination: A Life-Span Perspective. Focus on Exceptional Children, 42(6), 1-16.
- Palmer, S., Brotherson, M. J., Erwin, E. J., Maude, S. P., Stroup-Rentier, V., Wu, H.-Y., Peck, N. F., Zheng, Y., Weigel, C. J., Chu, S-Y., McGrath, G. S., & Haines, S. (2013). Building a foundation for

self-determination in early childhood: An inclusive model for children with disabilities. *Topics in Early Childhood Special Education*, *33*(1), 38–47. https://doi.org/10.1177/0271121412445288

Parker, G., Tupling, H., and Brown, L.B. (1979) A Parental Bonding Instrument. British Journal of Medical Psychology, 52, 1-10.

Parker, G. (1983). Parental overprotection: A risk factor in psychosocial development. Grune & Stratton.

- Reeve, J., Ryan, R. M., & Deci, E. L. (2018). Sociocultural Influences on Student Motivation as Viewed Through the Lens of Self-Determiantion Theory. In G. A. D. Liem & D. M. McInerney (Eds.), *Big Theories Revisited 2*, (pp. 15-41). Information Age Publishing Inc.
- Robinson, C. C., Mandleco, B., Olsen, S. F., & Hart, C. H. (1995). Authoritative, authoritarian, and permissive parenting practices: Development of a new measure. *Psychological Reports*, 77(3), 819-830. <u>https://doi.org/10.2466/pr0.1995.77.3.819</u>
- Robinson, C. C., Mandleco, B., Olsen, S. F., & Hart, C. H. (2001). The parenting styles and dimensions questionnaire. In B. F. Perlmutter, J. Touliatos, & G. W. Holden (Eds.), *Handbook of family measurement techniques*: Vol. 3. instruments & index (pp. 319–321). Sage.
- Roid G. & Miller L. (1997) Leiter international performance scale-revised: examiner's manual. In: *Leiter International Performance Scale-Revised* (eds G. H. Roid & L. J. Miller). Wood Dale, IL, Stoelting.

Roid G. H. (2003) Stanford Binet Intelligence Scales. Riverside Publishing.

- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68
- Ryan, R. M., Deci, E. L., Grolnick, W. S., & La Guardia, J. G. (2006). The significance of autonomy and autonomy support in psychological development and psychopathology. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology* (2nd ed., Vol. 1). Wiley.
- Sak, U., Bal-Sezerel, B., Ayas, M. B., Tokmak, F., Özdemir, N. N., Demirel-Gürbüz, Ş., & Öpengin, E. (2016). *Anadolu Sak Intelligence Scale: ASIS user manual*. Anadolu University Pub.

- Shogren, K. A. & Turnbull, A. P. (2006) Promoting Self-determination in Young Children with Disabilities the Critical Role of Families. *Infants & Young Children*, *19*(4), 338–352
- Shogren, K. A. (2011). Culture and self-determination: A synthesis of the literature and directions for future research and practice. *Career Development for Exceptional Individuals*, 34, 115–127. <u>https://doi.org/10.1177/0885728811398271</u>
- Shogren, K. A. (2012). Hispanic mothers' perceptions of self-determination. *Research and Practice for Persons with Severe Disabilities*, *37*, 170–184. <u>https://doi.org/10.2511/027494812804153561</u>
- Shogren, K. A., Palmer, S. B., Wehmeyer, M. L., Williams-Diehm, K., & Little, T. D. (2012). Effects of intervention with the Self-Determined Learning Model of Instruction on access and goal attainment. *Remedial and Special Education*, 33(5), 320-330. <u>https://doi.org/10.1177/0741932511410072</u>
- Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Forber-Pratt, A. J., Little, T. J., & Lopez, S. (2015) Causal Agency Theory: Reconceptualizing a Functional Model of Self-Determination. *Education* and Training in Autism and Developmental Disabilities, 50(3), 251-263.
- Shogren, K. A. & Wehmeyer, M. L. (2017). Culture and Self-Determination. In M. L. Wehmeyer, K. A. Shogren, T. D. Little, & S. J. Lopez (Eds.), *Development of Self-Determination Through the Life-Course* (pp. 169 168). Springer.
- Shogren, K. A., Wehmeyer, M. L., Little, T. D., Forber-Pratt, A. J., Palmer, S. B., & Seo, H. (2017). Preliminary validity and reliability of scores on the Self-Determination Inventory: Student Report version. *Career Development and Transition for Exceptional Individuals*, 40(2), 92-103.
- Shogren, K. A., Little, T. D., Grandfield, E., Raley, S., Wehmeyer, M. L., Lang, K. M., & Shaw, L. A., (2020) The Self-Determination Inventory-Student Report: Confirming the Factor Structure of a New Measure, Assessment for Effective Intervention, 45(2) 110–120.

https://doi.org/10.1177/1534508418788168

Shogren, K. A., Rifenbark, G. G., & Hagiwara, M. (2021) Self-Determination Assessment in Adults With and Without Intellectual Disability. *Intellectual and Developmental Disabilities*, 59(1), 55–69. <u>https://doi.org/10.1352/1934-9556-59.1.55</u> Siqueland, L., Kendall, P. C., & Steinberg, L. (1996). Anxiety in children: Perceived family environments and observed family interaction. *Journal of Clinical Child Psychology*, *25*, 225–237.

Tabachnick, B. G., & Fidell, L. S. (2007). Using multivariate statistics. Pearson/Allyn & Bacon.

- Tassé, M. J., Schalock, R. L., Balboni, G., Spreat, S., & Navas, P. (2016) Validity and reliability of the Diagnostic Adaptive Behaviour Scale. *Journal Intellectual Disability Research*, 60(1), https://doi.org/10.1111/jir.12239
- Thomasgard, M., Metz, W. P., Edelbrock, C., & Shonkoff, J. P. (1995). Parent– child relationship disorders. Part I: Parental overprotection and the development of the Parent Protection Scale. *Developmental and Behavioral Pediatrics*, 16, 244–250.
- Tufts Office of The Vice Provost for Research (2020) *Waiver granted due to cultural concerns about signing a document*. Available at: <u>https://viceprovost.tufts.edu/sberirb/forms-and-templates/consent-flowchart/informed-consent/</u>
- Turnbull, H. R., Turnbull, A. P., Wehmeyer, M. L., & Park, J. (2003) A Quality of Life Framework for Special Education Outcomes. *Remedial and Special Education*, 24(2), 67-74. https://doi.org/10.1177/07419325030240020201
- Turkmen-Aslan, D. & Ozmete, E. (2015) Self-Determination Behaviors of Students Who Living in Orphanages and Continuing Secondary Education (Yetistirme Yurtlarinda Kalan ve Ortaogretime Devam Eden Ogrencilerin Self-Determinasyon Davranislari). *Journal of Social Policy Studies* (Sosyal Politika Calismalari Dergisi), 15(35), 53-78. http://dx.doi.org/10.21560/spcd.79398
- Van der Kaap-Deeder, J., Vansteenkiste, M., Soenens, B., Loeys, T., Mabbe, E., & Gargurevich, R.
 (2015) Autonomy-Supportive Parenting and Autonomy-Supportive Sibling Interactions: The Role of Mothers' and Siblings' Psychological Need Satisfaction. *Personality and Social Psychology Bulletin, 41*(11), 1590-604. <u>https://doi.org/10.1177/0146167215602225</u>
- Vansteenkiste, M., Niemiec, C., & Soenens, B. (2010). The development of the five mini-theories of selfdetermination theory: An historical overview, emerging trends, and future directions. In T. Urdan &

- S. Karabenick (Eds.), *Advanced in Motivation and Achievement*: Vol. 16. The decade ahead (pp. 105-166). Emerald.
- Wechsler D. (2003) The Wechsler Intelligence Scale for Children-Fourth Edition. Pearson
- Wehmeyer, M. L. (1996). *The Arc's Self-Determination Scale-Adult Version*. The ARC National Headquarters.
- Wehmeyer, M. L. (2005). Self-determination and individuals with severe disabilities: Re-examining meanings and misinterpretations. *Research and Practice for Persons with Severe Disabilities, 30*, 113–120.
- Wehmeyer, M. L. (2007). *Promoting self-determination in students with developmental disabilities*. Guilford Press.
- Wehmeyer, M. L., Kelchner, K., & Richards, S. (1996). Essential characteristics of self-determined behavior of individuals with mental retardation. *American Journal on Mental Retardation*, 100(6), 632-642.
- Wehmeyer, M. L., & Garner, N. W. (2003). The impact of personal characteristics of people with intellectual and developmental disability on self-determination and autonomous functioning. *Journal* of Applied Research in Intellectual Disabilities, 16, 255–265. <u>https://doi.org/10.1046/j.1468-</u> 3148.2003.00161.x
- Wehmeyer, M. L., Lawrence, M., Kelchner, K., Palmer, S., Garner, N., & Soukup, J. (2004). Whose future is it anyway? A student-directed transition planning process (2nd ed.). Beach Center on Disability, Lawrence, KS.
- Wehmeyer, M. L., Shogren, K. A., Little, T. D., & Lopez, S. J. (2017). *Development of self-determination through the life-course*. Springer.
- Wolman, J. M., Campeau, P. L., DuBois, P. A., Mithaug, D. E., & Stolarski, V. S. (1994). AIR selfdetermination scale and user guide. American Institutes for Research. Available at <u>http://www.zarrow.ou.edu</u>

- Wong, P. K. S., Wong, D. F. K., Zhuang, X. Y., & Liu, Y. (2017) Psychometric properties of the AIR Self-Determination Scale: the Chinese version (AIR SDS-C) for Chinese people with intellectual disabilities. *Journal of Intellectual Disability Research*, 61(3), 233–244. https://doi.org/10.1111/jir.12343
- Yaman, A., Mesman, J., van Ijzendoorn, M. H., Bakermans-Kranenburg, M. J., & Linting, M. (2010).
 Parenting in an Individualistic Culture with a Collectivistic Cultural Background: The Case of Turkish Immigrant Families with Toddlers in the Netherlands. *Journal of child and family studies*, 19(5), 617–628. <u>https://doi.org/10.1007/s10826-009-9346-y</u>
- Zhang, D. (2005). Parent practices in facilitating self-determination skills: The influences of culture, socioeconomic status, and children's special education status. *Research and Practice for Persons* with Severe Disabilities, 30, 154–162. <u>https://doi.org/10.2511/rpsd.30.3.154</u>
- Zhang, D., Wehmeyer, M. L., & Chen, L.-J. (2005). Parent and teacher engagement in fostering the selfdetermination of students with disabilities: A comparison between the United States and the Republic of China. *Remedial and Special Education*, 26, 55–64. https://doi.org/10.1177/07419325050260010701
- Zhang, D. & Benz, M. R. (2006) Enhancing self-determination of culturally diverse students with disabilities: current status and future directions. *Focus on Exceptional Children*, 38(9), 1-12. <u>https://doi.org/10.17161/foec.v38i9.6823</u>
- Zhang, D., Landmark, L., Grenwelge, C., & Montoya, L. (2010) Culturally Diverse Parents' Perspectives on Self-Determination. *Education and Training in Autism and Developmental Disabilities*, 45(2), 175–186. <u>https://www.jstor.org/stable/23879805</u>
- Zheng, Y., Maude, S. P., Brotherson, M. J., Summers, J. A., Palmer, S. B., & Erwin, E. J. (2015).
 Foundations for self-determination perceived and promoted by families of young children with disabilities in China. *Education and Training in Autism and Developmental Disabilities*, 50, 109–122.

Table 1

Characteristics of Families and Their Children with/without IDD

Variables	n (%)
Participants (mothers & fathers)	243
Mother Age of Mean (M) & Standard Deviation (SD)	M = 41.13 (SD = 6.75)
Education level of mothers	
College/University/upper degree	61 (25.1)
High school (9 th -12 th)	40 (16.5)
Primary (elementary & secondary) school $(1^{st}-5^{th} \& 6^{th}-8^{th})$	74 (30.5)
Not graduated/could read and write	68 (28.0)
Employment status of mothers	、 <i>,</i>
Employed	61 (25.0)
Not employed	2 (.8)
Homemakers	180 (74.1)
Marital status of mothers	100 (7 11)
Married	222 (91.4)
Divorced/Separated/Widowed	21 (8 6)
Eather Λ ge of M & SD	M = 44.95 (SD = 7.66)
Education level of fathers	M = 100
College/University/upper degree	81 (33 3)
High school (0 th 12 th)	68(280)
Primary (alamantary & sacondary) school	08 (28.0)
$(1^{\text{st}}-5^{\text{th}}\&6^{\text{th}}-8^{\text{th}})$	70 (28.8)
Not graduated/could read and write	24 (9.9)
Employment status of fathers	
Not employed	33 (13.6)
Employed (labor-intensive)	114 (47.0)
Employed (other labor status)	93 (38.3)
Unreported	3 (1.2)
Type of family	
Nuclear	207 (85.2)
Extended	19 (7.8)
Single parent	17 (7.0)
Urban/Rural Divide (Urbanization)	
Urban	177 (72.8)
Rural	66 (27.1)
Monthly income average	\$640
(Turkish Liras was converted to US Dollar)	(Ranged \$73 - \$2569)
Lower average (\$640-)	162 (66.7)
Upper average (\$640)	81 (33.3)
Gender of children with/without IDD	01 (0010)
Female	105 (43 2)
Male	138 (56.8)
Age of children with ID ASD and TD	M = 12.91 (SD = 4.17)
Type of Disability	m = 12.91 (5D = 1.17)
Intellectual Disability (ID)	91 (37.4)
Autism Spectrum Disorder (ASD)	71 (29.2)
Typically Davaloping (TD)	(23.2)
severity of disability	01 (33.3)
Mild	67 (27 6)
Moderate	07 (27.0) 82 (22.7)
NUULIALE Sovere	02(33.7) 12(5.2)
Drofound	13 (3.3)
FIOIOUIIQ	-

Table 2

Means, Standard Deviations, and Correlations in Self -Determination, Parenting Styles and Practices

	Mean (SD)	1	2	3	4	5	6	7	8	9
1. Self-determination overall	62.33 (10.97)	-								
2. Self-determination capacity of child	17.03 (6.83)	.79**	-							
3. Self-determination opportunities at home	23.14 (3.65)	.76**	.47**	-						
4. Self-determination opportunities at school	22.09 (4.81)	.55**	.02	.29**	-					
5. Authoritative parenting style	66.64 (7.36)	.41**	.28**	.48**	.17**	-				
6. Authoritarian parenting style	40.65 (12.11)	12	10	15*	02	24**	-			
7. Permissive parenting style	10.62 (4.26)	43**	51**	28**	03	34**	.21**	-		
8. Overprotective parenting practices	9.48 (4.97)	36**	51**	23**	.06	14*	.40**	.48**	-	
9. Autonomy-supportive parenting practices	11.16 (3.07)	.35**	.25**	.31**	.18**	.38**	25**	21**	24**	-
*p < 0.05, **p < 0.01, N = 243										

Table 3

Results of Multiple Linear Regression in Predicting of the Self-Determination of Children by Parenting Styles and Practices

Outcome Variables	Predictors Variables	R	R^2	$\frac{Ad.}{R^2}$	F	В	ß	t	р
1. Overall self-	(Constant)	.56	.32	.31	27.79***	40.71		6.41***	.000
determination	1. Authoritative parenting					.36	.25	4.10^{***}	.000
	style								
	2. Permissive parenting					56	22	-3.45***	.001
	style								
	3. Overprotective parental					36	16	-2.64**	.009
	practices								
	4. Autonomy-supportive					.60	.17	2.91**	.004
	parenting practices							**	
2. Child's self-	(Constant)	.61	.37	.36	34.92	18.51		4.86**	.000
determination	1. Authoritative parenting					.09	.10	1.73	.08
capacity	style					17	20	4.00***	000
	2. Permissive parenting					47	30	-4.90	.000
	style					15	22	5 40***	000
	3. Overprotective parenting					45	33	-5.49	.000
	<u>Autonomy supportivo</u>					15	07	1.27	20
	narenting practices					.15	.07	1.27	.20
3 Self-	(Constant)	52	27	25	17 39***	8 95		3 61***	000
determination	1. Authoritative parenting	.02	.27	.20	11.09	.19	.39	6.13***	.000
opportunities at	style					,	,	0110	
home	2. Authoritarian parenting					.01	.03	.53	.59
	style								
	3. Permissive parenting					05	06	96	.33
	style								
	4. Overprotective parenting					07	09	-1.43	.15
	practices								
	5. Autonomy-supportive					.18	.15	2.45^{*}	.01
	parenting practices							de de de	
4. Self-	(Constant)	.21	.04	.04	5.96**	14.59		5.27***	.000
determination	1. Authoritative parenting					.07	.11	1.73	.08
opportunities at	style							• • • *	
school	2. Autonomy-supportive					.21	.14	2.09*	.03
	parenting practices								

Note: R= the correlation coefficient; R^2 = the coefficient of determination; Adjusted R^2 = a special form of R^2 , the coefficient of determination; B= the unstandardized coefficient; β = the standardized regression coefficient. *p < 0.05, **p < 0.01, ***p < 0.001, N = 243.

05.16.2022

Leann Smith DaWalt, PhD

University of Wisconsin-Madison, Waisman Center, Associate Editor American Journal on Intellectual and Developmental Disabilities - AJIDD

Re about second revision (Ref.: Ms. No. AJIDD-D-21-00086): Parenting Styles in Enhancing Self-Determination of Children with Intellectual and Developmental Disabilities

Dear Dr., DaWalt,

We very much thank you and the Reviewers for their valuable recommendations about our current manuscript. We tried to respond to their concerns and hope to meet all to advance toward publication. The relevant requests and our responses can be seen here.

We submitted the second revision of the article which is one of the first studies examining the effect of parenting styles and practices in promoting the self-determination of children with intellectual disability, autism spectrum disorder, and without a disability in Turkey.

All my best wishes

Correspondence author, on behalf of all authors.

Table 1

Variables	n (%)
Participants	243
Mother	113 (46.5)
Father	94 (38.7)
Primary caregivers	36 (14.8)
Age of mothers	
18-24	1 (.4)
25-34	36 (14.8)
35-44	137 (56.4)
45-54	62 (25.5)
55-64	7 (2.9)
65+	-
Mother Age of Mean & SD	M = 41.13 (SD = 6.75)
Education level of mothers	× /
College/University/upper degree	61 (25.1)
High school (9 th -12 th)	40 (16.5)
Primary (elementary & secondary) school	
$(1^{\text{st}}-5^{\text{th}} \& 6^{\text{th}}-8^{\text{th}})$	74 (30.5)
Not graduated/could read and write	68 (28.0)
Employment status of mothers	
Employed	61 (25.0)
Not employed	2 (.8)
Homemakers	180 (74.1)
Marital status of mothers	
Married	222 (91.4)
Divorced/Separated/Widowed	21 (8.6)
Age of fathers	(***)
18-24	-
25-34	11 (4.5)
35-44	117 (48.1)
45-54	80 (32.9)
55-64	28 (11.5)
65+	4 (1.6)
Unreported	3 (1.2)
Father Age of Mean & SD	M = 44.95 (SD= 7.66)
Education level of fathers	
College/University/upper degree	81 (33.3)
High school (9 th -12 th)	68 (28.0)
Primary (elementary & secondary) school	
(1 st -5 th & 6 th -8 th)	70 (28.8)
Not graduated/could read and write	24 (9.9)
Employment status of fathers	
Not employed	33 (13.6)
Employed (labor-intensive)	114 (47.0)
Employed (other labor status)	93 (38.3)
Unreported	3 (1.2)

Characteristics of families and their children with/without disabilities

Table 1 (continued)

Type of family	
Nuclear	207 (85.2)
Extended	19 (7.8)
Single parent	17 (7.0)
Urban/Rural Divide (Urbanization)	
Urban	177 (72.8)
Rural	66 (27.1)
Living area/Region	
Western part of country	122 (50.2)
Eastern part of country	121 (49.8)
Monthly income average	\$640
(Turkish Liras was converted to US Dollar)	(Ranged \$73 - \$2569)
Lower average (\$640-)	162 (66.7)
Upper average (\$640)	81 (33.3)
Gender of children with/without disabilities	
Female	105 (43.2)
Male	138 (56.8)
Age of children with ID, ASD, and TD	M= 12.91 (SD= 4.17)
7-14 aged	145 (59.6)
15-22 aged	98 (40.4)
Type of Disability	
Intellectual Disability (ID)	91 (37.4)
Autism Spectrum Disorder (ASD)	71 (29.2)
Typically Developing (TD)	81 (33.3)
Severity of disability	
Mild	67 (27.6)
Moderate	82 (33.7)
Severe	13 (5.3)
Profound	-
Typically developing	81 (33.3)
Comorbidity of children (additional disability)	
Has	202 (83.1)
Not	41 (16.9)

Table 2

Means, Standard Deviations, and Correlations in Self -Determination, Parenting Styles, and Parental Practices

	Mean (SD)	1	2	3	4	5	6	7	8	9
1. Self-determination overall	62.33 (10.97)	-								
2. Self-determination capacity of child	17.03 (6.83)	.79**	-							
3. Self-determination opportunities at home	23.14 (3.65)	.76**	.47**	-						
4. Self-determination opportunities at school	22.09 (4.81)	.55**	.02	.29**	-					
5. Authoritative parenting style	66.64 (7.36)	.41**	.28**	.48**	.17**	-				
6. Authoritarian parenting style	40.65 (12.11)	12	10	15*	02	24**	-			
7. Permissive parenting style	10.62 (4.26)	43**	51**	28**	03	34**	.21**	-		
8. Overprotective parental practice	9.48 (4.97)	36**	51**	23**	.06	14*	.40**	.48**	-	
9. Autonomy supportive parental practice	11.16 (3.07)	.35**	.25**	.31**	.18**	.38**	25**	21**	24**	-
*p < 0.05, **p < 0.01, N = 243										

Table 3

Means, Standard Deviations, and t-Test Results in Differences of Study Variables Depending on Living Area/Region, Urban-Rural Divide, and Lower/Higher than Average Income.

	Western part		estern part Eastern part				1	Url	ban	Rural			1	Lower	Income	Higher	Income			1	
Variables	(<i>N</i> =	122)	(<i>N</i> = 121)		t	р	hen's 6	(<i>N</i> = 177)		(N = 66)		t	р	hen's a	(<i>N</i> =	162)	(<i>N</i> =	811)	t	р	hen's 6
	М	SD	М	SD			Co	М	SD	М	SD			Co	М	SD	М	SD			Co
SD total	65.22	10.59	59.13	10.48	4.480	.000	.58	64.81	10.30	55.01	9.41	6.668	.000	.86	60.09	10.84	66.40	10.38	-4.384	.000	.56
SD capacity	19.77	5.13	14.09	7.08	7.165	.000	.92	19.03	5.82	11.33	6.04	9.085	.000	1.17	15.29	6.76	20.25	5.57	-5.710	.000	.73
SD home	23.86	3,70	22,23	3,55	3.484	.001	.44	23.72	3.52	21.23	3.63	4.834	.000	.62	22.40	3.65	24.34	3.52	-3.951	.000	.51
SD school	21.58	4.43	22.76	5.14	-1.921	.05	.24	22.05	4.46	22.47	5.71	600	.54	-	22.35	4.95	21.80	4.55	.839	.40	-
Authoritative	67.26	7.21	65.96	7.56	1.361	.17	-	67.06	7.36	65.39	7.42	1.558	.12	-	65.48	7.89	68.87	5.71	-3.438	.001	.44
Authoritarian	36.29	8.10	46.00	13.84	-6.669	.000	.79	39.67	10.96	44.92	14.72	-3.006	.003	.38	44.00	12.69	35.34	9.10	5.472	.000	.70
Permissive	9.77	3.33	11.78	4.91	-3.738	.000	.48	9.84	3.91	13.27	4.35	-5.889	.000	.75	11.70	4.60	8.90	2.87	5.021	.000	.64
Overprotective	7.34	3.34	11.95	5.34	-8.070	.000	1.03	8.23	4.33	13.42	4.75	-8.081	.000	1.04	10.92	4.80	7.07	4.42	6.048	.000	.77
Autonomy	11.85	3.05	10.41	3 10	3 640	000	46	11 33	3 1 5	10 59	3 13	1 6/8	10		10.90	3 15	11.60	3 13	-1 6/3	000	21
supportive	11.05	5.05	10.41	5.10	5.040	.000	.+0	11.55	5.15	10.39	5.15	1.048	.10	-	10.90	5.15	11.00	5.15	-1.043	.000	.21

df for *t* values: ranged 239-241; Cohen's *d* indicates effect size; *p < 0.05, **p < 0.01, ***p < 0.001, N = 243

Table 4

Means, Standard Deviations, and One-Way Analyses of Variance in Differences of Study Variables Depending on Disability Status and Severity.

Variables	ID (<i>N</i> = 91)		ASD (<i>N</i> = 71)		TD (N = 81)		F	р	Π^{2}_{p}	Mild (N = 67)	Moderate ($N = 82$)		Severe $(N = 13)$		F	р	\prod^{2}_{p}
	М	SD	М	SD	М	SD	-			М	SD	М	SD	М	SD	_		
SD total	61.19	10.39	56.56	10.74	68.29	8.54	27.1550***	.000	.18	65.50	8.36	55.12	10.18	51.84	8.82	26.594***	.000	.25
SD capacity	15.89	5.78	11.94	6.44	22.51	3.32	77.566***	.000	.39	17.79	5.96	11.56	5.43	11.84	4.87	23.821***	.000	.22
SD home	22.62	4.07	21.91	3.16	24.53	3.28	11.212***	.000	.08	23.84	2.50	21.47	3.96	19.76	4.24	12.350***	.000	.13
SD school	22.57	4.55	22.70	5.48	21.24	4.40	2.263	.10	-	23.77	3.72	22.07	5.67	20.23	4.74	3.939*	.02	.04
Authoritative	65.28	8.74	66.73	5.04	68.00	7.36	2.97^{*}	.05	.02	67.23	5.94	64.56	8.45	67.53	5.02	2.822	.06	-
Authoritarian	40.16	10.14	41.14	12.72	42.12	14.04	.538	.58	-	41.13	10.35	41.24	12.42	33.76	6.09	2.623	.07	-
Permissive	11.16	4.49	12.92	3.99	8.44	3.12	25.303***	.000	.17	10.83	3.50	13.09	4.85	10.30	3.03	6.347*	.002	.08
Overprotective	9.78	4.78	11.97	5.28	7.44	4.00	17.617***	.000	.13	9.73	4.29	11.80	5.67	9.23	3.96	3.772*	.02	.04
Autonomy supportive	11.28	3.19	10.76	3.05	11.29	3.21	.706	.49	-	11.65	2.69	10.63	3.30	10.61	3.81	2.130	.12	-

 $\overline{\Pi_p^2}$ = Partial Eta Squared indicates unbiasedly effect size; *p < 0.05, **p < 0.01, ***p < 0.001, N = 243

Table 5

Means, Standard Deviations, and One-Way Analyses of Variance in Differences of Study Variables Depending on Parent's Education

		Mother's education status												Fat	ther's e	ducation	status					
Variables	College/ University/ upper degree (N = 61)		High school $(9^{\text{th}}-12^{\text{th}})$ (N = 40)		Primary school (elementary & secondary) $(1^{st}-5^{th} \& 6^{th}-$ $8^{th})$ (N = 74)		Not graduated/ could read and write. (N = 68)		F	р	Π^{2}_{p}	Coll Unive upper (N =	lege/ ersity/ degree = 81)	High school $(9^{\text{th}}-12^{\text{th}})$ (N = 68)		Primary school (elementary & secondary) $(1^{st}-5^{th} \& 6^{th}-$ $8^{th})$ (N = 70)		Not graduated/ could read an write. (N = 24)		F	р	${\textstyle \prod}^{2}{}_{p}$
	М	SD	М	SD	М	SD	М	SD	-			М	SD	М	SD	М	SD	М	SD			
SD total	66.00	10.22	65.30	9.93	62.64	10.79	56.36	10.11	11.027***	.000	.11	64.93	10.88	65.04	10.59	59.14	9.83	53.47	8.71	11.108***	.000	.11
SD capacity	20.63	4.98	19.70	5.36	17.35	6.51	11.57	5.94	30.667***	.000	.27	20.04	6.11	18.39	5.39	14.44	6.83	9.66	4.12	24.520***	.000	.22
SD home	24.24	3.66	24.30	3.37	22.83	3.65	21.46	3.44	8.494***	.000	.09	23.97	3.49	23.91	3.59	22.24	3.23	19.73	3.96	11.381***	.000	.11
SD school	21.11	4.88	21.30	4.34	22.45	4.40	23.32	5.25	2.847^{*}	.03	.03	20.91	4.59	22.73	4.95	22.39	4.64	24.16	4.91	3.681**	.01	.05
Authoritative	68.72	5.85	66.45	8.41	66.90	7.56	64.50	7.41	3.614**	.01	.04	67.83	7.38	68.00	6.33	65.57	7.77	61.22	6.78	6.266***	.000	.07
Authoritarian	34.57	9.35	41.45	10.81	43.34	12.19	44.36	13.50	8.954***	.000	.09	37.07	10.20	41.91	11.30	43.69	12.80	45.00	16.42	5.066*	.002	.05
Permissive	8.62	2.81	9.82	3.48	11.20	3.90	12.79	5.22	12.482***	.000	.13	9.40	3.55	9.69	3.60	12.41	4.63	13.66	4.74	12.739***	.000	.13
Overprotective	6.63	3.97	8.60	4.06	9.97	3.52	12.58	5.96	19.424***	.000	.18	7.34	4.47	9.57	3.98	11.20	5.06	13.04	5.77	13.388***	.000	.12
Autonomy supportive	11.78	3.07	11.37	2.99	11.29	3.47	10.23	2.81	2.915*	.03	.03	11.39	3.11	11.44	3.16	10.88	3.23	10.12	2.96	1.365	.254	-

p < 0.05, p < 0.01, p < 0.01, p < 0.001, N = 243

Table 6

Results of Multiple Linear Regression in Predicting of the Self-Determination of Children by Parenting Styles and Parental Practices

Outcome	Predictors Variables	R	R^2	Ad.	F	В	ß	t	р
Variables				R^2					
1. Overall self-	(Constant)	.58	.34	.33	23.56***	36.16		5.06***	.000
determination	1. Authoritative parenting					.37	.25	4.07^{***}	.000
	style								
	2. Authoritarian parenting					.10	.11	1.83	.06
	style								
	3. Permissive parenting style					61	23	03.70***	.000
	4. Overprotective parental					44	20	-3.03**	.003
	practices								
	5. Autonomy supportive					.71	.20	3.32***	.001
	parental practices								
2. Child's self-	(Constant)	.64	.41	.40	32.07***	13.36		3.18**	.002
determination	1. Authoritative parenting					.11	.11	2.04^{*}	.04
capacity	style								
	2. Authoritarian parenting					.09	.16	2.98^{**}	.003
	style								
	3. Permissive parenting style					50	31	-5.21***	.000
	4. Overprotective parental					52	38	-6.07**	.000
	practices								
	5. Autonomy supportive					.25	.11	2.01^{*}	.04
	parental practices								
3. Self-	(Constant)	.50	.25	.24	15.76***	9.76		3.85***	.000
determination	1. Authoritative parenting					.18	.38	5.80***	.000
opportunities at	style								
home	2. Authoritarian parenting					.01	.03	0.56	.57
	style								
	3. Permissive parenting style					05	06	.92	.35
	4. Overprotective parental					08	12	-1.68	.09
	practices								
	5. Autonomy supportive					.16	.13	2.12^{*}	.03
	parental practices								
4. Self-	(Constant)	.26	.07	.05	3.42**	13.20		3.53***	.000
determination	1. Authoritative parenting					.07	.11	1.51	.13
opportunities at	style								
school	2. Authoritarian parenting					007	01	24	.80
	style								
	3. Permissive parenting style					04	04	57	.56
	4. Overprotective parental					.16	16	2.17^{*}	.03
	practices								
	5. Autonomy supportive					.30	.19	2.68**	.01
	parental practices								

Note: R= the correlation coefficient; R^2 = the coefficient of determination; Adjusted R^2 = a special form of R^2 , the coefficient of determination; B= the unstandardized coefficient; β = the standardized regression coefficient. *p < 0.05, **p < 0.01, ***p < 0.001, N = 243.