Saadet Aybeniz Yıldırım {ORCID:0000-0002-2408-1859}
Melek Gözde Luş {ORCID:0000-0002-0430-9289}
Habib Erensoy {ORCID:0000-0002-4278-2739}

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EXAMINATION OF EMOTION AND SOCIAL SKILLS IN PRIMARY SCHOOL STUDENTS WITH PERVASIVE DEVELOPMENTAL DISORDER

YAYGIN GELİŞİMSEL BOZUKLUK TANILI İLKÖĞRETİM ÖĞRENCİLERİNDE DUYGU AYARLAMA VE SOSYAL BECERİLERİN İNCELENMESİ

Saadet Aybeniz Yıldırım[1], Melek Gözde Luş[2], Habib Erensoy[3]*

Öz

Bu çalışmanın amacı, yaygın gelişimsel bozukluk tanılı ilköğretim öğrencilerinde duygu ayarlama, sosyal beceri düzeyi, aralarındaki ilişki ve duygu ayarlama ve sosyal beceri düzeyinin ebeveynlerin sosyo-demografik özellikleri ile ilişkisinin incelenmesidir. Araştırmanın örneklemini ilköğretim okullarında öğrenim gören, araştırmacının ulaşabildiği ve velilerin izin verdiği 30 normal gelişim gösteren ve 30 yaygın gelişimsel bozukluk tanılı olmak üzere 60 ilköğretim öğrencisi oluşturmaktadır. Çalışmada kişisel bilgiler için "Kişisel Bilgi Formu", sosyal beceri düzeyi için "Marmara Sosyal-Duygusal Uyum Ölçeği", duygu ayarlama düzeyini belirlemek için "Duygu Ayarlama Ölçeği" uygulanmıştır. Elde edilen verilerin analizinde bağımsız iki örneklem t testi, ANOVA testi ve Pearson korelasyon tekniklerinden yararlanılmıştır. Araştırmada elde edilen bulgulara göre, yaygın gelişimsel bozukluk tanılı ilköğretim öğrencilerinin duygu ayarlama ve sosyal becerileri orta düzeydedir. Yaygın gelişimsel bozukluk tanılı çocukların duygu ayarlama ve sosyal beceri düzeyinin çocuğun bulunduğu sınıf, anne öğrenim düzeyi, anne medeni durumu ve anne çalışma durumuna göre anlamlı farklılık göstermediği; sosyal beceri düzeyinin çocuğun yaşı ile ilişkili olduğu sonuçlarına ulaşılmıştır. Çalışmada ayrıca duygu ayarlama ve sosyal beceri düzeyi arasında pozitif yönlü ve anlamlı ilişki tespit olup elde edilen bulguların literatür ile genel olarak paralellik gösterdiği sonuçlarına ulaşılmıştır.

Anahtar Kelimeler: yaygın gelişimsel bozukluk, duygu ayarlama, sosyal beceri

[1] Üsküdar University, Clinical Psychologist, Istanbul, Turkey.

[2] Child and Adolescent Psychiatrist, University of Health Science, Haydarpaşa Numune Training and Research Hospital, Child and Adolescent Psychiatry Department, Istanbul, Turkey.

[3] Üsküdar University, Assistant Professor of Psychiatry, Istanbul, Turkey

*Sorumlu Yazar: Habib Erensoy Üsküdar University, Assistant Professor of Psychiatry, Istanbul, Turkey. e-mail: habiberensoy@yahoo.com

Abstract

The aim of this study is to investigate the relationship between emotional adjustment and social skills and the relationship between parents' socio-demographic characteristics in primary school students with Autism Spectrum Disorder (ASD). The sample of the study consisted of 60 elementary school students, 30 normal developmental and 30 diagnosed with ASD who were educated in primary schools, who were their parents allowed and accessible. For personal information "personal information form", for social skills, "Marmara Social-Emotional Adjustment Scale" and for emotion adjustment skills "emotion regulation scale" were applied in this study. In the analysis of the obtained data, two independent samples t test, ANOVA test and Pearson correlation techniques were used. According to the findings of the study, primary school students diagnosed with ASD had moderate emotion adjustment and social skills. It was concluded that the emotional adjustment and social skill level of the children diagnosed with ASD did not show a significant difference to the class of the child, mother's level of education, maternal marital status and maternal working status; social skill level is significantly associated with the child's age. In the study, a positive and significant relationship was found between emotion adjustment and social skill level and the results were found to be generally parallel to the literature.

Keywords: autism spectrum disorders, emotion regulation, social skills, adjustment, behaviors

1. Introduction

Autism spectrum disorder (ASD) is characterized by deficits in social communication and the presence of restricted and repetitive patterns of behaviors, interests, and activities (APA, 2013). Individuals with ASD have difficulty in the interests and awareness towards feelings about other's reactions, recognition of emotion expressions (Tracy JL, 2011). It is known that, children and adults with ASD are inadequate in social communication because they do not focus their attention on social stimuli and have difficulties in communicating with and understanding other people around them (Tracy JL and Robins RW, 2008; Ashwin C et al., 2006). According to literature, difficulties in social–emotional domains, such as understanding and responding to others are broadly characteristic in ASD (Lombardo MV et al., 2016), struggle to engage in joint attention, sustain eye contact, and recognize facial expressions are also seen in ASD (Dawson G., 2008; Fridenson-Hayo S. et al., 2016). The ability to respond to social stimuli is a skill that develops in the first months in children who develop normally. The inadequacy of this skill leads to significant insufficiencies in social communication (Luiselli JK. et al., 2008). In fact, failure to develop these skills may cause children with ASD to be excluded by their peers and exposed to social abstraction; In addition, activities aiming to increase social skills help to express the wishes and needs of individuals diagnosed with ASD, to share them and to communicate with their peers (Turhan C. and Vuran S., 2015). It is known that the repetitive behaviors of children with autism may be reduced and the social aspects of communication skills can be improved. In the development of social skills, group-based social skills interventions (Gates JA.et al., 2017) modeling with video (Ergenekon Y., 2012) cognitive social skills programs (Girli A. and Atasoy S., 2010) emotion teaching with pictures (Girli and Sabırsız, 2011) are commonly utulized and it is stated that social skills practices such as these may help individuals with ASD to learn simple first-aid skills, be able to cope with ridicule, and to cope with inappropriate avoidance situations, and consequently the symptoms can be reduced and the discomfort can be alleviated and the exclusion of the individual in society can be prevented. Given that individuals with ASD have emotional and behavioral difficulties, emotion regulation is thought to play a central role in the manifestation of individual differences in core ASD-related symptomatology and comorbid problems (Mazefsky et al., 2014; Weiss J.A., 2014). Many factors related to emotion-regulating difficulties in children with ASD have been defined theoretically and it has been emphasized that parents contribute significantly to the emotions of their children (Ting V and Weiss JA., 2017). There are studies suggesting that internalizing and externalizing problems in children with ASD may be associated with parent and family factors (Mayes et al., 2011; Sukhodolsky et al, 2008). On the other hand, it is important to understand whether the socio-demographic status of their parents is related to emotion regulation and social skills status of children with ASD, and to determine the level of involvement of parents in the future special education programs. The aim of this study is to investigate emotion regulation and social skill level of primary school students diagnosed with ASD and their relationship with socio-demographic characteristics of their parents. We hypothesized that, there is a significant relationship between emotion regulation and social skill level and socio-demographic characteristics of their parents in primary school students diagnosed with ASD

2. Materials and Methods

2.1. Participants

The sample for the study group consisted of 30 children aged between 6 and 13 years who were were diagnosed with ASD and their mothers. Children who were previously diagnosed with ASD in the Child and Adolescent Psychiatry Clinic in Istanbul (30 children who met the criteria for autistic disorder according to DSM 5 criteria) and who had not been diagnosed with any other psychiatric disorder in their psychiatric examinations formed the ASD group. The diagnosis of ASD was made based on the interviews with parents and children based on DSM - V criteria and detailed developmental and psychiatric evaluation. The control group consisted of 30 primary school students with normal development and no psychiatric disease. Results were evaluated by child psychiatrist, psychiatrist and psychologist. The parents were informed about the

purpose of the study and informed consent was obtained from all parents before the examination.

2.2. Instruments of data collection

Personal Information Questionnaire: The Personal Information Questionnaire Form prepared by the researchers is an interview form which includes the gender, age diagnosis and grade of child and level of education, marital status and profession of mother and the number of children the mother has.

Emotion Regulation Checklist (ERC). The Emotion Regulation Checklist (ERC) the instruments developed by Shields and Cicchetti (1997) used for the evaluation of emotion regulation in children. The reliability and validity studies of the Turkish version of ERC were carried out by Kapçı et al. (2009). The ERC comprises 24 items that are assessed on a four point Likert scale (1 = Never; 2 = Sometimes; 3 = Often; 4 = Almost Always) and can be answered by adults well acquainted with the child, such as the father, mother, caregiver, or teacher.

Marmara Social-Emotional Adjustment Scale (MSEA). The Marmara Social–Emotional Adjustment Scale (MSEA) was used in order to identify the children's social–emotional adjustments. The MSEA was created by Güven et al. (2004) in order to measure the social–emotional levels of 7-year old children. Işık has tested the reliability and validity of the scale for 5–6 year old children (2006).

Statistical Analysis. Data were analyzed using the SPSS 21.0 program. The significance level was selected as p <0.05 in hypothesis testing. Skewness coefficient was used in the test of normality of the scale scores. Since the scale scores were found to be normally distributed in the normality test, the two independent samples t-tests were used for the comparison of the diagnostic group, child gender, maternal marital status and working status variables; ANOVA test was used to compare the age, class, and mother learning status of the child. When there was a significant difference in ANOVA test, LSD post hoc test was used in paired comparisons in order to determine which groups the difference was between. Pearson correlation analysis was used to analyze the relationship between emotion adjustment and social skills.

3. Results

The frequency and percentage distributions of the sociodemographic information of 60 participants that are the sample of the study are given in Table 1. %30 of children with ASD are female and %70 are male. Of the undiagnosed children, %36.7 were girls and %63.3 were boys. The mean age of children diagnosed with ASD was 8.57 ± 2.36; The mean age of the children who were not diagnosed was 7.67 ± 1.42 years. %43.3 of the children diagnosed with ASD were 6-7 years, %30 were 8-9 years, %26.7 were 10-13 years. group. %53.3 of the undiagnosed children are in the 6-7 age group, %36.7 in the 8-9 age group, and %10 in the 10-13 age group. %50 of the mother of the children with ASD were educated at primary level, %26.7 at high school and %23.3 at university level. Of the mother of the undiagnosed children, %13.3

were educated at primary level, %3.3 were at high school and %83.3 were at university. %86.7 of the mother of children with ASD and mother of undiagnosed children were married, and %13.3 were single / divorced. Of the children diagnosed with ASD, %86.7 of their mother were housewife, %13.3 had a job, and %23.3 of undiagnosed children had a housewife mother, %76.7 of their mother had a job (table 1).

Descriptive statistics and comparison of the scales by groups are shown in Table 2. The mean ERC score of children with ASD (2.79 ± 0.38) was "moderate"; the mean ERC score of the children who were not diagnosed (3.21 ± 0.29) was found to be "high" (4-1 = 3/3 = 1; 1.00-2.00: low; 2.01-3.00: medium; 3.01-4.00: high). ERC scores of primary school children not diagnosed were significantly higher than those of children diagnosed with ASD (t=-4,89; p<0,05) (table 2). The mean MSEA score of children with ASD (1.96 ± 0.35) was "moderate"; the mean MSEA score of the children who were not diagnosed (2.59 ± 0.19) was found to be "high" (3-1 = 2/3 = 0.67; 1.00-1.67: low; 1.68-2, 33: medium; 2.34-3.00: high). MSEA scores were found to be significantly different between groups (t = -8.68; p <0.05). There was a positive and significant relationship between ERC scores and MSEA scores of primary school students diagnosed with ASD (r = 0.70; p <0.05) (table 2).

Table 3 shows the results of the comparison of the scale scores according to the sociodemographic characteristics of the mothers of primary school students diagnosed with ASD. It was determined that the ERC and MSEA scores of primary school students diagnosed with ASD did not show significant differences according to mother education level. ERC and MSEA scores did not differ significantly according to maternal marital status and also according to the working status of the mother (table 3).

4. Discussion

In this study, we determined that 30 ASD and 30 normally developped primary school students showed significant differences in emotion regulation and social skill levels. In their studies examining emotion regulation skills in children with children with autism and with 22q13 deletion syndrome, Glaser and Shaw (2011) showed that their emotional-social skills were low; however, they achieved results that could improve further with early intervention programs. Charlton et al. (2019) found that adults with ASD and comorbid anxiety or mood disorder demonstrated significantly greater involuntary engagement for emotion regulation than those without an anxiety or unipolar depression diagnosis and those without anxiety or depression reported significantly more voluntary engagement. Ting V. and Weiss J.A. (2017) investigated the association among parent co-regulation, child emotion regulation, and internalizing and externalizing problems in 51 parents and school-aged children with ASD and they reported that parental co-regulation and overall scaffolding have important relations to child externalizing problems. These findings of this study thought to be similar with the findings of tliterature the suggest that children with ASD have low

level of emotion regulations and social skills, but these skills can be increased by various educational methods. It was determined that the ERC and MSEA scores of the primary school students diagnosed with autism did not show a significant difference according to the mother education level. In his study, Yüklü (2017) examined the relationship between emotion regulation and social problem solving (social skill) levels of kindergarten students, it was found that emotion regulation and social skill level were not associated with maternal education level. It was concluded that there was no significant relationship between emotion regulation and social skill level and maternal education level.

In our study, ERC and MSEA scores were not significantly different according to the maternal marital status and the level of work of the mother. In the study where Akbaba (2017) examined the children's ability to regulate emotions, he found that there was no significant relationship between mother's working status and child's emotion regulation skills in his study. It was concluded that findings of this study and the the limited literature showed parallelism, there was no significant relationship between emotion regulation and social skill level and maternal working status.

It is now known that parenting behavior does not cause autism. However, parenting is a primary source of socialization for all young children, and the style and quality of parenting behavior affects social development in the context of autism (Caplan et al., 2019). Many studies have found a relationship between responsive maternal verbalization (both guiding and non-guiding) and language development in children with ASD (Haebig et al., 2013a; Haebig et al. 2013b). It is important for children with ASD to develop better in society, to develop appropriate behaviors, to be more active and to better understand their social skills to better adapt to the community. On the other hand, it is important to understand whether the socio-demographic status of their parents is related to emotion regulation and social skills status of children with ASD, and to determine the level of involvement of parents in the future special education programs.

This study is limited to a sample of 30 primary school students with 30 autism diagnoses. Since the sample size of the research is disproportionate to the total number of students making up the research universe, it cannot be generalized to the universe. The results related to emotion regulation and social skills of children with ASD are limited to the scope of the scales used in the study. Future studies may be helpful in understanding the relationships between autism, emotion adjustment, and social skill level and parenting characteristics.

Table 1. Distribution of Participants by Demographic Characteristics

Demographic Variable	Groups	Autism (n=30)		Normal (n=30)	
		N	%	n	%
Gender of the child	Girl	9	30,0	11	36,7
	Boy	21	70,0	19	63,3
Age Autism: (8,57±2,36) Autism: (7,67±1,42)	6-7 years	13	43,3	16	53,3
	8-9 years	9	30,0	11	36,7
	10-13 years	8	26,7	3	10,0
Grade of child	1. grde	10	33,3	4	13,3
	2. grade	6	20,0	17	56,7
	3. grade	6	20,0	4	13,3
	4-8. grade	8	26,7	5	16,7
Mother's level of Education	Primary S.	15	50,0	4	13,3
	High School	8	26,7	1	3,3
	University	7	23,3	25	83,3
Marital status of the mother	Married	26	86,7	26	86,7
	Single	4	13,3	4	13,3
Profession	Housewife	26	86,7	7	23,3
	Working	4	13,3	23	76,7

Table 2. Descriptive Statistics and Comparison of Scores by Groups

Group	Groups	n	$\overline{X}$	SS	t	p
ERC	Autism	30	2,79	0,38	-4,89	0,000
	Normal	30	3,21	0,29		
MSEA	Autism	30	1,96	0,35	-8,68	0,000
	Normal	30	2,59	0,19		

Correlation analysis results

Variables	ERC	MSEA
ERC	1	0,70**
MSEA	0,70**	1

*p<0,05   **p<0,01

Table 3. ANOVA Test Results of Comparison of Scale Scores According to Mother Education Level

Scale	Mother	n	$\overline{X}$	SS	F/t	p
ERC	A- Primary Sschool	15	2,73	0,43	0,35	0,709
	B- High School	8	2,86	0,34		
	C-University	7	2,83	0,33		
MSEA	A-Primary School	15	1,96	0,39	0,58	0,565
	B- High School	8	2,06	0,30		
	C-University	7	1,87	0,32		
ERC	Married	26	2,80	0,34	0,39	0,698
	Single	4	2,72	0,63		
MSEA	Married	26	1,98	0,36	0,66	0,514
	Single	4	1,85	0,26		
ERC	Housewife	26	2,78	0,38	-0,19	0,851
	Working	4	2,82	0,44		
MSEA	Housewife	26	1,98	0,36	0,66	0,514
	Working	4	1,85	0,33		

Patient informed consent: Informed consent was obtained.

Ethics committee approval : The ethics committee approval has been obtained from Üsküdar University with Ethics committee report number of B.08.6.YÖK.2. ÜS.0.05.0.06/2018/1010 (24 December 2018).

Conflict of interest: There is no conflicts of interest to declare.

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