

Investigating the Mealtime Behaviors of the Parents of Children with Typical Development and Autism Spectrum Disorder and Family Eating Routines

Tipik Gelişen ve Otizm Spektrum Bozukluğu Olan Çocukların Ebeveynlerinin Yemek Zamanı Davranışları ile Aile İçi Yeme Alışkanlıklarının İncelenmesi

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ABSTRACT Objective: Eating behaviors of children can be affected by parental eating behaviors as well as they may influence parental eating behaviors. In this mutual interaction, parental attitudes towards eating can also shape eating habits at home. In the study, it was aimed to examine the differences between parental mealtime actions and the family eating routines. **Material and Methods:** The parents of 180 children (90 with typical development-TD and 90 with autism spectrum disorder-ASD) aged 3-5 participated. The Parent Mealtime Action Scale was used to determine parents' eating behaviors and attitudes towards their children, and a personal information was used to determine family routines. **Results:** Considering the results obtained, limiting the number of snacks consumed daily by the parents of children with typically developing is more frequent in the group where the whole family eats at a specific time. In the parents of children with ASD, those who eat separately from the child consume less vegetable-fruit daily than those who eat together. In addition, the parents of children with ASD in the group where the whole family eats together, whether or not for a specific time, show more snacking models than those in the group where children eat separately. The parents of children with ASD whose foods are processed exhibit more positive persuasion. **Conclusion:** Family eating habits can be shaped in parallel with parental attitudes and behaviors. Therefore, fostering parental behaviors towards proper and healthy nutrition is thought to affect the eating behaviors of family members. It is considered that future studies should investigate the eating behaviors of children and parents through observing the natural environment of children.

ÖZET Amaç: Çocukların yeme davranışları, ebeveynlerin yeme davranışlarından etkilenebildiği gibi ebeveynlerin yeme davranışlarını da etkileyebilmektedir. Bu karşılıklı etkileşim içerisinde ebeveynlerin, yemek yemeye ilişkin tutumları da evdeki yeme alışkanlıklarını şekillendirebilmektedir. Mevcut çalışmada, ebeveynlerin yemek zamanlarındaki tutumları ile ev içi yeme rutinleri arasındaki farklılıkların incelenmesi amaçlanmıştır. **Gereç ve Yöntemler:** Bu amaçla çalışmaya, 90 tipik gelişen ve 90 otizm spektrum bozukluğu olan 3-5 yaşları arasındaki çocuğun ebeveyni katılmıştır. Ebeveynlerin, çocuklarına olan yeme davranış ve tutumlarını belirlemek için "Parent Mealtime Action Scale" ve ev rutinlerini belirlemeye yönelik araştırmacı tarafından geliştirilen genel bilgi formu kullanılmıştır. **Bulgular:** Elde edilen sonuçlara bakıldığında, tipik gelişen çocukların ebeveynlerin günlük tüketilen atıştırma miktarına sınır koyma davranışı, belirli bir saatte tüm ailenin yemek yediği grupta daha fazladır. Otizm spektrum bozukluğu olan çocukların ebeveynlerinde ise çocuğun diğer aile bireylerinden ayrı yiyenlere göre tüm aile birlikte yiyenler, günlük daha az sebze ve meyve tüketmektedirler. Ayrıca tüm ailenin belirli bir saat olsun ya da olmasın, birlikte yediği gruptaki otizm spektrum bozukluğu olan çocukların ebeveynleri, çocukların ayrı yemek yediği grupta olan ebeveynlere göre daha fazla atıştırma modeli olmaktadır. Yemeği işleminden geçen otizm spektrum bozukluğu olan çocukların ebeveynleri, daha fazla olumlu ikna tutumu sergilemektedir. **Sonuç:** Ev içindeki ailenin yeme alışkanlıkları, ebeveynlerin tutum ve davranışlarına paralel olarak şekillenebilmektedir. Bu nedenle de ebeveynlerin davranışlarının doğru ve sağlıklı beslenmeye yönelik olarak desteklenmesinin, tüm aile bireylerinin yeme davranışlarını etkileyebileceği düşünülmektedir. Gelecek araştırmalarda çocukların doğal ortamlarında gözlem yapılarak, çocukların ve ebeveynlerinin yeme davranışlarının incelenmesinin önemli olduğu düşünülmektedir.

Keywords: Autism spectrum disorder; mealtime; parents

Anahtar Kelimeler: Otizm spektrum bozukluğu; yemek zamanı; ebeveynler

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Eating is generally considered to be a basic biological function, but it also posits a fundamental socializing function.¹ According to parents, eating together with family members enhances chatting, togetherness, food sharing, and doing special activities.² Mother and child are cooperatively attached to each other within the family, especially at mealtimes.³ It is known that parents enjoy sharing their mealtimes with their children and want to include their children in the meal preparation process, but that they allow limited inclusion of their children in this process since they have concerns about the children's messing up.⁴ Recent studies, like the "The Family Dinner" project organized by Project Zero at Harvard University, reveal that spending mealtimes with children is essential in terms of fostering interactions among family members. Therefore, the project outputs recommend several recipes for different budgets, child participation in the meal preparation, and conversation and entertainment topics appropriate to the child's age group. Regular mealtimes are thought to increase self-perception, academic performance, and psychological resilience while reducing abuse, adolescent pregnancy, depression, and eating disorders.⁵

It is very important for children with autism spectrum disorders (ASD) to eat with their parents, as in typically developing (TD) children.⁶ However, parents who have children with ASD may experience some difficulties. One of these difficulties is the eating disorders of their children. Families need to be supported by professionals and to learn problem-solving strategies to cope with and eliminate eating disorders since this can cause stress in the caregivers of children with ASD who have eating problems.⁷⁻⁹ In the study of Sharp, Burrell, and Jaquess, it was concluded that when families were educated for mealtime plans of children with ASD, their stress on this issue decreased as a consequence of increased awareness of their attitudes towards their children at mealtimes.¹⁰ There is a growing knowledge accumulation to deal with eating disorders of children with ASD. In the intervention approaches to be planned, what is essential is not leave the child to go on a diet alone but to ensure the involvement of the whole family in the process.¹¹

Mothers of children with eating disorders can try different methods such as walking around or watching

television with the child at mealtimes to cope with the problems of their children. Therefore, counseling services should be offered to caregivers of such children to enable them to find effective and appropriate solutions.¹² Most of the eating-oriented paternal attitudes are used to ensure adaptive feeding behaviors. Some of those are not keeping the spoon close to the mouth of the child, guiding the child physically, offering different foods, giving positive feedback, using a food reward, using a non-food reward, repetitive insistence, and changing the consistency of foods.¹³⁻¹⁵ Apart from all these, repeated exposure method seems to be effective from early ages to ensure that children consume foods that they do not prefer much, such as vegetable. Repetitive exposure refers to offering the target vegetable to the child constantly in different environments and situations.¹⁴ In a recent meta-analysis study discussing 30 intervention studies, it has been revealed that interventions applying repetitive exposure are more effective.¹⁵ Similarly, another study revealed that acceptance of children increased when fruits were offered with another food with which that the child was familiar, parents gave them the opportunity to smell or taste fruits, and the children were increasingly exposed to the same fruit.¹⁶ However, even such methods are known to be effective for younger children without neophobia or children without developmentally sensitive conditions.¹⁷⁻²¹

It is deemed to be critical for parents to have information about which approaches or attitudes should be used when and where. For this reason, it is thought that knowing the differences between family routines and parental mealtime attitudes to children will form the basis of tailored-made intervention approaches to be generated for families. Therefore, the purpose of this study was to examine the relationship between parental mealtime attitudes and family eating habits. Another purpose of the study was to investigate family eating behaviors by comparing two groups of parents who had children with TD and ASD.

MATERIAL AND METHODS

The present research was conducted in employing a quantitative research design with a descriptive survey model.^{22,23}

SAMPLING PROCEDURES AND THE SAMPLE

A simple random sampling technique was utilized in selecting the participants. The children were enrolled in preschools and special education centers in the 2017-2018 academic year in eight different districts of Ankara, Turkey. In total 39 private education-rehabilitation centers and 18 private preschools agreed to participate in the study. Parents who volunteered to participate in the research in the prespecified schools were included in the sample group. Sample size was calculated according to the standardized means difference known as Cohen *d* applying the following steps: Type 1 error margin (α)=0.05, effect size=0.5, testing power=0.85. The result of the calculations at the intended confidence level revealed the sample size as 180. Each parent could participate in the study voluntarily and for only one child. Those who had agreed to participate in the study completed a consent form (Table 1).

MEASURES

The “Parent Mealtime Action Scale (PMAS)” and the “Personal Information Form” were used as data collection tools in the study. While the initial one was utilized to identify parental feeding attitudes towards their children at mealtimes, the latter was used to collect information about family eating habits.

Parent Mealtime Action Scale

The PMAS was initially developed by Hendy, Williams, Camise, Eckman, and Hedemann.²⁴ The scale assesses the parental behaviors while they are feeding their children at mealtimes and consists of

31 items on 9 distinct sub-scales. Participants are asked to respond to the question, “During a typical week in the past month, how often did you show each mealtime action?” on the 5-point Likert-type scale. The sub-scales are snack limits (SL), positive persuasion (PP), daily fruit-vegetable (DFV) availability, use of rewards (UR), insistence on eating (IE), snack modeling (SMO), special meals (SM), fat reduction (FR) and many food choices (MFC).^{24,25} The scale was adapted to Turkish by Arslan. Cronbach- α coefficients of the 31 items on nine distinct sub-scales were found to be in the range of 0.41-0.75.²⁶

Personal Information Form

The Personal Information Form was used to determine the eating routines within the family. The form was composed of the basic inquiries related to whether processing the foods of children, eating style, sensitivity to foods, and whether watching TV at mealtimes.

ETHICAL ISSUE AND DATA COLLECTION PROCEDURES

This study was conducted in accordance with the Helsinki Declaration 2008 Principles. Relevant permission to use the scale was obtained from the authors developing the scale. Prior to administering the process, Hacettepe University Research Ethics Committee approval (Number: 16969557-1616, Decision number: GO17/826-16 and Date: 24.11.2019) was obtained to be able to administer the scales to the sample group. Researchers ensured the participating parents completed the consent forms and adminis-

TABLE 1: Age and sex distribution of children of the parents included in the sample group.

Variable	Category	TD		ASD		Total	
		n	%	n	%	n	%
Age	3 years	23	26	14	15	37	21
	4 years	28	31	32	36	60	33
	5 years	39	43	44	49	83	46
	Total	90	100	90	100	180	100
Sex	Female	38	42	25	28	63	35
	Male	52	58	65	72	117	65
	Total	90	100	90	100	180	100

TD: Typically developing; ASD: Autism spectrum disorders.

tered the PMAS to them at available times in the above-specified locations in a pre-determined plan.

DATA ANALYSIS

In the statistical analysis, the compliance of the data to normality of the distributions was examined with the Shapiro-Wilk test. In the study, the distributions of normality have been decided by considering their significant values separately for the categories of each variable. The test method was decided by using it by deciding that categories are distributed normally if $p > 0.05$, otherwise they are not distributed normally. Considering the significance levels of the subcategories, analyzes were carried out with parametric tests if $p > 0.05$, and non-parametric tests if $p < 0.05$. It was examined whether there was significant differences among the scores on the sub-scales and the categories of the independent variables. Thus, assuming that the scores were normally distributed in each category of the independent variable, the independent sample t-test, and ANOVA were used according to the number of categories. On the other hand, upon supposing the scores on the sub-scales not to distribute normally, again, the Mann-Whitney U test and the

Kruskal-Wallis test were used according to the number of categories. For significance level, $p < 0.05$ criterion is taken as reference. Because of the null hypothesis of normality tests (null hypothesis=suitable for normal distribution), $p > 0.05$ is accepted as suitable for normal distribution.

RESULTS

The findings obtained from the study aimed at examining the differences between the mealtime attitudes of parents of children with TD and ASD, and family eating routines are given below according to mealtime order within the family and whether processing the foods of children.

FINDINGS ON THE SUB-SCALES OF THE PMAS BY MEALTIME ORDERS WITHIN THE FAMILY

The results of the Mann-Whitney U test applied to the scores obtained on the sub-scales of the PMAS reveals that scores of the parents of children with TD on the SL sub-scale show a statistically significant difference by mealtime orders within the family in favor of those eating together at a specific time ($Z_{SL} = -2.30$, $p_{SL} = 0.02$; $p < 0.05$) (Table 2). In other words, scores of the par-

TABLE 2: Comparison of the scores of the parents of children with typically developing on the sub-scales of the Parent Mealtime Action Scale by mealtime orders within the family.

t-test	n	Group	Mean	Minimum	Maximum	X	SD	df	t	p value
Positive persuasion	65	At a specific time	10	5	12	10.08	1.67	88	-0.01	0.994
	25	Not at a specific time	10	7	12	10.08	1.44			
Use of rewards	65	At a specific time	8	4	12	8.05	1.94	88	-0.25	0.802
	25	Not at a specific time	8	5	12	8.16	1.86			
Insistence on eating	65	At a specific time	5	3	9	4.82	1.69	88	-0.26	0.799
	25	Not at a specific time	5	3	9	4.92	1.85			
Snack modeling	65	At a specific time	5	3	9	4.97	1.52	88	-1.00	0.320
	25	Not at a specific time	5	3	9	5.32	1.41			
Special meals	65	At a specific time	6	4	9	5.69	1.33	88	-0.62	0.535
	25	Not at a specific time	6	4	8	5.88	1.13			
Fat reduction	65	At a specific time	6	3	8	5.58	1.49	88	-0.28	0.778
	25	Not at a specific time	6	3	8	5.88	1.13			
Many food choices	65	At a specific time	8	5	12	8.17	1.46	88	-0.75	0.458
	25	Not at a specific time	8	5	12	8.44	1.73			
Mann-Whitney U test	n	Group	Median	Minimum	Maximum	X	SD		U	p value
Snack limits	65	At a specific time	9.00	3	9	8.08	1.45		579.50	0.021*
	25	Not at a specific time	7.00	3	9	7.28	1.70			
Daily fruit-vegetable availability	65	At a specific time	8.00	5	9	7.85	1.67		787.00	0.809
	25	Not at a specific time	8.00	6	9	7.84	1.11			

SD: Standard Deviation; df: degrees of freedom; U: Mann-Whitney U Test.

ents, who eat together with other family members at a specific time, on the SL sub-scale are higher than those eating not at a specific time. However, the results of the t-test and Mann-Whitney U test in Table 1 suggest that the scores obtained on the other sub-scales of the PMAS do not differ statistically by mealtime orders within the family ($p>0.05$). That is, the scores of the parents on the sub-scales of PP, DFV availability, UR, IE, SMO, SM, FR, and MFC are similar by mealtime orders within the family.

The results of ANOVA and the Kruskal-Wallis test present that the scores obtained by the parents of children with ASD on the sub-scales of SMO and DFV availability show a statistically significant difference by mealtime orders within the family ($p_{SM}=0.02$; $p_{DFVA}=0.04$; $p<0.05$) (Table 3). As a result of the Dunn's post-hoc test analysis applied to determine the source of the difference, considering the mean scores of the parents of children with ASD on the SMO sub-scale, the statistical difference was found to be between the parents eating together at a specific time and those eating without the child in favor of the first group. Another source of the difference was identified to be between those eating together not at a specific time, and those eating without the child in favor of the first group. According to the results of non-parametric Dunn's post-hoc tests, it was determined that the statistical difference in the scores on the DFV availability sub-scale was between the parents eating together not at a specific time and those eating without the child in favor of the first group. Nevertheless, the results of ANOVA and the Kruskal-Wallis test in Table 3 suggest that scores obtained on the other sub-scales of the PMAS do not differ statistically by mealtime orders within the family ($p>0.05$). In other words, the scores of the parents on the sub-scales of SL, PP, UR, IE, SM, FR, and MFC are similar by mealtime orders within the family.

FINDINGS ON THE SUB-SCALES OF THE PARENT MEALTIME ACTION SCALE BY WHETHER PROCESSING THE FOODS OF CHILDREN

The parents of children with TD informed that they did not use to process the foods of their children. Meanwhile, 14.44% of children with ASD used to eat

processed foods. The results of the t-test and Mann-Whitney U Test applied to the scores on the sub-scales of the PMAS scale suggest that the scores of the parents of children with ASD on the PP sub-scale differ significantly by whether processing the foods of children in favor of those who process the foods of their children ($t_{pp}=2.21$, $p_{pp}=0.03$, $p<0.05$) (Table 4). In other words, scores of the parents, who used to process the foods of their children, on the SL sub-scale are higher than those not processing the foods of their children. Albeit, the results of the t-test and Mann-Whitney U test in Table 4 reveal that the scores obtained on the other sub-scales of the PMAS do not differ statistically by whether processing the foods of children ($p>0.05$). Namely, the scores of the parents on the sub-scales of SL, DFV availability, UR, IE, SMO, SM, FR, and MFC are similar by whether processing the foods of children.

DISCUSSION

The present study aimed at examining the differences between mealtime attitudes and daily routines of the parents of children with TD and ASD and family eating habits. Considering the findings, when asked about the mealtime orders within the family, the parents of children with TD indicated that they ate "together at a specific time" or "together not at a specific time." The parents of children with ASD also gave the same responses to the question, and additionally stated that they ate "without the child." Such a response raises the idea that children with ASD may not be able to eat with their parents due to their eating disorders. It is also known that children with ASD have preferences such as not eating with their parents.²⁷ This situation stems from not only eating and nutrition problems and special diets of children with ASD but also their difficulties in social skills.^{6,8,9,27-43} At the same time, according to the study of Provost et al., it can be difficult for parents of children with ASD to eat together at restaurants where they go as a family activity.⁴⁴ Therefore, the responses in the study, revealing that children eat separately from their parents, are expected responses according to the previous studies.

The scores of the parents of children with TD on the SL sub-scale revealed that eating together at a

TABLE 3: Comparison of the scores of the parents of children with autism spectrum disorders on the sub-scales of the Parent Mealtime Action Scale by mealtime orders within the family.

ANOVA	Group	Minimum	Maximum	X	SD	SS	Source of variance	Mean squares	df	F	p	Dif.
Snack modeling	Together at a specific time	3	9	5.17	1.48	15.81	Between groups	7.91	2	4.07	0.020*	1>3, 2>3
	Together not at a specific time	3	8	5.32	1.35	168.91	Within group	1.94	87			
	Without the child	3	6	4.00	1.04	184.72	Total		89			
Fat reduction	Together at a specific time	3	8	5.38	1.33	10.196	Between groups	5.10	2	2.81	0.066	
	Together not at a specific time	4	9	6.12	1.33	157.76	Within group	1.81	87			
	Without the child	3	8	5.33	1.44	167.96	Total		89			
Kruskal-Wallis	n	Group	Minimum	Maximum	X	SD	Chi-square	p	Dif.			
Snack limits	Together at a specific time	9	3	9	7.58	1.87		0.28	2	0.869		
	Together not at a specific time	9	3	9	7.48	2.00						
	Without the child	9	5	9	7.92	1.51						
Positive persuasion	Together at a specific time	10	4	12	9.68	2.05		3.56	2	0.169		
	Together not at a specific time	11	5	12	10.28	2.11						
	Without the child	10	6	12	9.33	1.67						
Daily fruit-vegetable availability	Together at a specific time	8	5	9	7.81	1.16		6.03	2	0.048*	2>3	
	Together not at a specific time	8	6	9	8.04	0.93						
	Without the child	6	3	9	6.75	1.71						
Use of rewards	Together at a specific time	8	4	12	8.34	1.97		4.88	2	0.087		
	Together not at a specific time	10	5	12	9.24	1.90						
	Without the child	8	4	10	7.92	2.07						
Insistence on eating	Together at a specific time	4	3	9	4.47	1.59		0.85	2	0.654		
	Together not at a specific time	4	3	9	4.60	2.10						
	Without the child	6	3	7	4.92	1.73						
Special meals	Together at a specific time	6	4	11	6.42	1.73		2.87	2	0.238		
	Together not at a specific time	7	4	10	6.84	1.86						
	Without the child	7	5	10	7.25	1.66						
Many food choices	Together at a specific time	8	4	12	7.83	1.83		3.18	2	0.204		
	Together not at a specific time	8	4	12	8.60	2.27						
	Without the child	8	5	10	8.17	1.34						

ANOVA: Analysis of variance; ANOVA: Analysis of variance; SS: Sum of the squared deviations; SD: Standard Deviation; df: degrees of freedom; F: F value; Dif: Differences.

TABLE 4: Comparison of the scores of the parents of children with autism spectrum disorders on the sub-scales of the Parent Mealtime Action Scale by whether processing the foods of children.

t-test	n	Group	Mean	Minimum	Maximum	X	SD	df	t	p value
Positive persuasion	13	Yes	11	8	12	10.92	1.38	88	2.21	0.030*
	77	No	10	4	12	9.61	2.06			
Use of rewards	13	Yes	9	5	12	9.15	1.95	88	1.22	0.227
	77	No	8	4	12	8.43	2.00			
Snack modeling	13	Yes	5	3	8	5.23	1.42	88	0.47	0.638
	77	No	5	3	9	4.53	1.66			
Fat reduction	13	Yes	6	4	8	5.54	1.20	88	-0.11	0.912
	77	No	6	3	9	5.58	1.41			
Many food choices	13	Yes	8	4	12	7.77	2.42	88	-0.65	0.519
	77	No	8	5	12	8.14	1.83			
Mann-Whitney U Test	n	Group	Median	Minimum	Maximum	X	SD	Rank sum	U	p value
Snack limits	13	Yes	9	3	9	7.23	2.13	548.00	457.00	0.586
	77	No	9	3	9	7.66	1.80	3547.00		
Daily fruit-vegetable availability	13	Yes	7	3	9	7.15	1.63	471.00	380	0.151
	77	No	8	5	9	7.83	1.15	3624.00		
Insistence on eating	13	Yes	4	3	9	4.77	2.28	585.50	494.50	0.943
	77	No	4	3	9	4.53	1.66	3509.50		
Special meals	13	Yes	8	5	10	7.46	1.76	746.50	345.50	0.071
	77	No	6	4	11	6.51	1.74	3348.50		

SD: Standard Deviation; df: degrees of freedom; t: T-Test; U: Mann-Whitney U Test.

specific time was effective. The SL sub-scale is related to the parent's ability to limit the sweet and salty snacks and fizzy drinks that the child can consume in a day.^{24,25} It is observed that as the frequency of limiting snacks increases, the daily snack consumption of children decreases.²⁶ The study which was conducted by Brown and Ogden et al. revealed that there was a significant relationship between snack consumption of parents and their children, which supports the abovementioned finding.⁴⁵ Therefore, eating the meals that the family offers to their children together reduces the consumption of snacks. The presence or absence of family meal orders is considered as the most important factor affecting children's eating behaviors.⁴⁶ Hence, eating together at least once a day will enable parents to be a model for their children and to prevent some negative eating behaviors and ensure children to have the opportunity to self-control, to imitate their parents' eating behaviors, and to learn table rules.⁴⁷ Eating together, whether at a specific time or not, is thought to guide family dynamics that affect child development.

In ASD, the difference appeared on the sub-scales of SMO and DFV availability, and in both sub-

scales, it was found that those eating together had better results than those eating without the child in both sub-dimensions. DFV availability points to the DFV consumption of parents and the child. SMO is related to the model that the parents adopt for snack consumption of their children. That is, it embodies parents' daily consumption of sweet, salty foods, and fizzy drinks.^{24,25} Eating orders and rules are learned in the processes where the whole family is together at the dining table. Besides, the mealtimes when the whole family eats together are considered to be very important for children to adopt eating behaviors.^{47,48} In addition, children eating on the dining table and feeding themselves take their parents as a model.⁴⁶ All these behaviors and habits interact with each other. It is known that DFV consumption of children with ASD is more limited than their TD peers.⁴⁹ Hence, meals eaten together are considered as times that allow family members to consume healthy foods and to be away from snacks. As a matter of fact, in the current study, it was obtained that snack consumption was high in families where the child ate separately. Also it is thought that the mealtimes when family members eat together are very important in develop-

ing positive eating behaviors of children with both TD and ASD.

It was concluded that parents of children with ASD, whose food is generally processed, exhibited more PP towards their children. The problematic eating behavior of the child, that is, consuming only soft-textured foods, causes stress in parents, and parents are thought to try to feed their child with PP. PP includes situations where the parents tell their child that he/she always likes the food; his/her friends and siblings also like the food; he/she will like its taste once he/she tries; the food will make him/her smart and healthy.^{24,25} In the study conducted by Arslan, a negative relationship was found between the body mass indices of the children and the PP of the parents, i.e., parents with thin children try to feed their children by displaying more PP.²⁶ The findings in the current study reveal that the parents of children with eating disorders regardless the weight status, namely children eating only soft-textured and processed foods, try to persuade their children positively because of the perception that their children eat poorly and unhealthily.

It is necessary to emphasize that all results are limited with the sample of the study. Future researches may focus more details on the home environment and mealtime actions. Moreover, the current study limited the statements of parents. It is important to observe the mealtime action of parents in their natural environment, at their home.

CONCLUSION

There are similarities, as well as differences between children with ASD and TD. Parental mealtime attitudes can also differ depending on their children's being TD or ASD. There are also significant differences between family eating routines and

parental mealtime attitudes towards their children. Parental attitudes are critical factors in shaping family eating routines and children's eating behaviors. Therefore, parents may need guidance on how to form their mealtime attitudes towards their children and their home routines. It is important to state that findings are likely to be helpful to future intervention studies. Considering the results obtained from the current study for the intervention studies to be planned in the future is thought to increase the effectiveness of such intervention programs. For future studies, it is thought that the observation of parents and children during mealtime may provide an objective assessment of children's eating behaviours, parents attitudes, and also their interaction during mealtime.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

All authors contributed equally while this study preparing.

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