

# A MARKETING APPROACH TOWARDS THE SUFFICIENCY OF READY-MADE GARMENTS TO SATISFY THE NEEDS OF CHILDREN WITH AUTISM

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#### Abstract:

Autism is a term of which we have been aware recently in our country through visual and printed media and which we have seen examples around us. Together with opening Dependent and Independent Education Centres for Children with Autism, children with autism have found the opportunity to receive education in line with their needs. With individual education programs developed by the teacher suitable for the development of the child with autism, they can acquire skills in various development areas. Dressing skill, which is one of the main skills necessary for every individual, is a mandatory skill that children with autism need to acquire to satisfy their own needs. In the first three parts of the study a conceptual frame was given and the definition, history, types, characteristics, and behaviour problems of children with autism were presented, and clothing comfort and other concepts were explained. In the fourth part, method, material, research approach, sample and population, numerals, limitations, data collection technique and data analysis technique were explained and the results were presented in tables. The study was carried out to reveal dressing problems children with autism encounter and to determine to what extent the clothes made by ready-made clothing sector satisfy the needs of children with autism and it was found that children with autism have difficulties in using ready-made clothes.

## **Keywords:**

Autism; Dressing Problems; Ready-Made Garments; Marketing

#### 1. Introduction

Autism generally appears during the first years of a person's life. It manifests itself in breakdowns in social interaction and verbal communication and continues through life (Luleci, 2011). One of the main reasons why autism has been the centre of attention recently is the fact that it has been recognized well and the frequency of it has increased. (Aydin, 2003). Normal children are born in a way to have a number of skills regarding each field of development whereas children with autism have many inadequacies which are related to holding an object with hands, toddling, eating, talking, understanding the mimics, and mimicking skills (Darica et al, 2002). Since dressing is a complicated process, it may take months to teach a child to get dresses on her/his own if the child has a learning difficulty. It is important that children with learning difficulties gain dressing skills, use these skills, and reach the level of normal children, which in turn will help children with autism to carry out their lives and use dressing skills independently. Gaining this skill is a significant gain both for the family and the child (Soganci, 2011). During this process it is necessary to avoid clothes that the child may not wear easily and that have a complicated structure. The aim of this study is to identify the dressing problems of children with autism and to determine to what extent readymade garments are suitable for these children. The study was planned and conducted to reveal the problems children with autism encounter in terms of dressing. For this purpose, to what extent ready-made garments satisfy the needs of children with autism, the features of clothes they might use and how appropriate zipping aids are were investigated.

## 2. Autism and Child With Autism

Autism is disability appears within the first three years of life and continues through the life (Korkmaz, 2000). There are both individual differences and similarities among children with autism. These children have problems regarding social interaction, verbal and non-verbal communication and imagination and show limited/repeated behaviours and interests (Besler, 2015). Although its symptoms and severity generally decrease, it continues for a life time. The

severity of the situation and the way problematic behaviours accumulate differ by every child (Kayaalp, 2000). The individual with autism perceives everything including the self as an object (good). That is, there is no integrity in her/his life. For this reason, the world seems like a puzzle of which pieces are never put together. The child cannot see any integrity. For example, when looking at a forest, she/he sees only one tree; thus, the forest is composed of only the tree she/he sees (mebk12.meb.gov.tr/meb\_iys\_dosyalar/06/14/.../11100534\_otzm.doc.)

## 2.1. Types of Autism

Asperger Syndrome: Asperger syndrome is different from other types in that there are not language development problems. It is a milder form autistic syndrome than other autism types(http://www.otizmvakfi.org.tr). Pedantry and specific problems in manipulative skills are typical. These children have normal or superior intelligence and behavioural problems. Gestures, mimics, and use of body language are problematic (Korkmaz, 2000).

Childhood Disintegrative Disorder: Children with this disorder develop normally at least two years after birth. The disintegration becomes evident with increasing activities, unrest, anxiety and losing previously-gained skills (talking etc.). Severe mental disability appears in childhood disintegrative disorder (Dogan, 2013).

Rett Syndrome: Rett syndrome begins between the 6th and 18th months and affects almost only girls. With this genetic syndrome, all mental, social, communicative and kinetic skills regress and balance disorders appear (http://www.otizmvakfi.org.tr). It is a serious psycho-motor development regression in which the head is smaller compared to the body and hand movements disappear (Volkmar 2007).

Atypical Syndrome: Atypical syndrome is diagnosed in patients who have some symptoms of autism or Asperger syndrome (<a href="http://www.otizmvakfi.org.tr">http://www.otizmvakfi.org.tr</a>)

#### 2.2. Behavioural Problems of Children with Autism

Temper tantrums: Temper tantrums generally become evident in age periods of 2 and 5. Talking is limited or absent and thus the child cannot express herself/himself verbally. For this reason, behaviours called temper tantrums such as kicking, crying, shouting, and throwing herself/himself on the floor emerge. Behaviours Damaging the Environment: Screaming outdoors, damaging the items in the house.

Self-harming Behaviours: These behaviours generally appear when the child gets angry, anxious, or unsuccessful. For example, pulling hair, scratching face, biting hands etc. Among severe behaviours are hitting the head on the wall, biting the hands until they bleed. Stereotypical (Repetitive Series of Body Movements) Body Movements:

- Sensory Stimulation: Swinging back and forth, swivelling.
- Visual Stimulation: Moving the fingers in front of the eyes, making figures with the fingers.
- Tactual Stimulation: Touching the ears, hands with with the rhythmic movements of the hand.
- Auditory Stimulation: Verbigration. (İlik, 2006).

#### 3. Clothing Comfort

In some sources clothing comfort is defined as a neutral situation independent of pain and discomfort, psychological and physiological harmony between human being and environment, not feeling uncomfortable or unsatisfied in any garment, satisfying harmony between human being and environment (Oner and Okur, Years:17). Clothing has personal, physical, mental, and social effects on children. The child learns how to dress tastefully and in a well-matched way from the adults and it is possible to help the child to get dressed by asking for her/his opinion. However, the most evident feature of autism is that children with autism are not able to express what they want to wear because of not being able to communicate and this situation emphasizes the importance of clothing in terms of the child socializing and feeling worthy (Soganci, 2011).

# 3.1. Basic Elements of Clothing Comfort

Clothing comfort is composed of two basic elements, namely psychological and physiological. Physiological comfort included thermo-physiological (thermal or calorific) comfort, sensorial comfort and body movement comfort.

Psychological comfort is usually named aesthetic comfort. Aesthetic comfort is perceived the clothing features that affect the person's psychology via sensory organs (eyes, ears, skin etc.) (Li, 2001; Kaplan and Okur, 2006).

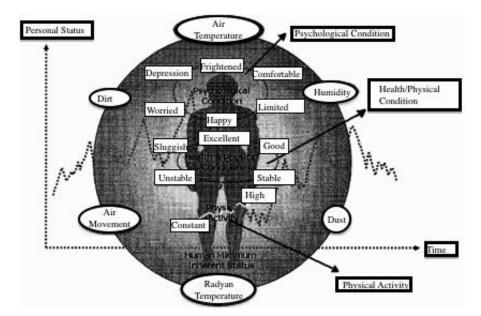


Figure 1. Basic Factors affecting clothing comfort (Okur et al, 2008)

# 4. Research Methodology

#### 4.1. Method and Findings

This study which aimed to identify clothing problems of children with autism was carried out using school survey method. A questionnaire was prepared for parents or coordinator teacher and administered.

# 4.2. Population and Sample

The population of the study was composed of children with autism studying in Education Centres for Children with Autism (ECCWA) in Istanbul in accordance with the rule "in order to generalise the study to a certain population, the study is done on small sample groups according to random sampling" as pointed out by Karasar (2001). The sample of the study was composed of 60 individuals with autism (aged between 3 and 16) studying in ministerial ECCWAs in Istanbul

#### 4.3. Premises

The answers to the questionnaire questions are correct. The information found in the literature is correct. The sample group involved in the study represents the population.

#### 4.4. Limitations

The subject of the study is limited to Identifying Clothing Problems of Children with Autism and Making Design regarding the Solutions. The study is limited to ECCWAs in Istanbul. The study was carried out between September 2014 and June 2015.

#### 4.5. Data Collection Technique

The literature of the study was created by reviewing various books, journals, periodicals, and online reviews. The questionnaire form developed by the researcher was used to collect research data.

## 4.6. Data Analysis Technique

While the data was entered into the computer, teacher and family variables were coded. Following the coding process, data analyses was done using SPSS package program. The findings regarding general information, questions prepared for the parents, behavioural characteristics of the child with autism, clothing skills, general skills, and zipping aids were shown in Percentage-Frequency tables.

## 5. Findings

## 5.1. General Information regarding Children with Autism

This section includes sex, age, height, weight, duration of education and general behaviour characteristics of the children.

Table 1. Distribution of Demographic Values regarding the Children with Autism

Sex	Frequency	Percentage	Valid	Cumulative
Girl	13	21,7	21,7	21,7
Boy	47	78,3	78,3	100,0
TOTAL	60	100,0	100,0	
Date of Birth	<u>.</u>			
1999-2002	5	8,33	8,33	8,33
2003-2007	18	30,0	30,0	38,33
2008-2012	37	61,67	61,67	100,0
TOTAL	60	100,0	100,0	
Height			•	
90-120	22	36,67	36,67	36,67
121-150	24	40,0	40,0	76,67
151-190	14	23,3	23,3	100,0
TOTAL	60	100,0	100,0	
Weight			•	
12-25	29	48,33	48,33	48,33
26-40	15	25,0	25,0	73,33
41-60	7	11,67	11,67	85,00
61-80	9	15,0	15,0	100,0
TOTAL	60	100,0	100,0	

According to Table 1, 21,7% of the children were girls and 78,3% of them were boys. The children in the group were aged between 3 and 16. 8,33% of the children were born between 1999 and 2002, 30% of them were born between 2003 and 2007, and 61,67 were born between 2008 and 2012. Height of the children participated in the study varied between 90 cm and 187 cm. 36,67% of the children were 90 -120 cm tall, %40 of them were 121-150 cm tall and 23,3% of them were 151-190 cm. The children participated in the study weighed between 12-80 kg. 48,33% of them weighed between 12 and 25 kg, 25% of them weighed between 26 and 40 kg, 11,67% of them weighed between 41 and 60 and 15% of them weighed between 61 kg and 80 kg.

Table 2. Distribution of Values regarding Duration of Education in any Education Institution of Children with Autism

Duration of Education	Frequency	Percentage	Valid	Cumulative
Up to 1 Year	6	10,0	10,0	10,0
1-3 years	24	40,0	40,0	50,0
4-8 years	23	38,33	38,33	88,33
9 years and more	7	11,67	11,67	100,0
TOTAL	60	100,0	100,0	

As it is seen in Table 2, 10% of the children with autism were educated for 1 year or less, 40% of them were educated between 1 and 3 years, 38, 33% of them were educated between 4 and 8 years, and 11, 67% of them were educated for more than 9 years.

Table 3. Distribution of Values regarding the Number of Disabled Members in the Families of Children with Autism

Disability Status within the Family	Frequency	Percentage	Valid	Cumulative
Yes	0	0,0	0,0	0,0
No	60	100,0	100,0	100,0
TOTAL	60	100,0	100,0	

The data in Table 3 show that there was no other individual with any kind of disability in the families of children with autism.

Table 4. Distribution of Values regarding Clothes Buying Choices of Families of Children with Autism

Clothes Buying Choices of Families	Y	ES	NO		TOTAL	
for Children with	Fre-	Percen-	Fre-	Percen-	Fre-	Percen-
Autism	quency	tage	quency	tage	quency	tage
If a well-known						
brand had special						
clothes designed for	26	43,3	34	56,7	60	100,0
children with autism,						
I would buy them.						
If there were a brand						
designing special						
clothes for children	21	35,0	39	65,0	60	100,0
with autism, I would						
buy them.						
If there were websites						
selling clothes for	11	10.2	49	01 7	60	100.0
children with autism,	11	18,3	49	81,7	00	100,0
I would buy them.						

The answers given by the parents are shown in Table 4 indicate that 43, 3% of the parents would buy the products of famous brands if they had special clothes designed for children with autism and 56, 7% of them would not buy

them. 35% of the parents stated that they would do shopping from these brands if there were a brand designing special clothes for children with autism whereas 65% would not want to buy clothes of these brands. 18,3% of the parents stated that they would do online shopping if there were websites selling clothes for children with autism while 81,7% of them would not like to do online shopping.

## 5.2. General Behavioural Characteristics of Children with Autism

			with Autism.

Behavioural	Y	YES		NO		TOTAL	
Characteristics	Fre- quency	Percentage	Fre- quency	Percentage	Fre- quency	Percentage	
Has temper tantrums.	60	100,0	0	0,0	60	100,0	
Tends to undress during temper tantrums.	6	10,0	54	90,0	60	100,0	
Tends to rip the clothes or part of the clothes during temper tantrums	12	20,0	48	80,0	60	100,0	
Dirties the clothes during eating.	31	51,7	29	48,3	60	100,0	
Wipes hands on clothes after eating.	16	26,7	44	73,3	60	100,0	

The data presented in Table 5 show that 100% of the children with autism had temper tantrums. 10% of the children took off their children during temper tantrums and 90% of them did not have such a tendency. 20% of the children had a tendency to rip their clothes during temper tantrums but 80% of them did not show this behaviour. Almost half of the children dirty their clothes while eating whereas the other half does not dirty their clothes. According to the answers given by the parents and the teachers, 26, 7% wipes their hands on clothes after eating and 73% did not wipe their hands on their clothes.

## 5.3. State of Children with Autism regarding Dressing Skills

This part shows the distribution of dressing skills and skills regarding zipping aids

Table 6: Distribution of Values regarding Dressing Skills of Children with Autism

Dressing skills of the individual General Skills		Frequency	Percentage
	Always	49	81,7
Talls aport undamyroon	Sometimes	9	15,0
Tells apart underwear	Never	2	3,3
	TOTAL	60	100,0
	Always	48	80,0
Talls aport outerween	Sometimes	10	16,7
Tells apart outerwear.	Never	2	3,3
	TOTAL	60	100,0
	Always	49	81,7
Talla anaut hattam alathina	Sometimes	9	15,0
Tells apart bottom clothing.	Never	2	3,3
	TOTAL	60	100,0

Table 6: Continue

	Always	50	83,3
Talls apart top slathing	Sometimes	8	13,3
Tells apart top clothing.	Never	2	3,3
	TOTAL	60	100,0
	Always	26	43,3
T-11	Sometimes	14	23,3
Tells apart clothing by season.	Never	20	33,3
	TOTAL	60	100,0

The data in Table 6 show that 81, 7% of the children always tell apart underwear, 15% of them sometimes tell apart underwear and 3, 3% of them never tell apart underwear. 80% of the children always tells apart outerwear, 16, 7% sometimes tells apart outerwear and 3,3% never tells apart outerwear. 81, 7% of the children always tell apart bottom clothing, 15% of them sometimes tell apart bottom clothing and 3, 3% never tell apart top clothing. 83, 3% of the children always tell apart top clothing and 3,3% of them never tell apart top clothing. 43, 3% of the children always tell apart clothing by season, 23, 3% of them sometimes tell apart clothing by season and 33, 3% of the children never tell apart clothing by season.

Table 8. Distribution of Values Regarding Zipping the Zipping Aids Skills of Children with Autism

Zipping Aids		Frequency	Percentage
	Always	58	96,7
Fastens Velcro	Sometimes	2	3,3
rastens veicro	Never	0	0,0
	TOTAL	60	100,0
	Always	38	63,3
Factors muses stude	Sometimes	15	25,0
Fastens press studs	Never	7	11,7
	TOTAL	60	100,0
	Always	18	30,0
Eastons a book and ave	Sometimes	17	28,3
Fastens a hook-and-eye	Never	25	41,7
	TOTAL	60	100,0
	Always	18	30,0
Belts	Sometimes	14	23,3
Beits	Never	28	46,7
	TOTAL	60	100,0
	Always	36	60,0
Double of his books of	Sometimes	10	16,7
Buttons big buttons	Never	14	23,3
	TOTAL	60	100,0
	Always	24	40,0
D	Sometimes	14	23,3
Buttons small buttons	Never	22	36,7
	TOTAL	60	100,0
	Always	39	65,0
Zing a zinnar with tooth	Sometimes	9	15,0
Zips a zipper with teeth.	Never	12	20,0
	TOTAL	60	100,0

According to the values in Table 8, it is seen that 96, 7% of the children always fasten velcro, 3, 3% of them sometimes fasten velcro. 63, 3% of the children always fasten press studs, 25% of them sometimes fasten press studs and 11, 7% of them never fasten press studs. 30% of the children always fasten a hook-and-eye, 28, 3% of them sometimes fasten a hook-and-eye and 41, 7% of them never fasten a hook-and-eye. 30% of the children always belt, 23, 3% of them sometimes belt and 46, 7% of them never belt. 60% of the children always button big buttons, 16, 7% of them sometimes buttons big buttons and 23, 3% of them never buttons big buttons. 45% of the children always button small buttons, 23, 3% of them sometimes button small buttons, and 36, 7% of them never button small buttons. 65% of the children always zip a zipper with teeth, 15% of them sometimes zip a zipper with teeth, and 20 % of them never zips a zipper with teeth.

#### 6. Results

The study was carried out to identify the problems children with autism (aged between 3 and 16) studying in Education Centres for Children with Autism (ECCWA) in Istanbul while dressing and to determine to what extent ready-made garments satisfy the need of these children and it was found out that

- Almost half of the parents of the children with autism stated that they would buy the products of famous brands if they had special clothes designed for children with autism, more than half of the parents stated that they would not buy them. Also, a great majority of the parents would do online shopping if there were websites selling clothes for children with autism.
- Children with autism were found to dirty their clothes while eating.
- Majority of the children with autism tells apart bottom and top clothing and underwear and outerwear, but have difficulty in picking up the right clothes by season.
- While majority of the children do not have difficulty in using zipping aids such as velcro, press stud, big buttons and zips, they have difficulty in using hook-and-eye, belt and small buttons

The following suggestions were made in line with the results of this study.

- Brands should design and produce special clothes for children with autism.
- Dirt-repellent fabrics should be used for clothes for children with autism and so that they are not isolated from their social lives.
- Families should support gaining children with autism dressing skills and families should be involved in the education process.
- If special clothes would not be purchased for children with autism, clothes with velcro, press-studs, big buttons and zips should be preferred.
- In order for dressing skills to be gained in special education centres for children with autism, textile and fashion departments should be applied to and appropriate education materials should be prepared.

#### References

Aydın, A. (2003), "Otizmde İlk Adım" 1. Basım. İstanbul: Epilson Yayıncılık.

Darıca, N., Abidoğlu, Ü. ve Gümüşçü Ş., (2002), "Otizm ve Otistik Çocuklar". Üçüncü Basım. Ankara:Özgür Yayın. Besler, F., (2015), "Anneler Tarafından Sunulan Video Modelle Öğretimin Otizmli Çocuklara Oyun Becerisi Öğretmedeki Etkililiği", Anadolu Üniversitesi, Sosyal Bilimler Enstitüsü, Eskişehir.

Doğan, A. R., (2013), "Otizm, Yaygın Gelişimsel Bozukluk".

İlik, Z., (2006), "Otistik Çocuklara Giyinme Becerilerinin Kazandırılmasında Kullanılan Öğretim Yöntemleri Hakkında Öğretmen Görüşlerinin Değerlendirilmesi", Selçuk Üniversitesi, Sosyal Bilimler Enstitüsü, Konya. Kaplan, S., ve Okur, A., (2006) Tekstil Materyallerinde Meydana Gelen Isı ve Kütle Transferi Mekanizmalarının Giysi

Termal Konforu Üzerindeki Etkileri, Tekstil ve Mühendis, 62-63: 28-36

Kayaalp, Vural, İ. (2000), "SOS Otizm ve İletişim Problemi Olan Çocukların Eğitimi", Birinci Basım, İstanbul: Evrim Yayınevi.

Korkmaz, B. Y., (2000) "Yağmur Çocuklar, Otizm Nedir?" İkinci Baskı, İstanbul: Doğan Kitapçılık.

Li, Y., (2001) "The Science of Clothing Comfor"t, Textile Institute Publications, Textile Progress, Volume: 31, Number: 1/2, 138 s., UK.

- Lüleci, N., E., (2011), "İstanbul'da Otistik Çocuklar Eğitim Merkezlerindeki Öğrenci Ebeveynlerinin Yaşamları Boyunca Karşılaştıkları Sorunların İncelenmesi", Marmara Üniversitesi, Sağlık Bilimler Enstitüsü, İstanbul.
- Okur, A., Küçüka, S., Kaplan, S., (2008), "Giysi Termal Konforunun Belirlenmesine Yönelik Bir Yöntem Geliştirilmesi", Proje No: 107M200, Temmuz, İzmir.
- Öner, E., Okur, A., "Materyal, Üretim Teknolojisi ve Kumaş Yapısının Termal Konfora Etkileri", The Journal Of Textiles and Engineer, Yıl: 17, Sayı: 80.
- Soğancı, N., (2011), "Otistik Çocuklarda Giysi Kullanımında Karşılaşılan Problemler", Gazi Üniversitesi, Eğitim Bilimleri Enstitüsü, Ankara.
- Volkmar, Fred R. (edt), (2007) Autism and Pervasive Developmental Disorders, Contet 1: Diagnosis and Definition of Autism and Other Pervasive Developmental Disorders Fred R. Volkmar And Catherine Lord. http://www.otizmvakfi.org.tr, Haziran 2015.
- mebk12.meb.gov.tr/meb\_iys\_dosyalar/06/14/.../11100534\_otzm.doc,Haziran2015.