AN INVESTIGATION OF THE RELATIONSHIP BETWEEN SELF-COMPASSION, HUMOR AND ALEXITHYMIC CHARACTERISTICS OF PARENTS WITH AUTISTIC CHILDREN

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ABSTRACT

Parents' individual characteristics have an important role on children's development and their acquisition of fundamental skills. This study aims to investigate the self-compassion, humor styles and alexithymia levels of parents with autistic children. The sample of the study consists of the parents of children diagnosed with autism who were also attending private special education centers in İstanbul. In the study, the Self-compassion Scale, the Humor Styles Scale and the Toronto Alexithymia Scales were used and hierarchical regression analyses were conducted to evaluate the causal relationship between the scales. The results revealed that over-identification subscale of the Self-compassion Scale and the aggressive humor subscale of the Humor Styles Scale are positive predictors, and the mindfulness subscale of the Self-compassion Scale is a negative predictor of the Toronto Alexithymia Scale total scores, the difficulty identifying feelings subscale and the difficulty describing feelings subscale scores. In addition, it is also revealed that self-enhancing humor variable is a positive predictor of the Toronto Alexithymia Scale total scores and the externally-oriented thinking subscale.

Key Words: Autism, parents, self-compassion, humor, alexithymia.

INTRODUCTION

Parents play a vital role in enabling children to learn the most basic skills. It is known that children have their first communication with their parents who are around themselves and want their needs and desires met by their parents. Parents establish a mutual relationship with their children as people who know their children very well by responding to their needs. However, in cases of children who have not had a normal developmental process or for those lacking basic communication skills, the mutual process between the parents and their children does not come naturally. One of the most pressing problems resulting in the difficulty of communication between the child and the parent is autism. Autism, which appears in the first three years of the childhood period, is a neurologic disorder affecting the brain functions (Sicile-Kira, 2004). It is a neurodevelopmental (Dawson et al., 2002, Toth, Dawson, Meltzoff, Greenson, Fein, 2007, Schechtman, 2007), and one of the most complex genetic disorders (Vanderweele and Cook, 2003). Parents can realize that their children have this disease when they observe their children with the following symptoms: Their children's joint attention development has not improved since babyhood (Bernier and Gerdts, 2010), poor eye-contact and the mimicking skills (Dodd, 2005 and Wing, 2012), the lack of development in their gestures and pointing skills, their extra-ordinary or limited interest and the existence of repetition in the children's behavior (Baron-Cohen, 2008; Korkmaz, 2010; Ingersoll and Lalonde, 2010). It could be stated that parents have difficulty in having communication with their children because of the disorders in their autistic children's social interaction skills, verbal and non-verbal interaction skills (Lubetsky, Handen and Mcgonigle, 2011) and their social as well as communication skills (Baron-Cohen, 2008). Besides, their lack of symbolic game skills (Bailey, Phillips and Rutter, 1996; Aydın, 2008) and the appearance of these symptoms due to different variables (Bernier, Gerdts, Munson, Dawson and Estes, 2012) make the communication between parents and their autistic children even more difficult. The hardships these parents encounter in social life and the problems they come across in educating their children might cause parents have the feeling of desperateness. In other words, the autism,

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which is a life-long developmental disease, (Turkington and Anan, 2007) not only affects the children with this syndrome but also their parents. This is because establishing a parent-child relationship with a child lacking the competence as well as the willingness to have basic communication with his/her parents, sharing common moments with the child and teaching something in an entertaining way become rather challenging for the parents. In addition, the communication, behavior and learning characteristics of the children diagnosed with autism might negatively influence their parents' teaching them the basic commination and daily life skills and may lead to the feeling of hopelessness and many other negative emotional status for the parents. For instance, it has been reported that mothers of the autistic children are not different from the general population in having close relationship with their children and in bringing them up, but although the social skills of their children improve to a certain extent, these mothers feel more stressed out and are more vulnerable to psychological problems when compared to the general population (Montes and Halterman, 2007). They also become more introverted, aggressive, weary, oversensitive and stricter than the other mothers (De Sousa, 2010). Furthermore, it was revealed by research studies that mothers of autistic children are stricter than their fathers, and the fathers were found to be more distant from their children than their mothers (Seidman, Yirmiya, Milshtein, Ebstein and Levi, 2011). The reason behind the emotional status of the parents might be their autistic child's lack of desire to initiate communication and the repetitive failure in the communication endeavors between the parent and the child. Despite all their attempts, parent cannot get response from their children and even have difficulty in meeting their basic needs, such as eating and sleeping. In some cases, autistic children might even display aggressive behavior to their parents and keep away from them. In such cases, it is crucial that parents should be understanding and sensitive to their children and continue their attempts to have communication with them. The compassion for these children is considered to be helpful in helping parents to understand them and to find appropriate ways to have communication with them. Compassion emerges when one is open to the pains of another person and is affected by these pains rather than ignoring or avoiding these pains (Neff, 2004). The feeling of compassion requires understanding the person who has certain problems or makes mistakes without judging them and approaching this person's attitudes and behavior in a patient, understanding, affectionate and tolerant manner to show them that nobody is perfect and making mistakes is only natural (Öveç, 2007). Self-compassion also means being open to an individual's own pains and sufferings, approaching him/herself in an affectionate way, being understanding in the case of failure and accepting his/her negative experiences as part of life experience (Neff, 2003b). Self-compassion reminds people of the need to think that pains are common to all people. Having a curing effect on the problems, self-compassion also teaches people how to be patient (Hollis-Walker and Collosimo, 2011), helps them to be aware of their own feelings and enables them to use the knowledge, thoughts and actions they acquire in time in a an effective and functional way (Salovey and Mayer, 1990). Self-compassion can be defined as the individuals' acceptance of themselves and the evaluation of the self-kindness they display for themselves (Werner, Jazaieri, Goldin, Ziv, Heimberg and Gross, 2012), and it paves the way for the compassion people display for others (Goldstein, 2005). Besides, self-compassion facilitates individuals' felexibilty in their behavior by moderating their reactions towards adverse events and negative situations (Germer and Neff, 2013) and helps not only the intrapersonal communication but also the interpersonal communication with other people (Neff and Beretvas, 2012). Additionally, self-compassion is an important indication of psychological health and life quality (Van Dam, Sheppard, Forsyth and Earleywine, 2011). Taking the parents of autistic children into consideration, it can be indicated that the frequency of psychological problems of these parents, such as the major depressive disorders and social phobias is higher than other parents (Demir, Motavallı-Mukaddes, Eralp-Demir and Bilge, 2000). Similarly, social difficulties, emotional status disorders and anxiety problems are reasonably higher for these parents (Gousse et al., 2002). According to the research, 55,7% of the parents with autistic children have depression while 85% of them are known to experience parental stress (Ingersol and Hambrick, 2011). Considering the research findings, it can be suggested that the level of self-compassion held by parents who have autistic children has an important impact on their psychological health and their ability to deal with these problems. This is because of the fact that the self-compassion gives people the ability to communicate with themselves, to develop empathy, to be sympathetic and sensitive and to be tolerant of the problems (Gilbert and Procter, 2006), and it can be an important means of coping with negative life experiences (Allen and Leary, 2010). It has been found that when individuals have high levels of self-compassion, they can more easily handle negative situations and respond more appropriately in the case of unpleasant events (Neff and Vonk, 2009). Therefore, carrying out research studies pertaining to

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the identification of self-compassion levels of parents with autistic children and seeking ways to help them improve their self-compassion levels will give them the opportunity to feel better and handle problems more effectively. Besides, it is thought that it is essential for these parents to relieve themselves and to forgive both themselves and the others despite all the challenges they encounter while bringing up their children. Humor is one of the ways with which individuals can tackle their negative life experiences and alleviate their distress. The type of stress generating factors and the way individuals handle the effects of stress have an influence on the abilities of the individuals to deal with stress.

For the parents of autistic children, many factors that affect one another and increase with the passage of time are available (Marshall and Long , 2010). On the other hand, there are many ways of dealing with stress, and humor is one of the most effective among all these ways. According to Chinery (2007), humor enables individuals to develop mindfulness to positively modify behavior in response to problems and to fight against depression and stress. It is known that humor and smiling have positive influences on human health (e.g., resistance to stress, immune system) (Martin, 2002). Humor and smiling can also be considered to be universal concepts emerging as a result of the evolution of the development of the human beings and their psychological experiences (Mireault, Poutre, Sargent-Hier, Dias, Perdue and Myrick, 2012). Humor generally used to realize one's intention, to back down from a given promise, to ingratiate someone or to invite somebody to the communication (Semrud-Clikeman and Glass, 2008) is also a social building block to be shared with others (Hoicka and Akhtar, 2012). Therefore, humor can best be achieved in the case of a mutual relationship between people. By means of the humor, individuals can have the chance to share their experiences, to explain themselves and to be accepted by the others. In addition, the way humor is used plays a decisive role in the interpersonal relationship among people. While humor can be used by individuals as a means of self-acceptance or a way of establishing positive relationships with other people, it can also be used in such a way (e.g., humiliating) that can harm themselves or others (Martin, Puhlik- Doris, Larsen, Gray and Weir, 2003). The use of humor to harm others can affect people's relationship with others and can put their relationship both with their intimate and distant community into jeopardy. On the other hand, when used properly, it would be fair to state that humor has a role in strengthening their relationship with other people. It is believed that humor, which is one of the most important instruments in social communication, has many adaptive functions (Dowling and Fain, 1999). Moreover, humor contributes to the interpersonal communication, the expression of stress in a reasonable way and to reducing the tension (Semrud-Clikeman and Glass, 2010). Determining how a person is perceived by his/her friends or family members, humor is also important for the existence of an individual in certain places and in his/her interpersonal communication (Zeigler-Hill, Besser, and Jett, 2013). In brief, using humor about one's negative-positive characteristics and good-bad experiences without humiliating the others can both relieve themselves and help them to be accepted by the people around themselves. Especially, when people have unwanted experiences, they feel the need to be accepted without being pitied; thus, humor plays a constructive role in interpersonal communication as a means of accepting these people in a tolerant way. The use of humor by parents with autistic children can enable them to overcome the challenges they experience when they are with their children. Additionally, humor can encourage these parents to be resistant not only to the negative experiences in the environments where their children spend time to adapt to the society but also to the prejudice of the social community. Through humor, individuals can reflect their personality traits. In other words, the differences in the personality traits of individuals affect the way they use the humor (Schermer et al., 2013). It can also be pointed out that while the personality traits of parents have an influence on the type of humor they use, the way they describe and express their feelings affects the type of humor they use and their level of self-compassion.

One of the cases in which individuals have difficulty in describing and expressing their feelings is known to be alexithymia. In alexithymia, individuals have difficulty in describing and expressing their feelings (Roedema and Simons, 1999), cannot understand other people's feelings (Taylor, 1987) and use fewer words to explain their emotional status (Roedema and Simons, 1999). Encountering emotional situations which cause them to have difficulty in perceiving others, individuals with alexithymia cannot externalize their feelings or explain their feelings appropriately as they cannot make connections among their feelings (Taylor, 1987 and Thompson, 2009). In other words, individuals with alexithymia do not realize their emotional status, cannot understand them or explain these feelings properly. Individuals with a higher degree of alexithymia are incompetent in

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identifying feelings, such as happiness, sorrow, anger, fear, surprise or hatred (Lane, Sechrest, Riedel, Shapiro and Kaszniak, 2000). Alexithymia is regarded as a personality trait independent from the daily stress generating situations; however, it directly affects the reaction of the individuals to the stress generating situation (De Sousa, 2010). According to some researchers, alexithymia arises from genetic factors and other factors, such as physical or psychological diseases, traumatic experiences, over depression, anxiety or stress in general (Way, et.al., 2007 and Thompson, 2009). On the other hand, some other researchers indicate that among reasons triggering and increasing the frequency of alexithymia are the feelings of emotional exhaustion, depersonalization and the lack of family support (Bratis, et. al.,2009). It has also been emphasized that individuals with alexithymia have lower levels of emotional density than other individuals and they attach a higher level of emotional density to words or expressions used to refer to negative emotional state (Sallıoğlu, 2002). Besides, it was concluded by some researchers that alexithymia is related to different mental disorders such as anxiety and depression (Pandey and Choubey, 2010). As a result of another research study, it was found that when compared to the general population or to parents with developmental disorders other than autism, parents with autistic children are observed to have alexithymia more frequently (Szatmari et.al., 2008). Considering the similarities between autism and the behavior of parents with autistic children, the relevant literature suggests that these patents have more social hardships, communication problems, problem in the use of the language and stereotypical behavior (Piven, Palmer, Jacobi, Childress and Arndt, 1997; Piven, 1999; Bishop et al., 2004; Volkmar et al., 2005; Skuse et al., 2011), which are common to autism. Especially, the hardships in the definition and the expression of the feelings can be associated with alexithymia. In autism causing communication problems, it is vital for parents to understand both their own feelings and their children's feelings, to express these feelings and to deal with the negative experiences they encounter while bringing up their children. There is a need for the investigation of the characteristics of alexithymia as well as the self-compassion and the humor styles of the parents with autistic children to help them to establish relationships with their children and to cope with these characteristics of alexithymia.

Aim

The aim of this study is to identify the relationship between self-compassion, humor styles and the characteristics of alexithymia of the parents who have autistic children.

METHOD

Research Design

Hierarchical regression analysis was used in this study to identify the relationship between self-compassion, humor styles and the characteristics of alexithymia. In hierarchical regression analysis used a method of Multiple Regression Analysis, predictive variables are analyzed in accordance with the order predetermined by the researcher and each variable is assessed in terms of its contribution to the variance of the dependent variable (Büyüköztürk, 2005).

Participants

The participants are autistic children attending the private rehabilitation centers in the Istanbul province and the parents whose children were attending autistic children education centers. Parents taking part in the current study were chosen among those whose children were studying at centers that could be reached more easily. Out of 200 autistic children, 160 (80%) were males while the remaining 40 (20%) were female. Among these children, 73 (36,5%) were under the age of 6, 105 (52,5%) were between the ages of 6-12 and the remaining were between the ages of 12-18. On the other hand, among the parents, 115 (57,5%) were mother while 85 (42,5%) were fathers. 78 (39%) of the parents were graduates of primary school while 47 (23%) of them were graduates of high school. The remaining parents had BA or MA. While 26 (13%) of them had low income, 142 (71%) of them had middle income, and the remaining participants had high income.

Data Collection Instruments

Self-compassion Scale: Developed by Neff (2003), the Self-compassion Scale assess the qualities related to the sub-dimension of self-compassion and is a self-assessment instrument based on the individual's giving information about his/her own self. Including 26 items, the Self-compassion scale was found to have 6 sub-

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dimensions making up the concept of self-compassion by means of the confirmatory factor analysis: self-judgment against self-kindness, isolation against common humanity and over-identification against mindfulness. The adaptation of the Self-compassion Scale and the reliability as well as the validity of the study was done by Akın, Akın and Abacı in 2007. 633 students at the Education Faculty of Sakarya University took part in their study. The confirmatory factor analysis in the study revealed that the scale was compatible with the original form ($x2$= 779.01, sd= 264, p= 0.00, RMSEA= .056, NFI= .95, CFI= .97, IFI= .97, RFI= .94, GFI= .91 and RMR= .059). The internal consistency coefficients were found to be between .72 and .80, and the test-retest reliability coefficients were found to be between .56 and .69. Also, the corrected item-total correlations of the scale were found to be between .48 and .71, and it was revealed that all the differences between the 27% of the means of the high-low groups were significant (Akın, Akın and Abacı, 2007).

Humor Styles Questionnaire (Scale): The scale developed by Martin, Puhlik-Doris, Larsen, Gray and Weir (2003) aims to assess four different dimensions through seven likert-type 32 items pertaining to the individual differences affecting the humor styles. The Humor Styles Scale was adapted into Turkish by Yerlikaya (2003) who carried out the study with 1363 students attending different faculties at Çukurova University. With a sample of 530 students, the piloting of the scale was done while the construct validity of the scale was tested with a sample of 495 students. The criterion-related validity studies were carried out through the involvement of two different sample groups consisting of 137 and 138 students, and the test-retest reliability studies were conducted in a fifteen-day interval with the involvement of a sample of 63 participants. The findings of the study revealed that the scale was comprised of four factors as determined in its original form, and each factor was found to be equivalent to four sub-scales including eight items. The percentage variance explanation of the obtained four factors is 36,88%. Core values of the factors are respectively as follows: Self-enhancing humor (SEH): 5.22, Affiliative Humor (PH): 2.97, Aggressive Humor (OH): 1.90 and Self-defeating Humor (SDH): 1.70. The variance description percentages are respectively as follows: 16.34, 9.28, 5.97 and 5.30. The Cronbach alpha internal consistency coefficients of the sub-scales were found to be between 67 and .78, and the test-retest correlation coefficients were found to be between .83 and .88.

Toronto Alexithymia Scale (TAS-20): The scale developed by Bagby, Parker and Taylor in 1993 is a self-assessment scale. Compatible with the structure of alexithymia in theory, the scale originally including 26 items has been developed by improving its psychometric features. The scale used for the study has 20 items and is scored between 1-5. It has three sub-scales, such as difficulty identifying feelings (TAS-1), difficulty describing feelings (TAS-2) and externally-oriented thinking (TAS-3). High scores show high levels of alexithymia. The Toronto Alexithymia Scale was adapted into Turkish by Güleç and the colleagues in 2009, and it was found that the adapted version was in line with the 3 factor structure of the original version. After the investigation of the scale's and its sub-scales internal consistency, it was revealed that the alpha value was alpha=0.78 for the total scale and the following alpha values were found for the 3 factors respectively: 1.factor alpha=0.80, 2. factor alpha=0.57 and 3. factor alpha=0.63. The correlation between the 1. and the 2. factors was found to be 0.53 while the correlation between 1. and 3. factors was found to be 0.12. Finally, the value was 0.36 for the correlation between the 2. and 3. factors. The corrected item-total correlation was found to be between 0.22-0.48, and thus considered to be statistically meaningful. Except for the 18. and 20.items, sufficiently correlation was found for the scale and the Turkish adaptation of the TAS-20 was regarded as reliable and valid for the Turkish sample (Güleç et al., 2009).

Data Collection and Analysis
In the beginning of the study, the centers where the autistic children were studying and the teachers working in these centers were informed about the study. Then, the scales were delivered to the teachers in the centers by the researcher, and the teachers delivered the scales to the parents who have autistic children. Finally, the scales were collected back. During the data collection procedures, a total of 800 forms were delivered and among 328 forms that were filed out by the participants, 200 forms were taken into account as they were filled out appropriately in line with the purpose of the study. The obtained data was first subjected to Pearson Correlation analysis to identify the relationship between the dependent and the independent variables, and then, the hierarchical regression analysis, which is one of the multiple regression analysis methods, was used.

FINDINGS

Table1: The Correlation of the Variables in the Study and Descriptive Statistics

Measurements	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.alexithymia total														
2. TAS1	,89[***]													
3. TAS2	,82[***]	,62[***]												
4. TAS3	,66[***]	,32[***]	,40[**]											
5. Self kindness	-,27[***]	-,34[***]	-,23[**]	,01										
6. Self judgment	-,01	,03	,08	-,14	,07									
7. Common hum.	-,31[***]	-,38[***]	-,27[***]	-,01	,53[***]	,02								
8. İsolation	,41[***]	,45[***]	,28[***]	,19[**]	-,22[**]	,09	-,22[**]							
9. Mindfulness	-,38[***]	-,44[***]	-,21[**]	-,19[**]	,67[***]	,04	,59[***]	-,29[***]						
10.Overidentified	,51[***]	,59[***]	,38[***]	,15[*]	-,39[***]	-,03	-,30[***]	,61[***]	-,35[***]					
11.Affiliative	-,12	-,12	-,07	-,09	,07	,33[***]	,03	-,02	,09	-,17[*]				
12.Self-enhancing	-,25[***]	-,26[**]	-,12	-,19[**]	,26[***]	,42[***]	,15[*]	-,20[**]	,22[**]	-,31[***]	,51[***]			
13.Self-defeating humor	,19[**]	,18[*]	,23[**]	,02	,03	,62[***]	-,09	,12	-,08	,07	,27[***]	,35[***]		
14.Aggressive humor	,40[***]	,39[**]	,35[***]	,18[**]	-,05	,33[***]	-,17[*]	,27[***]	-,22[**]	,24[**]	,11	,03	,49[***]	
Mean	52,86	16,87	13,12	22,86	15,07	13,70	12,38	10,71	12,84	10,43	23,86	27,00	21,79	18,09
Skewness	-,33	-0,20	-0,37	-0,61	0,46	0,34	0,44	-0,16	0,38	0,09	-0,44	0,14	-0,09	-0,08
Kurtosis	,02	-0,44	0,73	0,54	0,47	0,64	0,94	0,05	0,48	0,28	0,79	-0,05	-0,08	-0,98

Before assessing the predictive value of the independent variables through the regression analysis, the variables significantly related to the alexithymia total scores of the parents, the scores of the sub-scales and the independent variables were identified and illustrated on Table 1 along with their mean, skewness and kurtosis values. As a result of the analysis, it was revealed that considering the skewness and kurtosis values, all the variables were normally distributed (see Table 1). Besides the alexithymia total scores, which is a dependent variable of this study, the relationship between the sub-scales (i.e., difficulty identifying feelings, difficulty describing feelings, externally-oriented thinking) and the independent variables (i.e., the sub-scales of the self-compassion and the sub-scales of the humor styles) and the predictive value of this relationship was investigated using the hierarchical regression analysis.

The Hierarchical Regression Analysis for the Prediction of the Total Scores of the Parents' Alexithymia
Firstly, the sub-dimensions of the self-compassion scale (i.e., self-kindness, common humanity, isolation, mindfulness, over-identification) that have significantly meaningful (minimum at the level of 0,01) relationship with the Alexithymia total scores and the sub-dimensions of the humor styles scale (i.e., self-enhancing humor, self-defeating humor, aggressive humor) were included in the regression analysis. Self-judgment that is a sub-dimension of the self-compassion scale and the affiliative humor variable that is sub-scale of the humor styles scale were not included in the analysis as they were not found to be meaningful at the level of 0,05. According to the multiple regression analysis conducted before the hierarchical regression analysis ($R=0,60$; $R^2=0,36$, $F=15,63$, $p < 0,001$), it was revealed that although a meaningful model was revealed, the variables whose only t values were meaningful ($p < 0,05$) were subjected to the hierarchical regression analysis. These variables were ordered from largest to the smallest in line with the standardized beta (β) values. Firstly, mindfulness and then, self-defeating humor and finally the self-enhancing humor were included in the analysis and the results are illustrated in Table 2.

Table2: The Hierarchical Regression Analysis for the Prediction of the Total Scores of the Parents' Alexithymia

		Over-identification	Mindfulness	Aggressive Humor	Self-enhancing humor
1. Stage	β	1,56			
R =,51; F= 69,82	t	8,35			
R^2= ,26 ; p=0,00	p	0,00			
2. Stage	β	1,16	-,589		
R =,56; F= 44,08					
R^2=,31 ; p=0,00	t	6,805	-3,71		
	p	0,00	0,00		
3. Stage	β	1,17	-0,59	,44	
R =,61; F= 39,36	t	6,23	-3,15	4,58	
R^2= ,38 ; p=0,00					
	p	0,00	0,00	0,00	
4. Stage	β	1,06	-0,54	0,47	-0,14
R =,62; F= 30,87	t	5,51	-2,87	4,83	-1,94
R^2= ,39 ; p=0,00					
	p	0,00	0,00	0,00	0,00

As illustrated in Table 2, in the first stage of the analysis, the 26% of the total scores of the Alexithymia scale is justified by the over-identification scores that it is positively related to (R^2 = 0,26; F= 69,82; p <0,001). In the second stage, it was revealed that 31% of the total scores of the Alexithymia is justified with the addition of the mindfulness variable, which is negatively related to the Alexithymia total scores by causing a 5% contribution to the variance (R^2= 0,31; F= 44,08; p <0,001). In the third stage, with the addition of the aggressive humor variable to the model that is positively related to the total scores of Alexithymia, an increase of 7% in the variance was observed and all these variables justified 37% of the total scores of the Alexithymia (R^2= 0,38; F= 39,36; p <0,001). In the final stage, with the addition of the self-enhancing humor score to the model, an increase of 1% was observed and all these variables justified 39% of the total scores of the parents in the Alexithymia Scale (R^2 = 0,39; F= 30,87; p <0,001).

The Hierarchical Regression Analysis for the Prediction of the Difficulty Identifying Feelings Sub-dimension of the Alexithymia Scale

Before the hierarchical regression analysis for the prediction of difficulty identifying feelings scores in the Alexithymia Scale was done, the sub-dimensions of the self-compassion scale (i.e., self-kindness, common humanity, isolation, mindfulness, over-identification) that have significantly meaningful (minimum at the level of 0,01) relationship with the variable and the sub-dimensions of the humor styles scale (i.e., self-enhancing humor, self-defeating humor, aggressive humor) were included in the regression analysis. Self-judgment that is a sub-dimension of the self-compassion scale and the affiliative humor variable that is a sub-scale of the humor styles scale were not included in the analysis as they were not found to be meaningful at the level of 0,05. According to the multiple regression analysis conducted before the hierarchical regression analysis (R=0,67; R^2=0,44, F=25,65, p < 0,001), it was revealed that although a meaningful model was found, the variables whose only t values were meaningful (p < 0,05) were subjected to the hierarchical regression analysis. These variables were ordered from largest to the smallest in line with the standardized beta (β) values. Firstly, over-identification and then, mindfulness and finally the self-enhancing humor were included in the analysis and the results are illustrated in Table 3.

Table3: The Hierarchical Regression Analysis for the Prediction of the Difficulty Identifying Feelings Sub-dimension of the Alexithymia Scale

		Over identification	Mindfulness	Aggressive Humor
1. Stage	β	1,027		
R =,,59; F= 106,379	t	10,314		
R^2= ,34 ; p=0,00	p	,000		
2. Stage	β	,866	-,468	
R =,64; F= 69,332	t	8,565	-4,621	
R^2=,41 ; p=0,00	p	,000	,000	
3. Stage	β	,79	-,40	,22
R =,68; F= 56,40	t	8,05	-4,11	4,28
R^2= ,46 ; p=0,00	p	,000	,000	,000

As can be seen in Table 3, it was found that in the first stage of the analysis, 34% of the scores in the difficulty identifying feelings sub-scale which is one of the sub-scales of Alexithymia are justified with the scores of the over-identification that is positively related to the difficulty identifying feelings sub-scale (R^2 = 0,34; F= 106,379; p <0,001). In the second stage, it was revealed that 41% of the difficulty identifying feelings scores is justified with the addition of the mindfulness variable, which is negatively related to the difficulty identifying feelings sub-scale of the Alexithymia scale by causing a 5% contribution to the variance (R^2= 0,41 ; F= 69,332; p <0,001). In the third stage, with the addition of the aggressive humor variable to the model that is positively related to the difficulty identifying feelings scores, an increase of 5% in the variance was observed and all these variables justified 46% of the difficulty identifying feelings scores (R^2 = 0,46; F= 56,40; p <0,001).

The Hierarchical Regression Analysis for the Prediction of the Difficulty Describing Feelings Sub dimension of the Alexithymia Scale

The regression analysis was done between the Difficulty Describing Feelings, which is one of the sub-scales of the Alexithymia and significantly related (minimum at the level of 0,05) Self-compassion sub-scales of self-kindness, common humanity, isolation, mindfulness, and over-identification and the self-defeating humor and the aggressive humor variables that are the sub-scales of the Humor Styles Scale. As a significance value of 0,05 was not found, the sub-dimension of self-judgment that is a sub-dimension of self-compassion scale and the affiliative humor and self-enhancing humor variables that are both sub-dimensions of the self-compassion scale were not included in the analysis. According to the multiple regression analysis conducted before the hierarchical regression analysis (R=0,49; R^2=0,24, F=8,76, p < 0,001), it was revealed that although a meaningful model was revealed, the variables whose only t values were meaningful (p < 0,05) were subjected to the hierarchical regression analysis. These values were ordered from largest to the smallest in line with the standardized beta (β) values. Firstly, over-identification and then, the aggressive humor scores were included in the analysis and the results are illustrated in Table 4.

Table 4: The Hierarchical Regression Analysis for the Prediction of the Difficulty Describing Feelings Sub-dimension of the Alexithymia Scale

		Over-identification	Aggressive Humor
1. Stage	β	,383	
R =,38; F= 32,49	t	5,70	
R^2= ,14 ; p=0,00	p	,000	
2. Stage	β	,32	,15
R =,46; F= 26,29	t	4,79	4,17
R^2=,21 ; p=0,00	p	,000	,000

As can be realized in Table 4, in the first stage of the analysis, it was found that 38% of the scores in the difficulty describing feelings sub-scale which is one of the sub-scales of Alexithymia are justified with the scores of the over-identification that is positively related the difficulty describing feelings sub-scale (R^2 = 0,38; F= 32,49; p <0,001). In the second stage, the variance that is justified with the addition of the aggressive humor variable that is positively related to difficulty describing feelings increased by 8%, and it was revealed that these variables justified 46% of the difficulty describing feelings scores (R^2 = 0,63; F= 26,29; p <0,001).

The Hierarchical Regression Analysis for the Prediction of the Externally-Oriented Thinking Scores

Finally, the regression analysis was done between the Externally-Oriented Thinking, which is one of the sub-scales of the Alexithymia and significantly related (minimum at the level of 0,05) to the Self-compassion sub-scales of isolation, mindfulness, over-identification and the self-enhancing humor and the aggressive humor sub-scales of the Humor Styles Scale. As a significance value of 0,05 was not found, the variables of self-kindness, self-judgment, common humanity, which are all the sub-scales of the self-compassion scale and the variables of affiliative humor and the self-defeating humor, which are the sub-scales of the Humor Styles Scale were not included in the analysis. As a result of the multiple regression analysis (R=0,27; R^2=0,07, F=3,83, p < 0,01), it was found that although a meaningful model was revealed, the self-enhancing humor that is negatively related to the sub-dimension of Externally-Oriented Thinking which is a variable whose only t value is meaningful (p < 0,05) can predict the score of the externally-oriented thinking at the level of 7%.

DISCUSSION AND RESULTS

In this study, the relationship between self-compassion, humor styles and the characteristics of alexithymia of parents who have autistic children was investigated. As a result of the study, it was revealed that the variable of over-identification that is one of the sub-scales of the self-compassion scale positively predicted the total scores of the Alexithymia Scale and the scores of the difficulty identifying feelings and the difficulty describing feelings. It was indicated that an individual in a state of over-identification cannot display an objective attitude because of the emotional status he/she caught up (Scheff, 1981). It was also emphasized that such individuals can exaggerate their perception of such feelings as separation and isolation (Nolen-Hoeksema, 1991). Seeming unaware of the feelings they experience, individuals with alexithymia do not have the words to be able to express their feelings to the others (Szatmari et.al., 2008), and it is likely for these people to generally fail to evaluate their experiences objectively due to the over-identification with themselves. It would be fair to think that individuals who have the following characteristics of alexithymia do over-identification with themselves and become introverted so as not to share their experiences: Not being able to make a connection among their feelings despite their strong feelings, not indicating their feelings appropriately (Taylor, 1987 and Thompson, 2009) and having difficulty in arranging and managing emotional expressions that are important in interpersonal relationships (Way et.al., 2007). Under these circumstances, it becomes harder for individuals with alexithymia characteristics to have a proper relationship both with themselves and with others; moreover, it is more difficult for them to receive social support they need from the people around themselves. It would also be fair to state that while the parents are trying to overcome the challenges related to bringing up their autistic children, the way they share things with other people is very limited and the time they allocate to take care of themselves is not available. Being a parent of an autistic child and the failure in establishing communication and relationship with his/her child might cause him/her to feel bad. It can be pointed out that parents with autistic children come across many physical and emotional challenges, and thus feel an emotional burden both at home and in social surroundings while they endeavor to meet their children's needs. Although these parents are in need of describing their feelings and sharing them, they may not have the chance to do so or they might not be emotionally ready. That is because they hold the idea that all they have to do is to think about their children all the time and look after them. While the parents are meeting their autistic children's needs, they tend to deal with their feelings in their internal worlds, avoid any social interaction or communication, turn out to be introverted and finally become self-identified instead of describing and expressing their own feelings. Focusing merely on themselves and what they experience when encountered with challenge, such parents can over identify themselves and exaggerate their experiences. However, if these individuals could approach themselves and their experiences more consciously, more positive outcomes would be parts of their lives. It is underlined that approaching painful and troublesome feelings and thoughts in

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balanced mindfulness and avoiding over-identification with these experiences (Kirkpatrick, 2005) are ways to cope with the ego-centrism which causes such feelings as consciousness, feelings of isolation and separation from rest of humanity (Elkind, 1967).

As a result of the current study, it was also found that the mindfulness variable, which is one of the sub-scales of the self-compassion scale, has a negative predictive value on the total scores of the Alexithymia Scale and the difficulty identifying feelings sub-scale. Self-compassion suggests that although there is no need for a person to evaluate him/herself very harshly, the person can be clearly aware of his/her failures and cannot ignore them thanks to his/her awareness (Neff, 2003b). When people are not aware of the feelings causing pains and sufferings, they cannot accept their experiences as they, are which causes them to fail to reach the level of mindfulness referring to the conscious awareness or to emotionally resist to the pain (Hayes, Wilson, Gifford, Follette, Strosahl, 1996). Such a reaction can make a person focus on negative thoughts from a narrow perspective and get stuck in these thoughts (Nolen-Hoeksama, 1991). Conversely, non-judgmental consciousness reduces self-criticism and helps people to understand themselves (Jopling, 2000). Besides, it was indicated that consciousness is important in that though consciousness, individuals can mentally keep away from the negative experiences, and thus their sense of self-compassion and common humanity skills like social sharing can be developed (Neff, 2003). In addition, by means of awareness, individuals can at least be happy (Hollis-Walkerve Colosimo, 2011). In the relevant literature, it was also highlighted that providing education about mindfulness encourages people to accept their pains and sufferings as they are instead of trying to change them (Hayes, Strosahl and Wilson (1999). Similarly, it was revealed that as a result of such education programs, the stress and anxiety levels of such parents can be reduced and these parents were found to be more tolerant and forgiving to themselves and the others (Benn, Akiva, Arel, Roeser, 2012). Therefore, parents of autistic children should accept the special characteristics of their children, display behavior compatible with their needs and become aware of themselves and their children in the case of aggressive and obsessive behavior; in other words, they should not over-identify with themselves and instead develop their self-compassion skills alone. As maintained by Allen and Leary (2010), individuals with self-compassion approach the problems consciously and take responsibility by accepting these problems rather than paying attention to other issues or avoiding these problems. Therefore, it would be fair to state that mindfulness, which has a negative predictive value on the characteristics of alexithymia of the parents with autistic children, helps parents to realize themselves and approach themselves in a positive way.

The results of the present study indicate that the aggressive humor, which is a sub-scale of humor styles scale, variable has a predictive value on the total scores of the Alexithymia Scale and the scores of difficulty identifying feelings and difficulty describing feelings. It was also revealed that the self-developing humor variable has a positive predictive value on the total scores of Alexithymia Scale and the externally-oriented thinking sub-scales. This finding leads to the idea that the characteristics of alexithymia influence the styles of humor used by the individuals while expressing themselves. That is because the characteristics of alexithymia refer to the difficulty in an individual's expressing him/herself or in realizing others' feelings. People who have difficulty in realizing others' feelings do not mind using an aggressive style of humor, and even ignore the fact that other people can be offended. Sallıoğlu (2002) points out that the emotional density of alexithymia individuals is lower than other individuals, and thus such individuals attach a denser meaning to words and expressions having a negative connotation. Therefore, it can be stated that individuals with alexithymia cannot name their feelings correctly and thus are generally misunderstood (Taylor, 1987). In other words, the characteristics of alexithymia of the parents with autistic children have an influence on their aggressive style of humor. It is likely for parents with autistic children to have difficulty in social environments and feel themselves pressured as a result of the stress they experience with their children and especially the repeated and obsessive behavior of their children. It is also natural to think that parents with autistic children might make their children more aggressive and aggressive as a result of the pressure on these parents. To put it differently, when parents of autistic children face challenges they cannot overcome, they prefer to resort to aggressive style of humor when they are angry with people around. Alexithymia is also considered to be a defense mechanism against an emotional distress or pain (Solmaz et al., 2000), and it was stated that individuals with alexithymia characteristics come forward with their extroverted personalities (Hindistan, 2012). Considering that the self-enhancing humor is used a type of humor that embodies an individual's personal characteristics

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and takes other people's needs into account (Kuiper, Martin and Olinger, 1993; Martin, Public-Doris, Larsen, Gray and Weir, 2003), it is natural that the self-enhancing humor has an influence on the characteristics of alexithymia and the externally-oriented thinking dimension. It would be true to state that parents with autistic children use their sense of humor for others and deal with others rather than facing their own emotional states, describing them and expressing their experiences in a humorous way. That is because the individuals with alexithymia characteristics avoids describing what they experience in their internal world and focus on others. It can be suggested that parents with autistic children use self-enhancing style of humor, which helps them to be accepted by the people around themselves and adapt to their social environment. On the other hand, it can be regarded as a defense mechanism against alexithymia-related psychological conflicts and anxieties (Şaşıoğlu et al., 2013) and against the emotional distress and anguish (Solmaz et al., 2000). Parents with autistic children can also develop defense mechanisms genetically or as a means of defense mechanism, which might emotionally affect these parents. Thus, it is also known that the relatives of autistic children have difficulty in the use of the language socially and pragmatically (Piven, 1999), and they differ from other individuals in their use of the language for communication and socialization purposes (Bishop et al., 2004).

As a result of this discussion, it can be recommended that some precautions should be taken to help parents with autistic children to handle the challenges they experience and to enable them to express themselves. Programs offered to these parents generally focus on the ways to help parents to teach something to their autistic children. Conversely, it is suggested that programs with a focus on parents' self-compassion is considered to be more helpful for them to feel themselves better, and related experimental studies should be carried out as further studies. The evaluation scales utilized in the present study were filled out by parents with autistic children; therefore, the data was obtained through self-evaluation from their own perspectives. Further studies can concentrate on the relationship between the evaluation scales by collecting data from people close to the parents with autistic children. Additionally, by means of comparing the data obtained from the parents who evaluated themselves as in the present study and their relatives, further studies should be carried out. Finally, further studies can investigate what kind of a transition can be observed by evaluating such parents' styles of humor in several generations.

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