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Relationship between Alexithymia and Coping Attitudes in Generalized Anxiety Disorder

Yaygın Anksiyete Bozukluğunda Aleksitiminin Başa Çıkma Tutumları İle İlişkisi

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ABSTRACT

Among anxiety disorders, the incidence of alexithymic features is found in a wide range of 12.5-58%, and it is a personality trait that can also be seen in healthy individuals. Our study investigated the relationship between alexithymic features and coping attitudes in patients with generalized anxiety disorder. Forty patients diagnosed with Generalized Anxiety Disorder and 39 healthy volunteers participated in the study. Participants were divided into groups using the Toronto Alexithymia Scale, and the Hamilton Anxiety Scale and Coping Attitudes Scale were applied to all participants. Nineteen patients with alexithymia and Generalized anxiety disorder, 21 patients with Generalized anxiety disorder without alexithymia, and 39 healthy volunteers participated in this study. Statistically significant differences were observed between the problem-focused coping and emotion-focused coping subscale scores, but there was no difference in dysfunctional coping styles between the three groups. In the correlation analysis performed to determine the relationship between the total alexithymia and Coping attitudes subscale scores, there was a moderate negative correlation between the alexithymia scores and problem-focused (r=-0.442) and emotion-focused coping (r=-0.425) subscale scores. Alexithymia is often accompanied by generalized anxiety disorder and negatively affects coping attitudes.
Keywords: Alexithymia, generalized anxiety disorder, coping skills

ÖZ

Anksiyete bozuklukları arasında aleksitimik özelliklerin görülme sıklığı %12,5-58 gibi geniş bir aralıkta bulunsa da bu durum sağlıklı bireylerde de bir kişilik özelliği gibi algılanabilmekte ve başa çıkma tutumları ile ilişkilendirilmektedir. Çalışmamızda, yaygın anksiyete bozukluğu tanılı hastalarda aleksitimik özelliklerin varlığı ve ile başa çıkma tutumları arasındaki ilişkinin araştırılması planlanmıştır. Çalışmaya Yaygın Anksiyete Bozukluğu tanısı konan 40 hasta ile 39 sağlıklı gönüllü dahil edildi. Katılımcılar klinik görüşme sonrasında Toronto Aleksitimi Ölçeği uygulanarak gruplara ayrıldı ve grupların hepsine Hamilton Anksiyete Değerlendirme Ölçeği ve Başa Çıkma Tutumlarını Değerlendirme Ölçeği uygulanmıştır. Yaygın anksiyete bozukluğu tanısı olan hastalardan 19 kişi aleksitimisi olan (Grup 1), 21 kişi aleksitimisi olmayan (Grup 2) ve 39 kişi sağlıklı kontrol (Grup 3) grubuna dahil edilmiştir. Üç grup arasında problem odaklı başa çıkma ve duygu odaklı başa çıkma alt ölçek puanları arasında istatistiksel olarak anlamlı bir fark görülürken, işlevsel olmayan başa çıkma tutum puanları açısından üç grup arasındaki fark istatistiksel olarak anlamlı saptanmamıştır. Aleksitimi toplam puanı ve başa çıkma tutumları alt ölçek puanları arasındaki ilişkiyi belirlemek için yapılan korelasyon analizinde, aleksitimi toplam puanı ile problem odaklı başa çıkma (r=-0,442) ve duygu odaklı başa çıkma (r= -0,425) arasında orta düzeyde negatif bir ilişki bulunmuştur. Sonuç olarak, yaygın anksiyete bozukluğunda aleksitimi işlevsel başa çıkma tutumları ile negatif yönde ilişkilidir. Bireyselleştirilmiş psikoterapide bu özelliğe dikkat edilmesi tedavi başarısına katkı sağlayacaktır.
Anahtar sözcükler: Aleksitimi, yaygın anksiyete bozukluğu, başa çıkma tutumları

Introduction

Sifneos defined the concept of alexithymia as the verbal absence of emotions. Alexithymia was associated with psychosomatic diseases in the early days. This concept has also been shown in other psychiatric patients with eating disorders, obesity, substance use, depression, and anxiety disorders (Sifneos 1996, Mattila et al. 2008, Leweke et al. 2012, Raffagnato et al. 2020, Vuillier et al. 2020). Anxiety disorders are related to altered emotional reactivity and are thus associated with dysfunctional emotion regulation. Among them, Generalize Anxiety Disorder (GAD) is particularly characterized by deficits in emotional experience and regulation, which leads to avoidance of processing emotional stimuli through worry in patients with GAD (Mennin et al. 2009). When we look at people with alexithymia, four clinical features stand out: difficulty in describing emotions and distinguishing emotions and bodily sensations created by emotional arousal; difficulty describing feelings to

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other people; limited imaginary processes manifested by an inability to imagine, and an eccentric cognitive structure depending on the stimulus (Taylor and Bagby 2012, Luminet et al. 2021). These limitations cause alexithymic individuals to show deficiencies in both emotional awareness and communication with other people and reduce their capacity to cope with stressful situations (Lumley et al. 2007, Taylor and Bagby 2012, Di Tella et al. 2018, Luminet et al. 2021).

In the literature, more studies have been conducted with the clinical population, and alexithymia is more prevalent in those diagnosed with a disease than in healthy individuals. However, alexithymia is a personality trait that can also be observed in healthy individuals without a diagnosis of a psychiatric disorder (Taylor et al. 2003, Tolmunen et al. 2011). Even though it is accepted as a personality trait, the authors also stated that emotional dysregulation and impaired regulation of emotions may predispose the person to some psychiatric disorders or substance abuse, especially in cases of conflict (Morie et al. 2020). Alexithymic individuals have problems identifying, understanding, and expressing their emotions; they are less likely to turn to other people for support and to regulate their emotional stress with imaginary mental activities (Besharat 2010). In another study, alexithymia was correlated with five factors: depression, anxiety, stress, female gender, and life satisfaction (Hamaideh 2018).

The role of alexithymia in anxiety disorders such as panic disorder, obsessive-compulsive disorder, and post-traumatic stress disorder is well established (De Berardis et al. 2008). However, there is a lack of evidence in the literature regarding alexithymia and GAD and their relationship with coping strategies. When anxiety level and alexithymia are considered concepts that impact coping attitudes, we hypothesized that alexithymic features could change coping attitudes in patients with generalized anxiety disorder.

Method

Sample

Forty patients who applied to the Mental Health and Diseases Polyclinic of Balkesir University Health and Practice Research Hospital between January and June 2016 and were diagnosed with GAD according to the The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) criteria after a clinical interview by a specialist psychiatrist were included. Exclusion criteria were comorbidity with other psychiatric diagnoses (unipolar depression, bipolar depression, alcohol substance use, mental retardation, and psychotic disorders) and any psychiatric drug use. Between these dates, 40 patients and 39 healthy volunteers were included in the study, as 10 of 81 patients diagnosed with GAD received medication, 28 had a diagnosis of concomitant major depression, and 3 patients had alcohol and substance use.

Procedure

Written informed consent was obtained from all participants participating in the study, and ethical approval was obtained from the Balikesir University Ethics Committee (decision no:2015/83). First the participants were applied Toronto Alexithymia Scale (TAS) and divided into 3 groups: patients with GAD accompanied (Group 1) and without (Group 2) alexithymia and healthy volunteers (Group 3) by applying the Toronto alexithymia scale (TAS). The cut-off value was 59, and people above this score were accepted as alexithymic. After Sociodemographic Data Form, Hamilton Anxiety Scale (HAMA), and Coping Attitudes Scale (COPE) were administered to all participants. Application of clinical scales was completed in approximately 15 minutes.

Measures

Sociodemographic Data Form

In the sociodemographic data form prepared by us, the participant's age, gender, marital status, height/weight, and educational status were questioned.

Coping Attitudes Evaluation Scale (COPE)

The scale developed by Carver et al. in 1989 is a self-reported scale consisting of 60 questions (Carver et al. 1989). It includes 15 subscales, with each subscale consisting of four questions. The validity and reliability study of the scale in Turkish was performed by Aargn et al. (Agargn et al. 2005). Each subscale provides information on different coping attitudes. As a result, the high scores obtained from the subscales give the possibility to comment on which coping attitude is used more by the individual. These 15 coping attitudes are 1. Active coping,

2. Planning.3. Use of beneficial social support 4. Holding back, 5. Suppressing other occupations, 6. Positive reinterpretation and development, 7. Acceptance, 8. Treating as a joke, 9. Use of emotional social support, 10. Coping religiously, 11. Substance use, 12. Mental disengagement, 13. Focusing on problems and revealing emotions, 14. Denial, 15. Behavioral disregard. The subscales can be handled under three general headings:1. Problem-Focused/Problem-Solving Oriented (1-5) 2. Emotion/Emotion Oriented (6-10) 3. Dysfunctional (11-15).

Toronto Alexithymia Scale (TAS-20)

The Toronto Alexithymia Scale (TAS-20) was developed by Bagby et al. (Bagby et al. 1994). The Turkish adaptation, validity and reliability study of the scale was performed by Güleç et al. (2009).It was stated that high scores on the scale would indicate a high alexithymic level. According to the authors, it would be appropriate to take '51' as the lower value to avoid missing alexithymia and to take 59 as the upper value if it is desired to work with the pure alexithymic group. In our study, the recommended cut-off value was 59 points.

Hamilton Anxiety Scale (HAM-A)

It is a semi-structured scale developed by Hamilton in 1959 to assess the severity of anxiety neuroses (Hamilton 1959). It consists of 14 items that evaluate physical and mental symptoms of anxiety. Yazc et al. conducted a Turkish reliability and validity study (Yazici et al.). Anxiety was defined as a score of six or more.

Statistical Analysis

Data were analyzed using the SPSS 21.0 package program. Distributions were determined using visual graphics and appropriate statistical methods (Kolmogorov- Smirnov or Shapiro- Wilks). The ANOVA test was used to compare age and Cope scores because the distributions were normal and the variances were homogeneous. The Tukeys test was used for pairwise comparisons. The Kruskal-Wallis test was used for the comparison of HAMA scores in the three groups because it did not show a normal distribution, and the Mann-Whitney U test was used for pairwise comparison. In cases where the Mann-Whitney U test was used in post hoc comparisons, Bonferroni correction was performed, and $p<0.017$ was accepted as the level of statistical significance. The relationship between the Toronto scale and COPE subscale scores was determined using the Pearson correlation test. For the evaluation of sex, the chi-square test was performed by creating cross tables. The level of statistical significance was set at $p < 0.05$. The sample size of the study was calculated using the G*Power V3.1.9.7 program. Accordingly, the minimum sample size to be reached for the three groups was calculated as 78 at d=0.36 effect size, 0.80 power and a=0.05 error probability.

Results

Nineteen patients with alexithymia (group 1), 21 patients without alexithymia (group 2), and 39 healthy volunteers (group 3) participated in the study. The mean±SD ages of the patients were calculated as follows: Group 1 (45.11±8.79 years), Group 2 (40.95±12.81 years), and Group 3 (43.22±10.28 years). There was no statistically significant difference between the three groups in terms of the mean age (p=0.473). The groups were also compared in terms of gender distribution, and no statistically significant difference was observed (Table 1).

Table 1. Comparison of groups in terms of gender distribution

Group		**Gender**		**Total**	**P**
		Male	Female		
Group 1	N	6	13	19	0.747
	%	31.6%	68.4%	100.0%	
Group 2	N	8	13	21	
	%	38.1%	61.9%	100.0%	
Group 3	N	12	24	39	
	%	33.3%	66.7%	100.0%	

When the HAMA scale scores of the participants were evaluated, the median (25-75P) values were 25 (18-30) in Group 1, 20 (16-23.5) in Group 2, and 2.5 (0-4) in Group 3. In the pairwise comparison, this significance was observed between Group 1 ($p<0.001$) and Group 2 ($p<0.001$) and between Group 3. The mean (±SD) values of the COPE scale scores for each of the three groups are given in Table 2.

While a statistically significant difference was observed between problem-focused coping (PFC) and emotion-focused coping (EFC) subscale scores between the three groups, the difference between the three groups in terms

of dysfunctional coping attitude (DCA) scores was not statistically significant (p=0.381). Pairwise comparisons are presented in Table 3.

Table 2. COPE scale scores of the participants

Scale	Group 1			Group 2			Group 3			*p-value*
	N	Mean	Std. d	N	Mean	Std. d	N	Mean	Std. d	
PFC	19	46.2	5.2	21	49.0	5.2	36	53.7	6.3	<0.001*
EFC	19	49.2	5.6	21	52.0	5.4	36	55.5	7.4	0.003*
DCA	19	44.8	5.1	21	46.4	5.7	36	47.3	6.9	0.381*

*ANOVA, COPE:Coping Attitudes Scale, PFC:Problem Focused Coping, EFC:Emotional focused coping, DCA:Dysfunctional Coping Attitudes; Std. d: Standard deviation

Table 3. Pairwise comparisons of PFC, and EFC subscales

PFC	**Group 1**	**Group 2**	**Group 3**
Group 1	1	0.282	<0.001*
Group 2		1	0.01*
Group 3			1
EFC	**Group 1**	**Group 2**	**Group3**
Group 1	1	0.369	0.003*
Group 2		1	0.119
Group 3			1

PFC: Problem Focused Coping, EFC: Emotional Focused Coping

In the correlation analysis performed to determine the relationship between the Toronto scale and the coping attitudes subscale scores, there was a moderate negative correlation between Toronto scale scores and PFC (r=-0.442; p<0.001) and EFC (r=-0.425; p<0.001) scale scores. The relationship between DCA and Toronto scale scores was not statistically significant (Table 4). Cronbachs alpha measures of internal consistency on the Toronto and Cope subscales were 0.642 and 0.848, respectively.

Table 4. Correlation between Toronto Alexythimia Scale (TAS), and COPE scale scores

Pearson correlation test		**PFC**	**EFC**	**DCA**
TAS	r	-0.442	-0.425	-0.126
	p	0.000	0.000	0.276
	n	76	76	76

TAS: Toronto Alexythimia Scale, COPE:Coping Attitudes Scale, PFC:Problem Focused Coping ,EFC:Emotional Focused Coping, DCA:Dysfunctional Coping Attitudes

Discussion

In our study, we found that 19 of the 40 patients with GAD who participated in the study had a high TAS-20 score, and the rate of alexithymia accompanying patients with generalized anxiety was similar to the rates reported by de Berardis et al. (2017) and Paniccia et al. (2017). Kumar et al. (2018) found that 40% of GAD patients were alexithymic, and there was a positive correlation with the severity of GAD as measured with the GAD-7 scale. The coping strategies did not differ between the groups (Groups 1 and 2) with generalized anxiety disorder. The similarity of anxiety scores in subgroups with and without alexithymic features supports studies showing that alexithymia is a fixed personality trait rather than a secondary clinical condition related to anxiety (Luminet et al. 2021). In addition, the similarity in anxiety scores between Groups 1 and 2 increased the significance of the study. There are many scales developed to evaluate coping attitudes. In our study, coping attitudes were discussed as problem-focused ones, including coping with the problem's primary source; emotion-oriented ones, which include coping with the emotional effects caused by the source; and non-adaptive/non-functional/maladaptive coping styles. Although the rates of problem-focused and emotion-focused coping attitudes were significantly higher in the healthy control group, as expected, no difference was observed between the groups regarding dysfunctional attitudes. Erdem et al. stated that male patients diagnosed with generalized anxiety disorder used active coping attitudes, a problem-focused coping style, less frequently, and behavioral and mental disengagement attitudes in the dysfunctional group were used more often. However, it was determined that emotional and social support, under emotion-focused coping, was more frequently used in women (Erdem et al. 2008). When a study showing that the level of alexithymia has a significant relationship with all stress coping styles and predicts all of them at a significant level was examined in detail, it was seen that the level of alexithymia negatively predicted the problem-focused/active coping styles of self-confident, optimistic, and social support-seeking approaches. In addition, the study's findings showed that the level of alexithymia positively predicted desperate and submissive approaches considered emotion-focused/passive

coping styles (Kahramanol 2016). In our study, no correlation was observed between alexithymia scores and dysfunctional attitudes, while a moderate negative correlation was observed between functional attitudes, which aligns with the literature. In a study conducted in our country, while the level of alexithymia was positively correlated with the desperate approach, self-confident, optimistic, submissive, and social support-seeking approaches were negatively correlated with alexithymia (Luzumlu 2013).

Studies have suggested that alexithymia is associated with problems processing emotional information (Donges and Suslow 2017, da Silva et al. 2018). Related to these problems, alexithymic people fail to think about the problems created by stressful situations, analyze them well, and find suitable solutions (Besharat 2010). Understanding one's feelings, putting them into words, and communicating them to someone is necessary for harmony. Accurate information about one's inner life enables many vital processes for living a satisfying social life and coping with stressful situations (Nicol et al. 2011). In addition, individuals with severe alexithymia who have difficulty in the cognitive processing of emotional information may also fail to use cognitive strategies that enable them to regulate emotional states caused by stressful events, which may cause them to use inappropriate or passive coping strategies more frequently (Besharat, 2010). Alexithymic individuals also experience a more significant number of limitations regarding their physical health and emotional problems than non-alexithymic individuals; in particular, the inability to express emotions reduces their scores on the health-related quality of life scale (Mattila et al. 2009). While alexithymic characteristics negatively predicted functional attitudes independently of the groups, it was observed in our study that the presence of alexithymia in patients with generalized anxiety did not affect coping styles. This situation emphasizes the importance of anxiety levels and other cognitive failures (such as distractibility or rumination) on coping attitudes rather than alexithymia. Further studies are required to test these conditions

Our study had some limitations. The availability of many measurement tools related to styles of coping with stress caused difficulties in comparing them with other studies in the literature and generalizing their results. In addition, the subheadings of alexithymia could not be evaluated due to the relatively small number of patients. Evaluation of alexithymia and coping attitudes with sub-headings in studies conducted with larger samples will increase the chance of making comments regarding the absence of significant differences between the groups regarding dysfunctional attitudes.

Conclusion

When alexithymia is considered both a personality trait and a concept that predisposes individuals to psychiatric illness, psychological therapies targeting emotional awareness may improve functional coping strategies, reduce anxiety symptoms in generalized anxiety disorder, and potentially confer long-term benefits.

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