

# Evaluation of Panic Agoraphobic Spectrum and Sociodemographic Characteristics in Terms of Depression Types

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## WHAT IS ALREADY KNOWN ON THIS TOPIC?

- Major depressive disorder commonly occurs alongside anxiety disorders, which lead to intensified symptoms and reduced treatment success rates.
- The 2 subtypes of depression, known as melancholic and atypical depression, show unique symptom patterns and potentially different biological causes.
- The panic-agoraphobic spectrum includes multiple symptoms that extend past typical panic disorder symptoms, such as stress sensitivity, anticipatory anxiety, and separation anxiety, which affect how depression presents.

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## ABSTRACT

**Objective:** One of the most important predictors of the severity of major depressive disorder is the presence of a comorbid anxiety disorder. Independent of treatment, depressed patients with a lifetime anxiety disorder are found to have a slower response to treatment and lower symptomatic recovery rates compared to depressed patients without a lifetime anxiety disorder. In this study, the aim was to compare the Lifetime Panic-Agoraphobic Spectrum and sociodemographic characteristics of patients with major depressive disorder and healthy controls and to investigate its relationship with depressive disorder severity and anxiety levels.

**Methods:** A total of 135 participants were included in the study, 80 of whom were major depressive disorder patients. Beck Anxiety Scale, Beck Depression Scale, Lifetime Panic Agoraphobic Spectrum Scale, and a sociodemographic and clinical data form were applied to all participants.

**Results:** All Lifetime Panic Agoraphobic Spectrum subscale scores, Lifetime Panic Agoraphobic Spectrum total score, Beck Depression Inventory, and Beck Anxiety Inventory scores are found to be significantly higher in the major depressive group compared to healthy controls. Also, Lifetime Panic Agoraphobic Spectrum scores and Beck Depression Inventory scores are found to be significantly higher in patients with melancholic depression compared to patients with atypical depression.

**Conclusion:** The findings demonstrate that panic-agoraphobic spectrum characteristics are significantly associated with depression severity, especially in melancholic depression. Even in the absence of a comorbid anxiety disorder, the assessment of Panic-Agoraphobic Spectrum features and identification of the depression subtype can provide valuable insights for personalized treatment approaches and may lead to improved clinical outcomes.

**Keywords:** Anxiety, atypical depression, Panic Agoraphobic Spectrum, melancholic depression

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## WHAT THIS STUDY ADDS ON THIS TOPIC?

- The research shows that patients with major depressive disorder demonstrated substantially higher scores across all Panic-Agoraphobic Spectrum domains compared to healthy participants.
- The patients who had melancholic depression showed higher scores on Panic-Agoraphobic Spectrum assessments, especially in the separation anxiety, agoraphobia, and reassurance seeking domains compared to patients with atypical depression.
- The number of hospitalizations and suicide attempts show a positive relationship with Panic-Agoraphobic Spectrum scores, which indicates these characteristics could serve as useful indicators for depression severity and clinical results.

## INTRODUCTION

Major depressive disorder (MDD) is a heterogeneous psychiatric condition characterized by core symptoms such as depressed mood and anhedonia, as well as changes in sleep, appetite, energy level, concentration, and psychomotor activity.<sup>1</sup> This heterogeneity creates difficulties in the diagnosis and treatment of MDD. In order to better understand the differences in the symptom profiles of patients and to create more homogeneous subgroups, the Diagnostic and Statistical Manual of Mental Disorders (DSM) has defined markers such as melancholic and atypical features.<sup>1</sup>

One of the most important determinants of the severity determinants of MDD is the presence of comorbid anxiety disorders. Studies have shown that depressed patients with lifetime anxiety disorders respond more slowly to treatment and have lower symptomatic improvement rates compared to depressed patients without lifetime anxiety disorders, regardless of the type of treatment.<sup>2</sup> Depressed patients with comorbid anxiety disorders tend to have more severe symptoms and discontinue treatment more frequently. Furthermore, patients with comorbid generalized anxiety disorder were found to have a longer recovery time. In patients with comorbid panic disorder, it was observed that the response to both psychotherapy and pharmacological interventions was weaker.<sup>3</sup>

Over the past decade, considering the limitations of categorical classifications, the concept of “spectrum disorders” has gained importance. This approach makes it possible to assess some atypical manifestations, subclinical symptoms, clusters of behaviors associated with core symptoms, and temperament or personality traits.<sup>3</sup> In terms of panic disorder, the concept of “Panic-Agoraphobia Spectrum” was introduced by Cassano and colleagues in 1997.<sup>4</sup>

The Panic-Agoraphobic Spectrum covers a wide range of symptoms related to sensitivity to stress, anticipatory anxiety, separation anxiety, susceptibility to phobias, and susceptibility to medical illnesses, as well as typical symptoms of classic panic attacks.<sup>5</sup> The spectrum concept aims to assess typical and atypical panic symptoms, social and personal vulnerability, and reactions to stressful situations that individuals may experience throughout life.<sup>3</sup> A comprehensive evaluation of the panic-agoraphobic spectrum can also make important contributions to the examination of depressive disorders.

Of particular interest is the complex relationship of the panic-agoraphobic spectrum with depression, especially in terms of differences between different subtypes of major depressive disorder. Melancholic depression is characterized by marked psychomotor changes, anhedonia, and morning worsening, whereas atypical depression is characterized by mood reactivity, excessive sleep, increased appetite, and a feeling of heaviness called lead paralysis.<sup>6</sup> Comparison of Panic-Agoraphobic Spectrum characteristics between these 2 depression subtypes has the potential to better understand depression subtypes and improve treatment strategies.

Although melancholic and atypical depression subtypes have been compared in various aspects in the literature, comparisons in terms of Panic-Agoraphobic Spectrum characteristics are limited.<sup>7</sup> Notably, changes in stress response mediators in melancholic depression compared to atypical depression suggest that panic-agoraphobic spectrum features may occur differently in these 2 depression subtypes.<sup>8</sup>

The present study aimed to compare the Lifetime Panic-Agoraphobic Spectrum and sociodemographic characteristics of patients with major depressive disorder and healthy controls and to investigate their relationship with depressive disorder severity and anxiety levels. Additionally, the aim was to examine the differences in Panic-Agoraphobic Spectrum characteristics between melancholic and atypical depression subtypes. These comparisons may contribute to understanding the unique profiles of both depression subtypes in terms of Panic-Agoraphobic Spectrum and individualizing treatment approaches.

## MATERIALS AND METHODS

The sample group of this study consists of patients diagnosed with MDD (major depressive disorder) who applied to the outpatient clinics of Erenköy Mental Health and Diseases Hospital consecutively and accepted to participate in the study, and healthy controls without any psychiatric diagnosis, matched for age, gender, and educational status. Informed consent was obtained from all participants, and Ethics committee approval was received from the Erenköy Mental Health and Research Hospital (Date: 01.06.2015; Approval no.: 11). This research was carried out in adherence to the Declaration of Helsinki and the guidelines of the International Conference on Harmonization/Good Clinical Practice.

Of the 87 major depressive disorder patients, 2 were excluded due to incomplete Beck Depression Scales and 5 were excluded because of a score below 17 on the Beck Depression Scale. The study was completed with 80 major depressive disorder patients and 55 healthy controls.

Subjects who were diagnosed with major depressive disorder according to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5),<sup>9</sup> volunteered, were literate enough to fill out the self-report scales, and were between the ages of 18-65, were included in the study. However, patients with a diagnosis of schizophrenia and other psychotic disorders, intellectual disability, or cognitive deficit were excluded.

The diagnosis of major depressive disorder and its subtypes (melancholic or atypical) was established through a comprehensive clinical interview conducted by the same specialist psychiatrist, based on DSM-5 criteria. For melancholic features, the presence of anhedonia, lack of mood reactivity, distinct quality of depressed mood, morning worsening, early morning awakening, psychomotor changes, significant anorexia/weight loss, and excessive guilt were assessed. For atypical features, mood reactivity plus 2 or more of the following were required: significant weight gain or increased appetite, hypersomnia, leaden paralysis, and a long-standing pattern of interpersonal rejection sensitivity. The diagnostic process included assessment for a history of suicide attempts, which has been shown to be associated with higher depression and anxiety scores in panic disorder patients.<sup>10</sup>

Measurement tools used included a sociodemographic data form, an illness and family history form, the Beck Depression Inventory, the Beck Anxiety Scale, and the Lifetime Panic-Agoraphobic Spectrum Scale Self-Report Form. All diagnostic examinations were made by the same specialist.

**Sociodemographic data form:** This form was prepared by the researchers to be filled out by the patients.

**Past illness and family history form:** This form was prepared to be filled out by the researcher.

**Beck Depression Inventory (BDI):** It has 21 items. Each item in the BDI is scored between 0 and 3 points. The highest possible score is 63, with higher scores indicating more severe depressive symptoms. A validity and reliability study was conducted by Hisli.<sup>11</sup> The Turkish version has shown good internal consistency with a Cronbach's alpha of 0.80.

**Beck Anxiety Inventory (BAI):** It has 21 items. Each item receives a score between 0 and 3. The highest possible score is 63. Higher scores indicate more severe anxiety symptoms. A Turkish validity-reliability study was made.<sup>12</sup> The Turkish version demonstrated excellent internal consistency with a Cronbach's alpha of 0.93.

**Lifetime Panic-Agoraphobic Spectrum Scale Self-Report Form (PASS-SR):** The scale assesses symptoms in 8 domains including "separation sensitivity," "typical and atypical panic-like symptoms," "stress sensitivity," "drug and substance sensitivity," "anticipatory anxiety," "agoraphobia," "disease susceptibility and hypochondriasis," and "seeking reassurance" throughout life. A Turkish validity and reliability study was made.<sup>13</sup> The Turkish version of PASS-SR has demonstrated good psychometric properties with a Cronbach's alpha of

0.92 for the total scale and alpha values ranging from 0.78 to 0.87 for the subscales.

### Statistical Analysis

Statistical analyses were performed using Statistical Package for the Social Sciences (SPSS) version 16 software (SPSS Inc., Chicago, IL, USA). The conformity of the variables to the normal distribution was examined using visual (histogram and probability graphs) and analytical (Kolmogorov-Smirnov and Shapiro-Wilk tests) methods. The Mann-Whitney *U* test was used in the statistical evaluation of the numerical data, which were observed to be inconsistent with the normal distribution, between the 2 sample groups. The relationship between numerical variables was evaluated using Spearman Correlation Analysis if at least one of the variables did not fit the normal distribution. Chi-square test and Fisher test were used to compare categorical variables between groups. For statistical significance, the total type-1 error level was set at 5%.

### RESULTS

A total of 135 participants were included in the study, with 80 diagnosed with major depressive disorder. The mean age was 38.41 years for the patient group and 39.11 years for the control group, with no significant difference between groups. Regarding gender distribution, 75% of patients and 72.7% of controls were female, showing no significant difference. Education duration was also comparable between groups. However, the proportion of married individuals was significantly lower in the patient group compared to controls. Similarly, regular employment or retirement rates were significantly higher among controls. The patient group reported statistically lower income and social support perception than the control group (Table 1).

Analysis of all Lifetime Panic-Agoraphobic Spectrum Scale subscales revealed significantly higher scores in the MDD group across all domains: Separation Anxiety, Panic-like Symptoms, Stress Sensitivity, Substance and Drug Sensitivity, Anticipatory Anxiety, Agoraphobia, Illness Phobia, and Reassurance Seeking. Additionally, total PASS-OB, Beck Depression Scale, and Beck Anxiety Scale scores were statistically higher in the MDD group (Table 1).

Evaluation of relationships between PASS-OSD, BDI, and Beck anxiety questionnaire (BAQ) scores in MDD patients showed positive and significant correlations between BDI and most PASS-OSD subscales (Separation Anxiety, Panic-like Symptoms, Substance and Drug Sensitivity, Anticipatory Anxiety, Agoraphobia, Illness Phobia and Hypochondriasis, Reassurance Seeking), total PASS-OSD score, and BAQ. Notably, no statistically significant correlation emerged between BDI and the Stress Sensitivity subscale. Conversely, BAQ scores positively correlated with all PASS-OSD subscales, total PASS-OSD score, and BDI (Table 2).

Patients exhibiting melancholic features in their current depressive episodes demonstrated significantly higher scores in Separation Anxiety, Agoraphobia, and Reassurance Seeking subscales compared to those without melancholic features. These patients also showed significantly higher PASS-OSD total scale and BDI scores (Table 3).

In contrast, patients with atypical features showed significantly lower scores in Separation Anxiety, Agoraphobia, and Reassurance Seeking subscales. Their PASS-ASD total scale and BDI scores were also significantly lower (Table 4).

Table 1. Sociodemographic Characteristics and Clinical Scale Scores of Participants

Characteristics	Healthy Controls Median (IQR)	Major Depressive Disorder Median (IQR)	P
Sociodemographic characteristics			
Age	39.00 (34.50-43.50)	37.00 (30.00-46.75)	.672
Female gender, n (%)	40 (72.7%)	60 (75.0%)	.767
Married, n (%)	47 (85.5%)	38 (47.5%)	<.001
Employed/retired, n (%)	53 (96.4%)	36 (45.0%)	<.001
Total years of education	8.00 (5.00-15.00)	11.00 (8.00-15.75)	<.001
Medium/high income perception, n (%)	29 (52.7%)	64 (80.0%)	<.001
Present social support perception, n (%)	53 (96.4%)	31 (38.8%)	<.001
Clinical scale scores			
PASS-SR subscales			
Separation anxiety	1.63 (1.00-2.63)	3.24 (1.00-9.00)	<.001
Panic-like symptoms	2.68 (0.00-5.00)	5.87 (2.00-22.00)	<.001
Stress sensitivity	0.00 (0.00-1.00)	1.00 (1.00-2.00)	<.001
Substance and drug sensitivity	0.00 (0.00-1.00)	1.50 (1.00-3.00)	<.001
Anticipatory anxiety	0.00 (0.00-1.00)	3.00 (2.00-4.00)	<.001
Agoraphobia	2.00 (0.00-3.00)	7.00 (4.00-12.00)	<.001
Disease phobia	0.00 (0.00-1.00)	2.00 (0.00-3.00)	<.001
Reassurance seeking	1.00 (0.00-3.00)	5.50 (3.00-8.00)	<.001
PASS-SR total score	8.00 (4.00-15.00)	43.50 (32.00-59.00)	<.001
Beck depression inventory	1.00 (0.00-2.00)	34.00 (25.00-41.00)	<.001
Beck anxiety inventory	2.00 (1.00-4.00)	27.00 (17.00-38.00)	<.001

IQR, interquartile range; n, number of participants; PASS-SR, lifetime panic-agoraphobic spectrum scale self-report. .

No statistically significant correlation was found between MDD patients' age and their PASS-ASD, BDI, and BAQ scores. However, a significant negative correlation emerged between the total years of education and these same measures. Employment status showed no significant differences regarding these scores.

The total number of hospitalizations among MDD patients positively and significantly correlated with PASS-ASD and BDI scores but not with BAQ scores. Furthermore, the number of suicide attempts showed positive and significant correlations with PASS-ASD, BDI, and BAQ scores.

## DISCUSSION

The present study was designed to compare panic agoraphobic spectrum characteristics and sociodemographic factors in patients with major depressive disorder and healthy controls and to explore their relationship with depression severity and anxiety levels. Differences between melancholic and atypical depression subtypes were also assessed. The results of the study revealed that all the panic agoraphobic spectrum characteristics were higher in patients with major depressive disorder than in healthy controls. In particular, in the melancholic depression subtype, higher panic agoraphobic spectrum scores, depression, and anxiety levels were observed compared to atypical depression. These results support the clinical significance of assessing anxiety symptoms in conjunction with depression, with different subtypes of depression requiring different treatments.

Comparative analysis revealed significantly higher PASS-SR subscale, total score, BDI, and BAI scores in patients with major depressive

disorder compared to the control group. Kim et al<sup>10</sup> reported similarly high scores on depression and anxiety scales in patients with panic disorder, especially in those with a history of suicide attempts.

To the authors' knowledge, this study is among the first to examine the association between Panic-Agoraphobic Spectrum characteristics and depression subtypes. Tsai et al<sup>11</sup> showed that panic disorder increased the risk of suicide (HR=1.85), and this risk was even higher (HR=6.08) when associated with major depressive disorder. Lydecker and Grilo<sup>12</sup> found that psychiatric comorbidities may affect the severity of the underlying disorder. These findings make a unique contribution to the literature by showing the importance of the Panic-Agoraphobic Spectrum in depression subtypes.

Gender distribution analysis revealed the number of women in the patient group was approximately 3 times higher than that of men. This finding is similar to the gender distribution in the study by Lins et al,<sup>13</sup> in their study, the number of female participants (n=1777) was approximately 3 times higher than that of males (n=520). In addition, Shi et al<sup>14</sup> reported that depression was approximately twice as common in women as in men. This difference may be related to factors such as the higher prevalence of somatic depression symptoms in women and men's lack of emotional expression and reluctance to seek help.

Regarding marital status, the proportion of singles was significantly higher in the patient group than in the control group. Similarly, in the meta-analysis by Buckman et al,<sup>15</sup> it was reported that approximately 30% of patients with depression were single and 20% were no longer married (separated, divorced, or widowed). These findings suggest the protective effect of social support on depression.

Table 2. Correlation Coefficients Between Lifetime Panic-Agoraphobic Spectrum Scale Self-Report Form Subscales, Beck Depression Inventory, and Beck Anxiety Inventory Scores in Patients with Major Depressive Disorder

Variables	Separation Anxiety	Panic-Like Symptoms	Stress Sensitivity	Substance and Drug Sensitivity	Anticipatory Anxiety	Agoraphobia	Disease Phobia	Reassurance Seeking	PASS-SR Total Score	BDI
Panic-Like Symptoms	0.462**	-								
Stress Sensitivity	0.270*	0.249*	-							
Substance and Drug Sensitivity	0.347**	0.261*	0.148	-						
Anticipatory Anxiety	0.353**	0.668**	0.235*	0.170	-					
Agoraphobia	0.624**	0.587**	0.336**	0.252*	0.300**	-				
Disease Phobia	0.452**	0.467**	0.397**	0.234*	0.501**	0.446**	-			
Reassurance Seeking	0.501**	0.536**	0.276*	0.279*	0.556**	0.484**	0.425**	-		
PASS-SR Total Score	0.740**	0.847**	0.395**	0.404**	0.640**	0.812**	0.631**	0.716**	-	
BDI	0.432**	0.643**	0.181	0.250*	0.539**	0.525**	0.412**	0.571**	0.687**	-
BAI	0.401**	0.723**	0.288**	0.248*	0.575**	0.532**	0.299**	0.602**	0.719**	0.671**

Values represent Spearman's correlation coefficients. \* $P < .05$ , \*\* $P < .01$ .  
BAI: Beck Anxiety Inventory; BDI: Beck Depression Inventory; MDD: Major Depressive Disorder; PASS-SR: Lifetime Panic-Agoraphobic Spectrum Scale Self-Report.

Table 3. Comparison of Scale Scores Between Patients With and Without Melancholic Features in Current Depressive Episode

Scale Scores	No Melancholic Features Median (IQR)	Melancholic Features Median (IQR)	P
PASS-SR subscales			
Separation anxiety	6.00 (4.00-8.00)	8.00 (5.00-10.00)	.017*
Panic-like symptoms	14.50 (11.00-18.25)	18.50 (12.00-21.00)	.112
Stress sensitivity	2.00 (1.00-2.00)	1.00 (1.00-2.00)	.410
Substance and drug sensitivity	1.00 (0.00-3.00)	2.00 (1.00-3.00)	.215
Anticipatory anxiety	3.00 (2.00-4.00)	4.00 (2.00-4.00)	.074
Agoraphobia	6.00 (3.75-9.25)	9.00 (5.00-13.00)	.041*
Disease phobia	1.00 (0.00-3.00)	2.00 (1.00-3.00)	.165
Reassurance seeking	5.00 (3.00-7.00)	6.00 (4.00-9.00)	.050*
PASS-SR total score	40.00 (28.75-52.25)	47.50 (34.00-63.00)	.034*
Beck Depression Inventory	27.00 (23.00-35.00)	36.00 (29.00-43.00)	.005**
Beck Anxiety Inventory	23.50 (17.00-33.25)	28.50 (17.00-39.00)	.258

P-values were calculated using Mann-Whitney U test.  
IQR, interquartile range; PASS-SR, lifetime panic-agoraphobic spectrum scale self-report.  
\* $P < .05$ .  
\*\* $P < .01$ .

Social support perception was significantly low in the patient group. Harrison et al<sup>16</sup> also showed that perceived social support was significantly negatively associated with depression and anxiety. Lack of social support appears to be an important risk factor in the development and aggravation of depressive symptoms.

Educational analysis demonstrated a negative correlation between years of education and PASS-SR, BDI, and BAI scores. Harrison et al<sup>16</sup> also reported a negative correlation between educational level and depression, anxiety, loneliness, and recurrent negative thinking scores. These findings support the protective effect of educational level on mental health.

Suicide attempt analysis revealed a positive correlation between the number of suicide attempts and the BAI score, PASS-SR total score, and total number of hospitalizations. Similarly, Kanner et al<sup>17</sup> found that anxiety disorders, including panic disorder and agoraphobia, were positively correlated with suicidal ideation and attempts in a study conducted on epilepsy patients. They<sup>18</sup> showed that agoraphobia symptoms predicted depression symptoms and depression symptoms strongly predicted suicidal ideation in veterans with panic disorder.

Hospitalization frequency positively correlated with PAS-SR and BDI scores, a finding supported by the study of Rognli and colleagues.<sup>19</sup> They reported that repeated emergency department admissions after substance-induced psychosis increased the risk of transition to schizophrenia spectrum disorder. This suggests that the severity of psychiatric disorders is associated with the frequency of hospitalization.

Regarding substance sensitivity, scores on this subscale positively correlated with Beck Anxiety Scale scores, consistent with the



**Table 4. Comparison of Scale Scores Between Patients With and Without Atypical Features in Current Depressive Episode**

Scale Scores	No Atypical Features Median (IQR)	Atypical Features Median (IQR)	P
PASS-SR subscales			
Separation anxiety	8.00 (5.00-10.00)	6.00 (4.00-8.00)	.022*
Panic-like symptoms	19.00 (12.00-21.00)	14.00 (11.00-18.00)	.060
Stress sensitivity	1.00 (1.00-2.00)	2.00 (1.00-2.00)	.297
Substance and drug sensitivity	2.00 (1.00-3.00)	1.00 (0.00-3.00)	.119
Anticipatory anxiety	4.00 (2.00-4.00)	3.00 (2.00-4.00)	.067
Agoraphobia	9.00 (5.00-13.00)	6.00 (3.00-9.00)	.047*
Disease phobia	2.00 (1.00-3.00)	1.00 (0.00-3.00)	.218
Reassurance seeking	6.00 (4.00-9.00)	5.00 (3.00-7.00)	.044*
PASS-SR total score	49.00 (34.00-63.00)	40.00 (28.00-52.00)	.025*
Beck Depression Inventory	36.00 (29.00-43.00)	27.00 (23.00-35.00)	.004**
Beck Anxiety Inventory	29.00 (17.00-39.00)	24.00 (17.00-33.00)	.233

P-values were calculated using Mann–Whitney U test.

IQR, interquartile range; PASS-SR, lifetime panic-agoraphobic spectrum scale self-report.

\* $P < .05$ .

\*\* $P < .01$ .

finding of Bear et al<sup>20</sup> that stress is an important environmental factor in the development of mood disorders such as anxiety and depression. Additionally, stress sensitivity subscale scores correlated positively with Beck Anxiety Scale scores, which supports the view of Bear et al<sup>20</sup> that the severity of emotional reactions may increase in individuals under stress.

The positive correlation between the agoraphobia subscale score and the BDI and BAI was similarly observed in the study of Rizzo et al. They found that panic-agoraphobia subscale scores measured in the third trimester were positively correlated with postnatal depressive symptoms. These findings suggest that panic-agoraphobic symptoms are closely related to the severity of depression and anxiety<sup>21</sup>.

Comparison of depression subtypes revealed significantly higher Beck Anxiety Scale, Beck Depression Scale, and Anticipatory Anxiety subscale scores in patients with melancholic depression than in patients with atypical depression. This finding is in parallel with the finding of Grassi et al<sup>22</sup> that the severity of depression is more pronounced in certain subgroups and specific types of anxiety are observed more intensely. The recent study by Su et al<sup>23</sup> also showed that melancholic depression is characterized by more severe symptoms such as depressed mood, psychomotor retardation, and impaired concentration.

The significantly higher PASS-SR total scores and BDI scores of patients with melancholic current episode are consistent with other studies emphasizing the severity of melancholic depression. Su et al<sup>23</sup> found that melancholic depression showed a significant association with both distal and proximal stressors. This suggests that melancholic depression may become more pronounced with additional stressors and is consistent with the high anxiety and depression scores in these findings.

Patients with melancholic features exhibited significantly higher separation anxiety, agoraphobia, and reassurance seeking subscale scores, similar to the findings of Shin et al<sup>24</sup> that the severity of anxiety and panic-related symptoms increased in patients with panic disorder symptoms. Lasserre et al<sup>25</sup> also found behavioral differences between melancholic and atypical depression subtypes. For example, they showed that individuals with melancholic depression differed from individuals with atypical depression even in dietary patterns, suggesting that the neurobiological and behavioral differences between these 2 subtypes may be extensive.

This study has several limitations. Firstly, patients with psychotic and catatonic depression were not included, similar to the approach taken by Platona et al,<sup>26</sup> who analyzed only non-psychotic depression patients, and Chen et al,<sup>27</sup> who excluded participants with pre-existing major psychiatric disorders, thus limiting generalizability. Additionally, the reliance on self-report scales presents conceptual limitations, as noted by Smith and Racine,<sup>28</sup> who highlighted the difficulties in measuring emotions through processes requiring conscious awareness. The cross-sectional design further prevented establishing causal relationships between variables, a limitation also acknowledged by Chen et al.<sup>27</sup> pointed out that recognition rates may vary depending on clinical settings and diagnostic criteria, potentially affecting results. Despite these constraints, this study makes a valuable contribution by examining Panic-Agoraphobic Spectrum subscales from a lifelong perspective and comparing them with a control group, similar to how Platona et al<sup>26</sup> emphasized their contribution regarding the clinical, etiopathogenetic, prognostic, and therapeutic importance of psychiatric comorbidities with depression, and how Berkhout et al<sup>29</sup> acknowledged their study's importance despite methodological limitations.

A statistically significant positive correlation was found between the number of hospitalizations and the Panic Agoraphobic Spectrum Scale Total Score, as well as the Beck Depression Inventory. Additionally, the analysis demonstrated a statistically significant positive correlation between the number of suicide attempts, the Beck Anxiety Scale score, the Lifetime Panic Agoraphobic Spectrum Scale total score, and the total number of hospitalizations. Furthermore, Panic Agoraphobic Spectrum levels and the severity of depression are significantly higher in melancholic depression compared to atypical depression. Thus, even in the absence of a comorbid anxiety disorder, defining depression type and Panic Agoraphobic Spectrum is crucial in addressing individual treatment requirements for a better prognosis. In conclusion, evaluating the Panic-Agoraphobic Spectrum and depression types to achieve better outcome in clinical settings is strongly recommended.

**Data Availability Statement:** The data that support the findings of this study are available upon request from the corresponding author.

**Ethics Committee Approval:** Ethics committee approval was received for this study from the ethics committee of Erenköy Mental Health and Research Hospital (Approval no.: 11; Date: June 1, 2015).

**Informed Consent:** Written informed consent was obtained from all participants, who agreed to take part in the study.

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