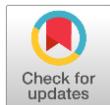


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Mood and Anxiety Symptoms, Psychological Distress, and Life Satisfaction: Differential Associations between Patients with Anxiety and Depression

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Abstract

Guided by tripartite model of Clark and Watson, the study is planned to examine the differential association of anxiety symptoms with life satisfaction, and psychological distress in patients with anxiety and depression. Using correlational research design, an equally distributed sample of ($N = 232$) diagnosed patients of Anxiety and Depression, between the age range of 21 to 61 were selected using purposive sampling technique. Anxiety symptoms, life satisfaction, and psychological distress scales were used as assessment measures. Descriptive analysis and group differences revealed significant variations, showing high score in anxiety patients, i.e., on anxious arousal, anxious symptoms, and psychological distress. The patients with depression scored higher on depressive symptoms, anhedonic depression and lower levels on life satisfaction. Furthermore, both anxiety symptom subscales were positive predictors of psychological distress only for patients with anxiety. However, two subscales of depressive symptoms were significant negative predictors of life satisfaction for patients with depression only. The results support the tripartite model of mood anxiety symptoms. The results have clinical and research implications providing valuable insights for interventions with anxiety and depression patients to reduce psychological distress and improve wellbeing.

Keywords: anxiety, depression, psychological distress, life satisfaction

Introduction

Depression and anxiety disorders are the mental health conditions that are the cause of the worldwide prevalence of disorders. Irrespective of the fact, both disorders diversely effect individuals across different ages, cultures, and social contexts. The World Health Organization (WHO, 2025) reports that more than 264 million people worldwide are living with depression, and around 850,000 people die of depression every year, more than 280

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million people are depressed, and approximately 3.6% of the world's population suffers from an anxiety disorder. Globally, in middle and high-income countries, depression is the most prevailing mental health condition. In general population of Pakistan, the prevalence of anxiety and depression symptoms was 33%, and 40% respectively during COVID-19 (Riaz et al., 2021). Additionally, significant gender differences show that severity of depression is evident more in women than in men (Sharif et al., 2025).

Persistent feelings of sadness, anxiety, disinterest, tension, mental stress, and physical arousal are manifested as mood anxiety symptoms (Clark & Watson, 1991). These symptoms not only disturb daily functioning but also impact mental wellbeing on an individual (Gebremariam et al., 2023; Yadav et al., 2024). Luo et al. (2024) described that mood and anxiety symptoms are often interrelated, co-occurring and overlapping (American Psychiatric Association [APA], 2013).

Comorbidity of mood and anxiety symptoms has been linked with elevation of psychological distress, decreased life functioning, and deteriorated well-being (Gebremariam et al., 2023; Konstantopoulou et al., 2020). Subjective well-being is determined through life satisfaction, which reflects quality of life (Diener et al., 1985). Meher et al. (2024), evaluated wellbeing, life satisfaction, and psychological distress, which need special attention from researchers working with patients with depression and anxiety. Evidence suggests that the presence of anxiety and depression tend to lower life satisfaction, while increasing psychological distress (Yadav et al., 2024). Mood and anxiety symptoms have strong negative links with life satisfaction in individuals with spinal cord injury at one year's post injury (Parker et al., 2022). These links highlight the devastating influence of negative emotional states on the cognitive appraisal of one's life satisfaction. Likewise, mood anxiety symptoms tend to intensify psychological distress in terms of heightened emotional states, impaired coping mechanisms, and difficulty in concentration (Batsikoura et al., 2021; Troy et al., 2019). There is, however, a gap in understanding how the components of mood anxiety symptoms differentially impact psychological outcomes of wellbeing and distress across clinical populations with anxiety and depression.

Theoretical Framework

Different frameworks describing the co-existence of symptomatology

in depression and anxiety have remained popular in clinical research (Luo et al., [2024](#)). The tripartite model for depression and anxiety proposed by Clark and Watson ([1991](#)) conceptualizes depression and anxiety symptoms categorized in three groups: general distress and high negative affect as a shared component of anxiety and depression, low positive affect and anhedonia specific to depression, and somatic arousal unique to anxiety. The model proposes high concurrence of anxiety and depression symptoms by highlighting that both disorders share the common dimension of negative affect, while low positive affect is unique to depression and high physiological hyperarousal is unique to anxiety. Du et al. ([2024](#)) and Ma and Jia ([2024](#)) also tested the application of tripartite model in the broader context (Constantinou et al., [2021](#); Seo et al., [2018](#)). Contemporary research on biological and neurological factors reveals that neurobiological responses such as dysregulated cortisol, associated with neural substrates and prefrontal areas interact in complex ways, also explain the negative affect, anxiety, and depression symptoms (Ariño-Braña et al., [2025](#)).

In Pakistani cultural context, the application of the tripartite model of depression and anxiety gives the unique interplay of cultural norms, mental health stigma, and unequal access to health care facilities across diverse subgroups. It also defines the cultural expectations of emotional expression, family roles, and collectivistic norms, which further make expression of anxiety and depression, and shared negative affectivity difficult. The stigma linked to seeking psychological treatment, and non-availability of trained mental health practitioners, delay the reporting of symptoms, resulting in delayed improvement of the wellbeing of an individual. Together, these psychological, neurological, and cultural considerations underscore the need for contextually informed and theoretically grounded investigations of depression and anxiety in Pakistan.

Rationale of the Study

Despite a good deal of research on anxiety and depression, there is a dearth of research focusing on evaluating mood anxiety symptoms in relation to psychological distress and life satisfaction in comparative samples of patients with anxiety and depressive disorders. Depression and anxiety, while frequently co-occurring, exhibit unique emotional symptom patterns (APA, [2013](#)). Depression and anxiety disorders were conceptualized according to DSM-5 TR (APA, [2022](#)). Using standardized classification ensures consistency in identifying core features of both

conditions including shared negative affectivity and disorder specific symptoms which are central to the tripartite model. Understanding differential associations between anxiety and depression is crucial for identifying mechanisms through which these two disorders differentially impact life satisfaction and wellbeing. Also, a clearer understanding of these associations can contribute to more individualized mental health intervention plans. Furthermore, existing literature has largely treated depression and anxiety as unitary constructs, without disentangling how their symptom dimensions affect mental well-being outcomes differently. This research addresses this gap using validated assessment measures.

Hypotheses

- There is likely to be significant negative correlation of mood and anxiety symptoms with life satisfaction.
- There is likely to be significant positive correlation of mood and anxiety symptoms with psychological distress.
- The associative patterns of depression and anxiety symptoms with life satisfaction and psychological distress will vary between patients with depression and anxiety.

Method

Research Design

A correlational research design was used in the study to examine the relationship of mood anxiety symptoms with life satisfaction and psychological distress.

Sample

The sample size was calculated using G Power Analysis. Power analysis showed that the sample size was required to be $n = 99$ in each group for linear multiple regression, R^2 increase (medium effect size= .20, 5 nested predictors, 9 total predictors, & $\alpha = .05$) and it was identified to be $n1 = n2 = 105$ for independent sample t test (medium effect size= .50, $\alpha = .05$, $n1=n2$). Accordingly, the final study included 232 participants. The sample was divided into two groups: 116 participants were diagnosed with depression (aged between 24 and 61 years) and 116 were diagnosed with anxiety (aged between 21 and 61 years). Only those participants were included who met the diagnostic criteria of generalized anxiety disorder and

major depression as per DSM-5 TR (APA, [2022](#)). Diagnosis was made by the handling psychiatrist in consultation with the clinical psychologist in the ward. Participants were selected using purposive sampling based on defined inclusion and exclusion criteria. Initially, 300 individuals were approached from the psychiatry wards of different hospitals of Lahore. Among those, participants with comorbid psychiatric or neurological conditions were excluded. Comorbidity was assessed from a patient's history recorded in their profile as well as confirmed by their nurses. After excluding those with comorbid conditions ($n=28$), refusals ($n=24$), and dropouts ($n=16$), the final sample consisted of 232 participants. All participants were under treatment. Demographic characteristics of the sample in the two groups have been presented in Table 1.

Table 1

Demographics Statistics of the Sample of Patients with Anxiety and Depression (N =232)

| Variables | Depression | | | | Anxiety | | | |
|---------------------------|------------|-----------|----------|------|----------|-----------|----------|------|
| | <i>M</i> | <i>SD</i> | <i>f</i> | % | <i>M</i> | <i>SD</i> | <i>f</i> | % |
| Age (in years) | 35.85 | 7.99 | | | 34.98 | 7.65 | | |
| Education (in years) | 11.01 | 3.50 | | | 11.29 | 2.98 | | |
| Disease Duration (months) | 28.95 | 16.52 | | | 27.73 | 15.52 | | |
| Gender | | | | | | | | |
| Men | | | 53 | 45.7 | | | 49 | 42.2 |
| Women | | | 63 | 54.3 | | | 67 | 57.8 |
| Marital Status | | | | | | | | |
| Married | | | 68 | 58.6 | | | 69 | 59.5 |
| Unmarried | | | 45 | 38.8 | | | 45 | 38.8 |
| Divorced/Widow | | | 3 | 2.6 | | | 2 | 1.7 |

Assessment Measures

Mood and Anxiety Symptom Questionnaire

The Mood and Anxiety Symptom Questionnaire-62 item (Watson et al., [1995](#)) assesses specific dimensions of mood and anxiety symptoms in four subscales, namely Anxious Symptoms, Anxious Arousal, Depression Symptoms, and Anhedonic Depression. All items on the scale use a 5-point Likert scale response format from 1 (*not at all*) to 5 (*extremely*). The composite scores on all subscales are obtained by summing the item scores

within each subscale. The questionnaire demonstrates high internal consistency assessed from Cronbach's alpha values for subscales ranging between .85 and .93 (Watson et al., 1995). Internal consistency coefficients of subscales in the present study were very good ($\alpha = .76 - .80$).

Satisfaction with Life Scale

Satisfaction with Life Scale (Diener et al., 1985) has been designed to evaluate people's comprehensive assessment of life satisfaction. Comprising five items, the scale uses a 7-point Likert scale response format (1-7) for all items. The scale displayed good psychometric properties in its initial research (Diener et al., 1985). A composite score on the scale is obtained by adding all item scores. Internal consistency of the scale in the present study was very good ($\alpha = .80$).

Kessler Psychological Distress Scale

Kessler Psychological distress Scale (Kessler et al., 2002), a 10-item scale, is a simple and effective tool to quantify general psychological distress symptoms. The items focus on symptoms such as nervousness, hopelessness, or restlessness in the previous four weeks. Respondents rate how frequently they encountered each symptom on a 5-point Likert scale ranging from 1 (*none of the time*) to 5 (*all of the time*) yielding a total score between 10 to 50. The scale has shown high reliability and good psychometric properties in previous studies (Kessler et al., 2002). Internal consistency of the scale in the present study was also very good ($\alpha = .80$).

Procedure

The study was approved by the Departmental Advisory Committee, Department of Humanities, COMSATS University Islamabad. After obtaining ethical approval, the researchers contacted heads of Psychiatry wards of the selected hospitals to seek their permission for data collection. Then, potential patients were identified, and informed consents were obtained for their participation in the study. They were briefed about the study and instructions were provided about how to respond to items related to study measures. Data was collected in individual settings. The order of measures was counterbalanced across participants to avoid any effects due to order. Random sequence of the three scales was presented randomly to different participants. After data collection, participants were thanked for their participation in the study.

Results

The data was analyzed using SPSS v23. Initially, it was screened for any missing data. Missing data was identified to be 2% and missing values were replaced with series median. Then, normality assumptions were checked for all variables conducting analyses for skewness and kurtosis. Following guidelines from Hair et al. (2010) and Byrne (2010), all tested variables met normality assumptions with skewness values between -.705 - .07 (within -2 to +2 range) and kurtosis values between -1.807 - -.232 (within -7 to +7 range). First, descriptive statistics and group differences on the study variables were calculated between the two groups. Also, gender differences were tested on study variables using independent sample t test. Next, Pearson correlation coefficients were calculated to assess the relationship between mood anxiety symptoms, life satisfaction, and psychological distress among participants in the two groups. Finally, hierarchical regression analyses were computed to assess the predictive associations of mood and anxiety symptoms with life satisfaction and psychological distress after controlling the potential demographic confounds in model 1.

Descriptive statistics and group differences calculated using independent sample t-test between patients with anxiety and depression. No significant gender differences were observed between groups (depression & anxiety) on any of the tested variables. For patients with depression (Life satisfaction $t= 1.78, p>.05$; psychological distress $t= .58, p>.05$; anxious symptoms $t= .58, p>.05$; anxious arousal $t= .80, p>.05$; depressive symptoms $t= .05, p>.05$; anhedonic depression $t= .20, p>.05$). Gender differences were significant only in patients with anxiety for life satisfaction ($t= -2.12, p<.05$), but not for other variables (psychological distress $t= 1.26, p>.05$; anxious symptoms $t= .58, p>.05$; anxious arousal $t= .72, p>.05$; depressive symptoms $t= -.23, p>.05$; anhedonic depression $t= -.16, p>.05$).

Table 2

Group Differences in Mood and Anxiety Symptoms, Life Satisfaction and Psychological Distress between Patient with Depression and Anxiety

| Variables | with | Anxiety (n=116) | | Depression (n=116) | | $t(230)$ | p | Cohen's d |
|---------------|------|--------------------|------|-----------------------|------|----------|------|----------------|
| | | M | SD | M | SD | | | |
| Satisfaction | Life | 24.46 | 3.19 | 14.93 | 4.45 | -18.71 | .000 | 2.46 |
| Psychological | | 32.53 | 3.31 | 22.78 | 7.79 | -12.39 | .000 | 1.62 |

| Variables | Anxiety (n=116) | | Depression (n=116) | | <i>t</i> (230) | <i>p</i> | Cohen's <i>d</i> |
|-------------------------|--------------------|-------|-----------------------|-------|----------------|----------|---------------------|
| | M | SD | M | SD | | | |
| Distress | | | | | | | |
| Anxious Symptoms | 47.83 | 7.24 | 16.6 | 3.56 | -41.69 | .000 | 5.47 |
| Anxious Arousal | 72.41 | 12.22 | 20.17 | 4.16 | -43.59 | .000 | 5.72 |
| Depressive Symptoms | 17.10 | 4.22 | 54.20 | 6.09 | 53.92 | .000 | 7.08 |
| Anhedonic Depression | 46.42 | 23.86 | 68.49 | 22.16 | 7.30 | .000 | 0.96 |

Results from independent samples *t*-test showed significant group differences between patients diagnosed with depression and those with anxiety across all measured variables. Patients with anxiety reported considerably higher mean scores on life satisfaction, psychological distress, anxiety symptoms, and anxious arousal compared to those with depression. On the other hand, patients with depression scored significantly higher on depression symptoms and anhedonic depression subscales. Following Cohen's interpretation (Cohen, 1988), effect sizes are considerably large for all variables. This indicates pronounced differences in mood anxiety symptoms, psychological distress, and life satisfaction between anxiety and depression patients supported by tripartite model and empirical literature (Clark & Watson, 1991; Constantinou et al., 2021; Seo et al., 2018).

Next, correlation of mood anxiety symptoms with life satisfaction and psychological distress was calculated for the two subgroups. The correlational findings have been presented in Table 3.

Table 3

Correlation between Mood and Anxiety Symptoms, Life Satisfaction, and Psychological Distress between Patient with Depression and Anxiety

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------------------------------|--------|--------|--------|--------|---------|------|------|
| 1. Anxious Symptoms | - | .64*** | .32*** | -.09 | -.02 | -.01 | .003 |
| 2. Anxious Arousal | .94*** | - | .38*** | -.26** | -.13 | .02 | .02 |
| 3. Depressive Symptoms | .26** | .25** | - | .23* | -.40*** | .01 | .01 |
| 4. Anhedonic Depression | -.14 | -.11 | -.17 | - | -.29** | .01 | .20* |
| 5. Life Satisfaction | -.004 | .002 | .09 | -.12 | - | -.09 | -.10 |
| 6. Psychological Distress | .75*** | .75*** | .19* | -.14 | -.16 | - | .08 |

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----------|---------|---------|------|-----|-------|-------|---|
| 7. Age | -.35*** | -.32*** | -.16 | .16 | -.001 | -.20* | - |

Note. Values above the diagonal are for the group of patients with depression and below the diagonal are for the group of patients with anxiety.

* $p < .05$. ** $p < .01$. *** $p < .001$.

The upper diagonal of Table 3 displays the correlations for the clinical group of depression patients, while the lower diagonal shows correlations for the group with anxiety patients. For patients with anxiety, significant and very strong correlations of anxiety symptoms and anxious arousal subscales, and a weak correlation of depression symptoms subscale with psychological distress were observed. For the patients with depression, depression symptoms and anhedonic depression revealed significant negative and moderate correlations with life satisfaction. Overall, correlation coefficients were stronger for the clinical group of anxiety patients for psychological distress compared to the group of depressive patients for life satisfaction.

Next, hierarchical regression analysis approach was used to predict distress and life satisfaction from mood anxiety symptoms in patients with depression. The results have been presented in Table 4. In the first model of hierarchical regression, potential demographic confounds were controlled. After controlling the potential demographics, depression symptoms and anhedonic depression turned out to be significant negative predictors of life satisfaction. The predictors at step 2 explained moderate variance (23% incremental variance). Specifically, higher levels of depressive symptoms were associated with decrease in life satisfaction. For psychological distress, however, mood anxiety symptoms subscales explained no incremental variance after controlling demographics at step 2, and none of the predictors was found to be significant.

Table 4

Mood and Anxiety Symptoms as Predictor of Life Satisfaction and Psychological Distress in Patient with Depression

| Predictors | Life Satisfaction | | | | | Psychological Distress | | | | | | |
|---------------------|-------------------|------|---------|-------|------|------------------------|-------|-------|---------|-------|------|----------------|
| | B | SE | 95 % CI | | p | R ² | β | SE | 95 % CI | | p | R ² |
| | | | LL | UL | | | | | LL | UL | | |
| Step 1 | | | | | | | | | | | | |
| Constant | 24.60 | 3.87 | 16.91 | 32.33 | .00 | .10 | 31.02 | 6.91 | 17.12 | 44.81 | .00 | .04 |
| Age | -.16 | .06 | -.12 | .03 | .14 | | -.02 | .11 | -.24 | .20 | .83 | |
| Education | -.08 | .13 | -.37 | .17 | .48 | | -.14 | .25 | -.79 | .18 | .21 | |
| Gender | -.17 | .81 | -3.2 | .07 | .06 | | -.06 | 1.4 | -3.8 | 2.03 | .54 | |
| Disease Duration | -.20 | .02 | -.10 | .004 | .03 | | -.04 | .04 | -.11 | .07 | .69 | |
| Step 2 | | | | | | | | | | | | |
| Constant | 43.11 | 3.87 | 32.74 | 53.41 | .00 | .33 | 33.11 | 10.82 | 11.53 | 54.72 | .003 | .04 |
| Age | -.10 | .05 | -.16 | .05 | .34 | | -.04 | .12 | -.28 | .19 | .71 | |
| Education | -.09 | .12 | -.37 | .13 | .35 | | -.16 | .26 | -.88 | .16 | .17 | |
| Gender | -.23 | .73 | -3.5 | -.62 | .005 | | -.06 | 1.52 | -3.9 | 2.06 | .53 | |
| Disease Duration | -.24 | .02 | -.11 | -.02 | .01 | | -.05 | .05 | -.11 | .07 | .63 | |
| Anxious Symptoms | .10 | .13 | -.14 | .40 | .35 | | -.09 | .28 | -.76 | .37 | .50 | |
| Anxious Arousal | -.12 | .12 | -.38 | .12 | .31 | | .05 | .26 | -.43 | .60 | .74 | |
| Depressive Symptoms | -.41 | .07 | -.43 | -.15 | .00 | | .01 | .15 | -.29 | .29 | .96 | |
| Anh. Depression | -.19 | .02 | -.08 | -.00 | .04 | | .03 | .04 | -.06 | .01 | .78 | |

Table 5*Mood and Anxiety Symptoms as Predictor of Life Satisfaction and Psychological Distress in Patient with Anxiety*

| Predictors | Life Satisfaction | | | | | Psychological Distress | | | | | | |
|---------------------|-------------------|------|---------|-------|-----|------------------------|---------|------|---------|-------|-----|-------|
| | β | SE | 95 % CI | | p | R^2 | β | SE | 95 % CI | | p | R^2 |
| Step 1 | | | | | | | | | | | | |
| Constant | 18.61 | 2.96 | 12.73 | 24.51 | .00 | .28 | 34.21 | 3.05 | 28.12 | 40.23 | .00 | .09 |
| Age | .11 | .04 | -.04 | .13 | .32 | | -.13 | .04 | -.14 | .03 | .22 | |
| Education | .11 | .11 | -.11 | .33 | .32 | | .08 | .11 | -.13 | .32 | .40 | |
| Gender | .21 | .60 | .16 | 2.56 | .02 | | -.12 | .62 | -2.06 | .40 | .18 | |
| Disease Duration | -.07 | .02 | -.05 | .02 | .49 | | -.09 | .02 | -.06 | .02 | .34 | |
| Step 2 | | | | | | | | | | | | |
| Constant | 18.72 | 4.15 | 10.52 | 26.92 | .00 | .34 | 13.71 | 2.88 | 8.061 | 19.52 | .00 | .60 |
| Age | .13 | .05 | -.04 | .14 | .25 | | .10 | .03 | -.02 | .11 | .18 | |
| Education | .11 | .11 | -.11 | .34 | .29 | | .07 | .08 | -.07 | .23 | .32 | |
| Gender | .21 | .61 | .15 | 2.56 | .02 | | -.05 | .42 | -1.17 | .49 | .42 | |
| Disease Duration | -.09 | .02 | -.05 | .02 | .39 | | .05 | .01 | -.02 | .04 | .45 | |
| Anxious Symptoms | -.19 | .12 | -.32 | .15 | .49 | | .43 | .08 | .03 | .36 | .02 | |
| Anxious Arousal | .11 | .07 | -.11 | .17 | .67 | | .36 | .05 | .00 | .20 | .04 | |
| Depressive Symptoms | .14 | .07 | -.04 | .25 | .16 | | -.01 | .05 | -.11 | .10 | .95 | |
| Anh. Depression | -.11 | .01 | -.04 | .01 | .25 | | -.05 | .01 | -.02 | .01 | .42 | |

Results from the second hierarchical regression analysis have been presented in Table 5. The findings revealed that after controlling the demographic confounds, anxiety symptoms and anxious arousal positively predicted psychological distress but not life satisfaction in patients with anxiety. In predicting psychological distress, mood anxiety symptoms explained a large variance (51% incremental variance) at step 2. For life satisfaction, the incremental variance due to mood anxiety symptoms was modest (6%), yet none of the predictors was significant at step 2.

Discussion

This study was designed to explore the differential associations of mood anxiety symptoms with life satisfaction and psychological distress between individuals diagnosed with depression and anxiety. Based on the tripartite model of mood anxiety symptoms (Clark & Watson, 1991), it was assumed that mood and anxiety symptoms will differently relate to psychological distress and life satisfaction between patients with anxiety and depression. Current findings provide empirical support for the proposed hypotheses of differential association. The findings not only align with the previous literature on anxiety and depression but also provide support to tripartite model of mood anxiety symptoms based on the evidence from an underrepresented Asian country, Pakistan.

First hypothesis of the study was to evaluate the associations of mood and anxiety symptoms with life satisfaction among patients diagnosed with anxiety and depression. Results showed that depression symptoms assessed from two mood subscales negatively predicted life satisfaction in patients with depression. This finding offers support to the tripartite model describing low positive affect connected with lowered levels of subjective wellbeing and life satisfaction (Clark & Watson, 1991). Moreover, the negative link between mood symptomatology with life satisfaction is aligned with findings from previous studies (Seo et al., 2018). The findings support the earlier literature that low positive affect and higher negative affect in the form of hopelessness, low mood, and cognitive biases negatively impacts cognitive appraisal of life conditions (Han & Midorikawa, 2024; Lalk et al., 2025). The current finding appears logical on the ground that depressive mood symptoms such as anhedonia, reduced energy, and sadness weaken positive appraisal of life situations, thereby reducing life satisfaction. Also, the finding lines up with Beck's model of depression emphasizing the role of negative schemas in shaping the

negative image of self, life, and future (Dobson et al., [2018](#)).

Whereas no association was found for mood and anxiety symptoms with life satisfaction in patients with anxiety. This is not a surprising finding given that anxiety disorders are characterized by hyperarousal, anxious symptoms, excessive worry, and anticipatory situational threat appraisal, all of which do not necessarily weaken evaluation of life satisfaction in ways similar to those for depression. Even though anxiety is distressing and impairs life functioning, the association between anxiety and life satisfaction may depend on the level of a few moderators, and the association may remain insignificant at a particular level of the moderator such as BMI (Lai et al., [2023](#)).

The second aim of the study was to assess the association of mood anxiety symptoms with psychological distress in patients with anxiety and depression. The results revealed that anxiety symptoms assessed from two anxiety subscales were strong positive correlates and depressive symptoms were a weaker correlate of psychological distress in patients with anxiety. However, in regression analyses, depression symptoms became insignificant for distress after controlling the other subscales. The findings are consistent with the earlier research (Batsikoura et al., [2021](#)). The results shed light on anxiety specific mechanisms leading to heightened levels of subjective distress. Excessive worry and heightened apprehensions specific to anxiety disorder intensify physiological arousal coupled with cognitive emotional responses thereby fueling distress. Distress in turn further exacerbates anxious symptoms with the reciprocal mechanisms explaining strong links between anxiety symptoms and distress (Groen et al., [2020](#)).

For patients with depression, no such associations of mood or anxiety symptoms with psychological distress appeared. The absence of significant associations highlights that anxiety symptoms co-occur with depression symptoms in patients with depression due to high comorbidity (Groen et al., [2020](#)), yet their role in driving psychological distress appears limited and less central compared to the role of depression symptoms of low energy, hopelessness, and anhedonia in diminishing life satisfaction (Han & Midorikawa, [2024](#); Lalk et al., [2025](#)). Stated in another way, anxiety symptoms may present an additional load for depression patients but do not centrally predict psychological distress.

Differential Pathways Across Anxiety and Depression

Regarding the third hypothesis, it was proposed that mood and anxiety symptoms would differentially predict life satisfaction across clinical conditions of anxiety and depression. In general, the results supported the hypothesized differential associations of anxiety symptoms predicting psychological distress in the anxiety group and depressive symptoms predicting life satisfaction in depression group. These findings provide insight into the differential pathways of affective and anxious symptomatology linked to wellbeing and distress outcomes across two clinical conditions. Also, the results offer support to the tripartite model of anxiety and depression proposed by Clark and Watson (1991). The model theorizes that while symptoms of general distress are shared by both disorders, unique characteristics of hyperarousal and anxious symptoms in anxiety and low positive affect in depression differentiates both disorder and derives differences in life outcomes. The present findings line up well with the model by showing the close connection of anxious symptoms with psychological distress in anxiety, and of depression symptoms with life satisfaction in depression. Moreover, though the earlier literature describes anxiety and depression as highly comorbid conditions (Groen et al., 2020), the results of differential associations point to the importance of distinctive symptomatology when evaluating psychological consequences across the two clinical conditions. Specifically, diminished life satisfaction appears to be a more sensitive marker of depression, and psychological distress to be a sensitive marker of anxiety. Notably, mood anxiety symptoms explained zero percent incremental variance over and above demographics in psychological distress in patients with depression. Similarly, these symptoms explained a very modest variance in life satisfaction in patients with anxiety. The tripartite model supports null prediction of life satisfaction in patients with anxiety and psychological distress in patients with depression. The model proposes that low positive affect that is unique to depression decreases life satisfaction in depression but not anxiety, and high physiological hyperarousal that is unique to anxiety increases distress in anxiety but not in depression. Also, the findings are well supported by the literature that describes physiological arousals specific to anxiety disorders inducing psychological distress (Constantinou et al., 2021), while low positive affectivity specific to depression, weakening life satisfaction (Seo et al., 2018). Yet the weak explanatory power may reflect the potential unassessed factors such as personality traits, treatment history,

environmental stressors, or cultural factors that may explain larger variance in the reported constructs.

Notably, testing the application of tripartite model in Pakistani cultural context is a novel finding. In this context, collectivism may intensify interpersonal sensitivity and restrain emotional independence, potentially amplifying mood and anxiety symptoms. In addition, strong family structure may serve as a protective factor in regulating physiological arousal, while stigma associated with mental health concerns may discourage open expression of emotional symptoms. While cultural and familial variables were not tested in the current study, it is recommended that future studies may test the tripartite model while considering cultural variables in the same context.

Limitations and Future Suggestions

Few limitations of the study must be considered while interpreting the findings. First, the cross-sectional research design examining clinical patients limits the generalizability and causal inferences about the tested associations. It remains uncertain whether hyperarousal in anxiety drives the psychological distress or if distress intensifies the anxious symptoms. To clarify causal and more nuanced relationships, future studies should employ longitudinal designs. In addition, the study used self-report measures which may lead to common method bias. Integrating multi-method approach using clinical interviews, behavioral assessments, experience sampling methods, and informant reports may strengthen future research. Another limitation is the absence of data on disease severity, which could not be collected due to the absence of standardized measures of disease severity. It limits our ability to assess how severity levels may have influenced participants' ability to respond. Also, given the evidence of comorbidity of anxiety and depression (Groen et al., [2020](#)), in future, researchers are recommended to assess comorbidity explicitly to unveil unique and shared predictors of psychological wellbeing. Moreover, participants' medication and treatment status may have influenced the pattern of symptoms in both groups which could not be considered in the study. It is recommended that future studies may replicate the study with more diverse samples from diverse subcultural contexts. Finally, gender differences were tested as a preliminary analysis. In future studies, gender differences merit further consideration given that the socio-cultural norms associated with gendered pattern of emotional expression in Pakistan may

influence the strength or direction of associative patterns as per the tripartite model; gender may be tested as a moderator in similar studies.

Implications

The study has several clinical implications emphasizing the need for tailored intervention plans to address depression symptomology to enhance life satisfaction in depression patients and to address hyperarousal to reduce distress in anxiety patients. Given the effectiveness of tailored interventions for diverse clinical conditions, intervention strategies such as cognitive behavior intervention and positive psychology techniques (Nakao et al., 2021) may be used with depression patients to reframe maladaptive schemas and enhance positive self and world view. Likewise, mindful meditation and relaxation techniques may help decrease the anxious arousal to relieve psychological distress in anxiety. Lastly, it has research implications by advancing research on two clinical conditions and highlighting the importance of disorder specific outcomes and their symptomatic specifiers.

Conclusion

It can be concluded that hyper arousal and anxiety symptoms are positive predictors of distress in patients with anxiety, whereas depressive symptoms are negative predictor of life satisfaction in patients with depression. The findings highlight the importance of personalized intervention plans to address disorder specific symptoms to effectively deal with unique psychological challenges faced by patients across the two clinical conditions.

Author Contribution

Shameem Fatima: conceptualization, supervision, writing – review & editing. **Ain Ul Raazia:** data curation, writing – original draft.

Conflict of Interest

The authors of the manuscript have no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

Data Availability Statement

The data associated with this study will be provided by the corresponding author upon request.

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