

Anxiety Severity and Well-Being Among Adults with Generalized Anxiety Disorder: A Cross-Sectional Study

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Abstract: *Generalized anxiety disorder (GAD) can affect emotional well-being and everyday functioning. This cross-sectional study examined the association between anxiety severity and subjective well-being among 110 adults aged 18–60 years recorded as having GAD. Anxiety severity was assessed using the Hamilton Anxiety Rating Scale (HAM-A), and well-being was assessed using the five-item WHO-5 Well-Being Index. The sample included 82 women (74.5%) and 28 men (25.5%); the largest age group was 31–40 years (36.4%). The mean HAM-A score was 20.44 (SD = 3.75), and 65.5% of participants were in the source-defined mild-to-moderate category. The mean WHO-5 raw score was 11.88 (SD = 4.21). HAM-A and WHO-5 raw scores showed a small negative correlation ($r = -0.200$, $p = 0.036$), indicating that higher anxiety scores were associated with lower reported well-being. HAM-A scores also differed by gender, and WHO-5 scores differed by gender, occupation, and habitat in the reported analyses. Because the design was cross-sectional, the findings do not establish causation. The study suggests that assessing well-being alongside anxiety symptoms may offer a more comprehensive understanding of patients' clinical status.*

Keywords: generalized anxiety disorder; anxiety severity; HAM-A; WHO-5; psychological well-being

1. Introduction

Generalized anxiety disorder (GAD) is characterized by persistent and excessive worry accompanied by symptoms that may include restlessness, fatigue, difficulty concentrating, irritability, muscle tension, and sleep disturbance [1]. Beyond symptom distress, anxiety may interfere with work, family responsibilities, relationships, and participation in everyday activities. Assessment of symptom severity alone may therefore not fully represent a person's broader psychological experience [2].

Research has identified substantial quality-of-life impairment among people with anxiety disorders. In a meta-analysis, Olatunji and colleagues found poorer quality of life in anxiety-disorder samples than in non-clinical comparison groups, with mental health and social functioning notably affected [3]. The WHO-5 Well-Being Index is a brief self-report measure of subjective well-being. A systematic review found broad use of the measure and evidence supporting its clinimetric validity across research and clinical contexts [4]. Although well-being and quality of life are related concepts, they are not interchangeable: the WHO-5 specifically assesses positive subjective well-being rather than the broader domains assessed by dedicated quality-of-life instruments.

2. Review of Literature

Generalized Anxiety Disorder (GAD) is associated with substantial impairment in psychological well-being, social relationships, occupational functioning, and overall quality of life [1,2]. Olatunji et al., in a meta-analytic review, reported significantly poorer quality of life among individuals with

anxiety disorders, particularly in mental health and social functioning [3]. These findings highlight the importance of assessing quality of life alongside anxiety symptom severity.

The Hamilton Anxiety Rating Scale (HAM-A), developed by Hamilton, is widely used to assess anxiety severity [5]. The WHO-5 Well-Being Index is widely used instrument for assessing psychological well-being, with evidence supporting its clinical utility and psychometric properties [4]. The National Mental Health Survey of India further highlights the importance of addressing mental health conditions in the Indian population [6]. Although previous research indicates an association between anxiety severity and poorer quality of life, further investigation in Indian clinical settings is warranted. Therefore, the present study aims to examine the relationship between anxiety severity, assessed using HAM-A, and psychological well-being, assessed using the WHO-5 Well-Being Index, among individuals aged 18–60 years with GAD.

3. Methodology / Approach

Study design, setting, participants, and sampling

A quantitative, cross-sectional, correlational design was used. The study was conducted in the outpatient department (OPD) of VPSV Ayurveda College, Kottakkal, Kerala, India, from March 2026 to September 2026. A total of 110 adults aged 18–60 years with Generalized Anxiety Disorder (GAD) were included via purposive sampling. GAD was identified through a diagnostic interview based on DSM-5 criteria.

Inclusion criteria

- Individuals diagnosed with GAD
- Age 18–60 years

- Willingness to provide informed consent.

Exclusion criteria

- Comorbid severe psychiatric disorders, such as psychosis
- Substance use disorders
- Severe medical conditions affecting participation.

Measures

Anxiety severity was assessed with the Hamilton Anxiety Rating Scale (HAM-A), a clinician-rated scale described in the source thesis as comprising 14 symptom domains, with total scores ranging from 0 to 56 [5]. The scores are grouped as mild (0–17), mild-to-moderate (18–24), moderate (25–30), and severe (>30); these are the categories used in the reported results and should be checked against the scoring protocol actually applied. Subjective well-being was assessed using the five-item WHO-5 Well-Being Index, with each item scored from 0 to 5 and a raw total from 0 to 25 [3].

Statistical analysis

The thesis reports descriptive statistics, chi-square tests, one-way analysis of variance (ANOVA), and Pearson correlation, with statistical significance set at $p < 0.05$. The primary reported association was between HAM-A total score and WHO-5 raw score. One way ANOVA test was the statistical test adopted to find the difference between assessment values before and after treatment. Statistical analysis was done using Microsoft Office 2010 Excel and SPSS Statistics version 25.0.

4. Results and Discussion

The dataset contained 110 baseline records. Women comprised 74.5% ($n = 82$) and men 25.5% ($n = 28$). The largest age group was 31–40 years ($n = 40$, 36.4%), followed by 41–50 years ($n = 38$, 34.5%), 20–30 years ($n = 20$, 18.2%), and 51–60 years ($n = 12$, 10.9%). Most participants were married (84.5%) and literate (98.2%). Nearly half were from semi-urban areas (49.1%), while 43.6% were from rural and 7.3% from urban areas.

Table 1: Selected demographic characteristics reported in the thesis

Characteristic	n	%
Women	82	74.5
Men	28	25.5
Age 20–30 years	20	18.2
Age 31–40 years	40	36.4
Age 41–50 years	38	34.5
Age 51–60 years	12	10.9
Married	93	84.5
Literate	108	98.2
Semi-urban residence	54	49.1
Rural residence	48	43.6
Urban residence	8	7.3

The mean total HAM-A score was 20.44 ($SD = 3.75$), with a reported range of 9–28. Seventy-two participants (65.5%) were classified in the source-defined mild-to-moderate category, 24 (21.8%) in the mild category, and 14 (12.7%) in the moderate category; none were classified as severe. Among HAM-A domains, tension had the highest mean (2.09, $SD = 0.55$), followed by anxious mood (2.05, $SD = 0.63$). The mean WHO-5 raw score was 11.88 ($SD = 4.21$), with a reported range of 2–24.

Table 2: Anxiety severity and subjective well-being scores

Measure / result	Value
HAM-A total score, mean (SD)	20.44 (3.75)
HAM-A mild category, n (%)	24 (21.8%)
HAM-A mild-to-moderate category, n (%)	72 (65.5%)
HAM-A moderate category, n (%)	14 (12.7%)
HAM-A severe category, n (%)	0 (0.0%)
WHO-5 raw score, mean (SD)	11.88 (4.21)
WHO-5 raw score range	2–24

The primary analysis showed a small negative correlation between HAM-A total score and WHO-5 raw score ($r = -0.200$, $p = 0.036$). Thus, higher anxiety scores were associated with lower subjective well-being scores in this sample. Although the association reached the conventional 0.05 significance threshold, its magnitude was small. The result should not be interpreted as evidence that anxiety caused lower well-being, or vice versa, because measurements were cross-sectional and the analysis was correlational.

Table 3: Selected inferential results reproduced from the thesis.

Association / comparison	Statistic	p value	Interpretation as reported
HAM-A total vs WHO-5 raw score	$r = -0.200$	0.036	Small negative correlation
Gender and HAM-A severity category	$\chi^2(2) = 6.649$	0.036	Statistically significant association
HAM-A by gender	$F(1,108) = 12.309$	<0.001	Women: mean 21.13; men: mean 18.39
HAM-A by present occupation	$F(4,105) = 1.765$	0.142	Not statistically significant
WHO-5 by gender	$F(1,108) = 5.517$	0.021	Men: mean 13.46; women: mean 11.34
WHO-5 by present occupation	$F(4,105) = 2.510$	0.046	Overall difference; post-hoc tests not reported
WHO-5 by habitat	$F(2,107) = 3.110$	0.049	Overall difference; post-hoc tests not reported

The reported gender comparisons indicated higher mean HAM-A scores among women than men, and higher mean WHO-5 scores among men than women [5,4]. The study also reported overall differences in WHO-5 scores across present occupation and habitat categories. These secondary findings require cautious interpretation because the source does not report post-hoc comparisons or assumption checks, and some demographic categories were small. The multiple comparisons also increase the possibility of chance findings.

The association between religion and HAM-A severity was not statistically significant in the source analysis ($\chi^2 = 0.112$, $df = 2$, $p = 0.945$).

The direction of the primary correlation is consistent with the broader literature linking anxiety disorders with poorer functioning and well-being [2,4]. However, the correlation is modest and the present sample is not sufficient to establish the size of this relationship in the wider population. The high

proportion of women and the limited description of recruitment and diagnosis further constrain generalizability.

5. Conclusion

The study found a statistically significant, small negative correlation between anxiety severity and subjective well-being among 110 individuals with GAD ($r=-0.200$, $p=0.036$). Anxiety severity differed significantly by gender, while WHO-5 scores differed by gender, occupation, and habitat. These findings highlight the value of assessing subjective well-being alongside anxiety symptoms in clinical practice. However, the cross-sectional design limits causal interpretation, and further research is warranted.

6. Future Scope

Future studies could recruit larger and more diverse samples, document diagnostic procedures and recruitment methods clearly, and prespecify the primary analysis. Reporting confidence intervals and effect sizes, checking statistical assumptions, and conducting justified post-hoc analyses would strengthen interpretation. Longitudinal studies could examine whether changes in anxiety severity track changes in well-being over time. If quality of life is the intended primary construct in future work, a validated quality-of-life instrument should be selected and reported consistently with the study protocol.

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