

Research Article

An Assessment of Psychological Well-being Among Medical Students in a Tertiary Care Hospital in Etawah. A Cross-Sectional Study

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A B S T R A C T

Objective: This study aims to assess the psychological well-being of medical students at Uttar Pradesh University of Medical Sciences (UPUMS), Saifai.

Background: Medical education is highly demanding, and medical students are known to have higher rates of mental health issues compared to their age-matched peers. Despite this, no representative survey has been conducted in UPUMS, Saifai, to evaluate their psychological well-being. We conducted a cross-sectional survey to address this gap.

Materials and Methods: The short form of the Ryff Scales of Psychological Well-Being was included in an online survey targeting medical students aged 18–26 who were present in their classrooms. Confidentiality was assured. A total of 644 students participated, comprising 444 males and 200 females, including 150 first-year, 144 second-year, 140 third-year, 110 final-year, and 100 interns. Data were analyzed using SPSS v24, employing descriptive statistics, correlation, factor, and reliability analyses.

Result: Among the participants, 50.5% demonstrated moderate psychological well-being, while around 25% had low or high well-being. Analysis of subscales revealed that most students (57.6%) scored moderately on positive relations with others and purpose in life, whereas only 18.3% scored low on purpose in life. Students scored lower on self-acceptance and personal growth but showed higher scores on autonomy, positive relations, and purpose in life dimensions, indicating areas of strength and vulnerability in their psychological profiles.

Conclusion: Medical students face substantial psychological stress relative to their peers. These findings highlight the need for larger, nationally representative studies to quantify the issue and to inform interventions aimed at improving the psychological well-being of medical students.

Keywords: Psychological Well-Being, Autonomy, Environmental Mastery, Personal Growth, Positive Relations with Others, Purpose in Life, Self-Acceptance

Introduction

Psychological well-being is an individual's emotional health and overall well-being.² In other words, it refers to a positive mental state such as happiness or satisfaction. Understanding the levels of psychological well-being among medical students is essential, as this developmental stage sets the foundation for future well-being and success. Psychological well-being among students is associated with various positive outcomes, including better academic performance, higher self-esteem, and healthier relationships. Conversely, low levels of psychological well-being can lead to mental health problems and hinder their overall development.

The NMHS 2015–16 (the latest completed national survey) found that 10.6% of Indian adults suffer from at least one mental disorder. Depression is experienced by approximately 5% of adults; around 7.3% of adolescents (13–17 years) face mental disorders. Suicidal risk affects approximately 1% of the population, with urban areas and the 40–49 age group showing slightly higher rates.

Well-being is a multidimensional construct consisting of psychological, emotional, and social aspects. Psychological well-being (PWB) comprises six dimensions: a sense of purpose in life, striving towards personal growth, a sense of confidence in influencing the environment (environmental mastery), acceptance of oneself for who they are (self-acceptance), independence and self-agency regarding one's thoughts and actions (autonomy), and fruitful relationships with others (positive interpersonal relationships).³

Ryff's psychological well-being dimensions are self-acceptance (i.e., the knowledge, acceptance, and awareness of personal limitations), positive relations with others (i.e., the ability to create deep and meaningful connections with others), environmental mastery (i.e., the sense of control over one's life situation), personal growth (i.e., the tendency to see life as a growing experience and as an opportunity to develop one's talents and potential), autonomy (i.e., the sense of living in accordance with one's own convictions and free will), and purpose in life (i.e., the tendency to perceive meaning, purpose, and direction in one's own life).⁴

Medical colleges aim to establish an optimal atmosphere for undergraduate medical education. The actions made during this procedure have the potential to impact and alter the psychological health of medical undergraduates. Students in the medical field face psychological suffering that is significantly greater than that of students in other professions due to the demands of medical education. Various data from India on the prevalence of various psychological outcomes among medical students are available. "Dwivedi and Sachdeva (2021)" conducted a

meta-analysis based on the random effect model and estimated the pooled prevalence of depression to be 40%.⁵ "Arun P and Ramamurthy P (2022)" found the prevalence of anxiety to be 20–40% and the risk for suicidal behaviour to be 29%.⁶ Studying the psychological well-being of medical undergrads is the goal of this research. "Philip S and Chaturvedi (2021)" conducted a cross-sectional study in India that reveals that medical students are going through exceptional stress when compared to their age-matched peers. "Bharani and Divyadarshini (2022)" revealed that college students of Tamil Nadu undergo stress, and the perception of stress had an effect on their mental well-being. No prior studies have been conducted in this district. Therefore, the present study highlighted the understanding of the psychological requirements of students and also revealed the need for psychological care for the students.

Materials & Methods

Study design

The descriptive cross-sectional study was conducted by survey method at the Tertiary Care Hospital Etawah among undergraduate medical students to assess their psychological well-being.

Study period

In January, the research was designed, a protocol was established, and data collection commenced from February 2024 onwards till April 2024.

Study setting and area

Tertiary Care Hospital Etawah has been chosen as the locational study setting.

Sample size determination

The sample size was determined by the complete enumeration method, in which all 644 were included, and there was no dropout bias.

Study Subjects

MBBS students of tertiary care hospital Etawah

Inclusion criteria

First-year, second-year, third-year, and final-year students and interns of UPUMS Saifai were included in the study.

2. Age between 18 and 26 students were included.

Exclusion criteria

1. The students who were taking psychiatric medications were excluded from the study.
2. Participants who did not respond despite two or more follow-ups were excluded.
3. Other than MBBS graduate students, others are also excluded from the study.

Data Collection Tool

We used Ryff's psychological well-being 18-item scale for the evaluation of psychological well-being among all the students. It was composed of 6 domains and 18 questions. The questions were based on autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. The items are rated on a 6-point Likert scale, ranging from 1 (strongly disagree) to 6 (strongly agree). Therefore, the total score is in the range of 18–108, with higher scores representing greater well-being.

Study Tool Description

Scoring: The psychological well-being of students was assessed using the Ryff's 18-item Psychological Well-Being Scale, which evaluates six core dimensions: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance—each represented by three items. All 18 items contributed equally to the total score. Responses were rated on a Likert scale, and the total psychological well-being score was obtained by summing across all items.

The scale includes reverse-scored items (e.g., negatively worded statements), which are adjusted using the

formula: (Number of scale points + 1) – Respondent's answer

The internal consistency of the tool, as indicated by Cronbach's alpha, was 0.80, demonstrating acceptable reliability in the present study. A detailed item-wise breakdown, including subscale mapping and reverse-scoring instructions, is provided in Annexure I for reference.

We collected data through online mode via Google Forms and circulated it in WhatsApp groups of students from various batches of MBBS students. Data were analysed by using SPSS 24 software.

Results

The study participants had a mean age of 23 years (SD = 1.6), and the overall Psychological Well-Being (PWB) score averaged 88.41 (SD = 12.3), indicating a moderate level of well-being. Among the six subdomains, Personal Growth and Self-Acceptance had the highest mean scores (16.5), reflecting a positive self-view and a sense of ongoing development. Autonomy (14.53) and environmental

mastery (14.18) were moderate, suggesting a fair level of independence and ability to manage life situations. However, Purpose in Life (13.9) and especially Positive Relations with Others (12.8) had relatively lower mean scores, indicating potential challenges in interpersonal relationships and finding meaning or direction, which may contribute to overall psychological distress.

Mean age of the population was reported as 23±1.6years(Table 1).Among 644 students almost more than 55%(≈355) students reported moderate level psychological well-being(Table 2) Among all participants, 24% of students reported low psychological well-being , 50% of students reported moderate psychological well -being and 25.5% reported high psychological well-being.(Fig 1, Table 2) Moderate psychological well-being is predominant among students. 19.9% reported low psychological well-being, and most of the students (57.6%) reported moderate psychological well-being in positive relations with others.(Fig 2), 22.2% reported low psychological well-being and56.7% reported moderate psychological well-being in autonomy(Fig 3). 19.3 % reported high psychological well-being and 56.2% of students reported moderate psychological well-being in environmental mastery, and 24.5% reported low psychological well-being in environmental master (Fig 4), 21.9% reported high psychological well-being, 23%low and 55.1% moderate in personal growth (Fig 5,) Very few students (18.3%) reported low psychological well-being, and 24% of students reported high psychological well-being toward their purpose in life(Fig 6) 23% reported low psychological well-being and 55.7 % students reported moderate psychological well-being in self-acceptance(Fig 7).

Table 1.Descriptive statistics of PWB and dimensions of PWB

Domain	Mean(N=644)	(SD)
Age	23	1.6
PWB	88.41	12.3
Autonomy	14.53	2.88
Environmental mastery	14.18	3.03
Personal growth	16.5	3.09
Positive relations	12.8	3.7
Purpose in life	13.9	3.3
Self-acceptance	16.5	3.1

Table 2.Categorical Distribution of Psychological Well-being Dimensions

S. No	Dimension	Low (%)n/N	Moderate (%)n/N	High (%)n/N
1	Autonomy	22.2(143)	56.7(365)	21.1(136)
2	Environmental Mastery	24.5(158)	56.2(362)	19.3(124)
3	Personal Growth	23(148)	55.1(355)	21.9(141)

4	Positive Relations	19.9(128)	57.6(371)	22.5(145)
5	Purpose in Life	18.3(118)	57.6(371)	24.1(155)
6	Self-Acceptance	23.3(150)	55.7(359)	21(135)

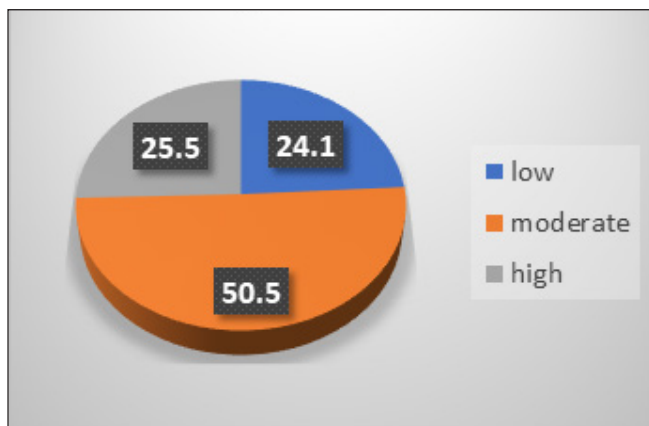


Figure 1.Overall Psychological wellbeing level of students

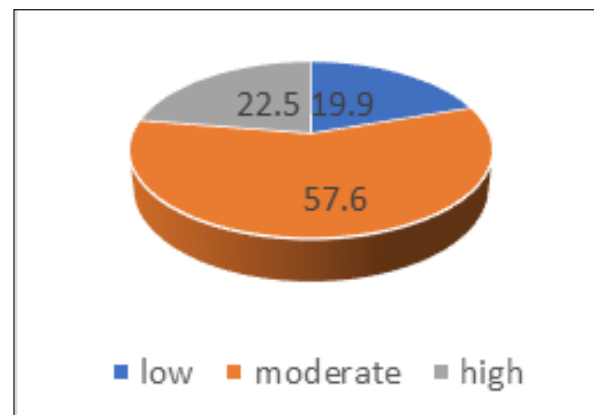


Figure 2. Level of Positive relation with others of the participants

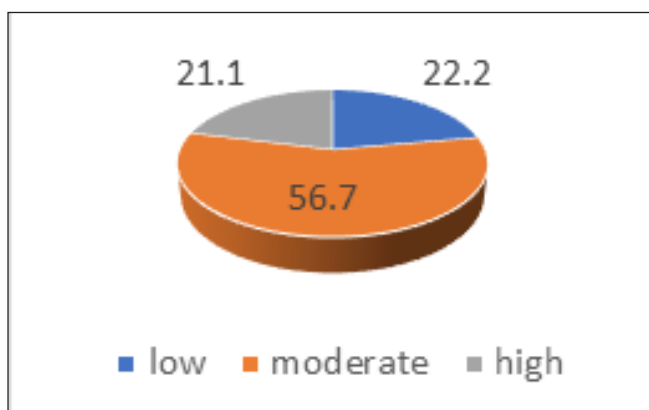


Figure 3.Level of Autonomy among students

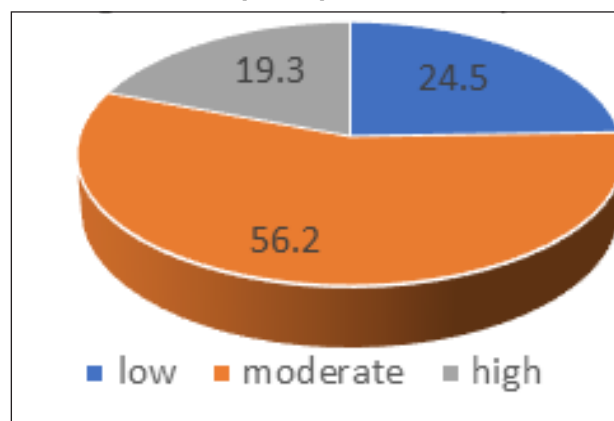


Figure 4.Level of Environmental Mastery among Students

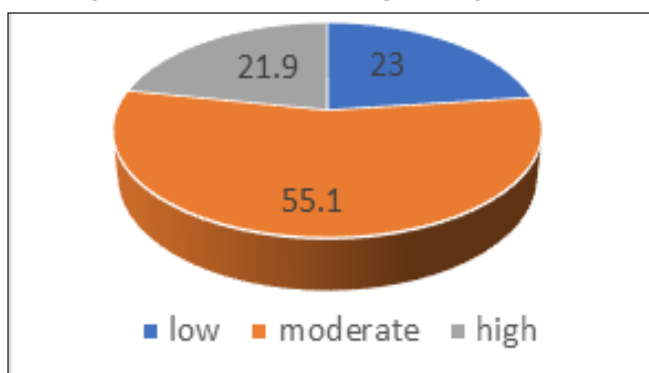


Figure 5.Level of Personal growth Growth among students

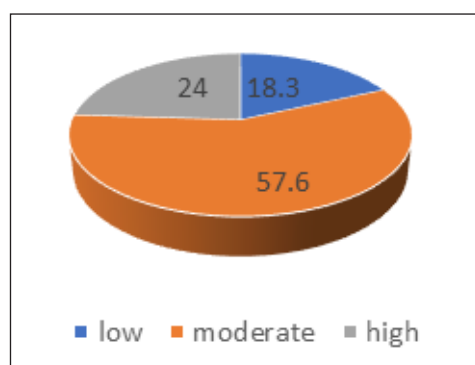


Figure 6.Level of Puspose in Life among students

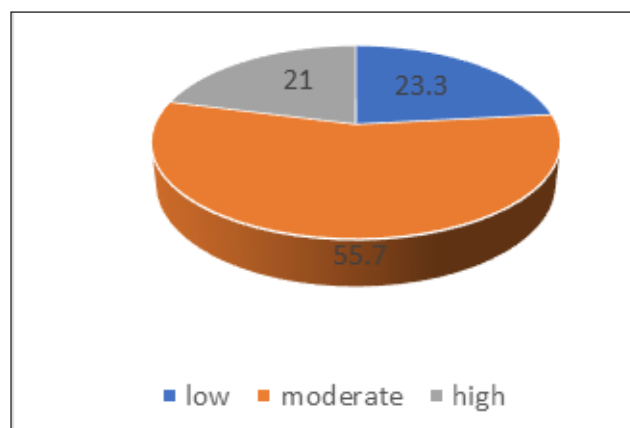


Figure 7. Level of Self acceptance among students

Discussion

This study found that most students demonstrated a moderate level of psychological well-being, which raises concern as it suggests a potential vulnerability to psychological morbidities. A moderate score does not imply mental stability but rather a latent risk of stress-related disorders, particularly if left unaddressed over time. The prevalence of stress among medical students is well-documented and may be attributed to various academic and institutional pressures.

In the Indian context, medical students are expected to master a vast body of knowledge, skills, and professional behaviours—often under tight time constraints and with high performance expectations. This leads to persistent academic stress, which can negatively affect their psychological health.

Specifically, the present study noted lower scores in the autonomy and self-acceptance domains, suggesting that students may feel a lack of control over their academic and personal lives. This may be due to a rigid curriculum structure, authoritative teaching methods, and limited opportunities for self-reflection and feedback. Furthermore, socio-cultural pressures—such as parental expectations, the societal prestige associated with medicine, and peer competition—may exacerbate feelings of inadequacy and emotional strain.

These findings are consistent with a study by Kumar et al. (2020) conducted at Government Medical College, Saharanpur, which reported average to moderate levels of psychological well-being among both medical and paramedical students. Similarly, Srivastava K et al. (2006), using the IPAT Anxiety and Depression Scale and the Achievement Motivation Scale among 104 medical students, found that most had average levels of achievement, motivation, and adaptability, indicating limited coping

capacity under stress. On the other hand, Shreelatha et al. (2020), in a study from South India, reported low psychological well-being among 402 medical students, possibly reflecting regional or institutional disparities in support systems, academic pressure, or living conditions. A similar pattern was observed in a study from Saudi Arabia, where medical students experienced high psychological distress, indicative of low psychological well-being. In contrast, some studies have reported higher psychological well-being among general college students, suggesting that the medical education environment is uniquely stressful.

The mechanisms contributing to moderate well-being levels likely include academic overload, inadequate access to counselling services, lack of structured mentorship, interpersonal challenges in hostels, and insufficient recreational or stress-relief opportunities. Institutions must prioritise mental health through the creation of peer support systems, professional counselling units, regular mental health screenings, and faculty mentorship programmes aimed at fostering resilience and emotional well-being.

Limitations

Some limitations of the present study should be noted. The use of online surveys may introduce selection bias. Psychological well-being is dynamic and may vary over time, limiting the generalisability of a single time-point assessment. External factors such as exam schedules or pandemic-related stress were not controlled for. The present study is based on a cross-sectional design, which limits the ability to determine causal relationships. Additionally, there was no discussion about students' sleep habits or lifestyle-related problems.

Conclusion

The results of the present study illustrate that students of UPUMS Etawah report moderate levels of psychological

well-being across all dimensions. Appropriate training for future teachers on diverse teaching methods—methods that are less detrimental to students' psychological well-being—is crucial for creating a less stressful academic environment. It is recommended that medical colleges integrate structured mental health support programmes as part of the core curriculum. Higher levels of psychological well-being among students would result in happier learners who enjoy the educational process.

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