

Humor Styles, Perceived Stress Scores, and Depression Scores Among Psychiatry Residents in Saudi Arabia: A Cross-Sectional Study

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Abstract

Objective: To assess different humor styles among psychiatry residents in Saudi Arabia and examine their correlations with perceived stress and depression scores, while exploring demographic and training-related influencing factors.

Methods: This cross-sectional study surveyed 100 psychiatry residents across Saudi Arabia using the Humor Styles Questionnaire (HSQ), Beck Depression Inventory-II (BDI-II), and Perceived Stress Scale (PSS). Data were analyzed using descriptive statistics, Spearman correlations, and non-parametric tests.

Results: Among 100 psychiatry residents (61% male, 39% female), the median scores for humor styles were: affiliative humor (46, IQR: 38.5–50), self-enhancement (36.5, IQR: 29–43), self-defeating (26, IQR: 18.5–33.5), and aggressive humor (25, IQR: 19–30). Self-defeating humor showed significant positive correlations with both depression ($r = 0.427$, $P < 0.001$) and perceived stress scores ($r = 0.269$, $P = 0.007$). Males exhibited significantly higher aggressive and self-defeating humor scores ($P = 0.004$ and $P = 0.001$, respectively), while female residents reported significantly higher perceived stress than males ($P = 0.033$). Residents with prior MDD diagnoses demonstrated higher depression and perceived stress levels ($P = 0.013$ and $P = 0.021$, respectively).

Conclusion: Self-defeating humor appears to be a maladaptive coping mechanism associated with poorer mental health outcomes among psychiatry residents in Saudi Arabia. Gender differences in humor styles and stress perception suggest the need for tailored wellness interventions. These findings highlight the importance of promoting adaptive humor styles in psychiatric training programs to enhance resilience and well-being.

Keywords: Adaptation, psychological, emotional adjustment, mental health, internship and residency, education, medical, graduate, resilience, psychological, Saudi Arabia

Introduction

Humor is a fundamental aspect of human experience that plays a crucial role in coping with life's stressors and maintaining psychological well-being. However, not everyone possesses the same level or type of humor. A sense of humor can be best defined as either a stable personality trait or an individual difference that varies across people. Importantly, humor is not universally beneficial or harmful—it can have both positive and negative effects.¹

Studies have used various scales to assess the individual's use of humor in daily life. The Humor Styles Questionnaire (HSQ), developed by Martin et al. (2003), is one of the most widely used instruments. It categorizes humor into four distinct styles: affiliative, self-enhancing, aggressive, and self-defeating.² Each style reflects different motivations and strategies for using humor, influencing how individuals cope with stressors and perceive their mental health. The HSQ has demonstrated good internal consistency (Cronbach's alpha ranging from 0.80 to 0.85) and test-retest reliability over a two-week period ($r = 0.75$) across various populations.²

Depression, a prevalent and serious mental health condition among healthcare professionals, can significantly impact job performance, patient care, and overall quality of life.^{3,4} The Beck Depression Inventory-II (BDI-II), developed by Beck et al. (1996), is a widely used self-report tool that detects and assesses the severity of depressive symptoms. The BDI-II has demonstrated excellent internal consistency (Cronbach's alpha = 0.92) and strong concurrent validity with other measures of depression severity.⁵

Perceived stress, another critical component of mental health, refers to the degree to which individuals appraise their lives as stressful. The Perceived Stress Scale (PSS), developed by Cohen et al. (1983), measures subjective stress perception and has been extensively validated across diverse populations, including healthcare workers. The PSS demonstrates good internal consistency (Cronbach's alpha ranging from 0.75 to 0.91) and test-retest reliability ($r = 0.85$) over periods ranging from two days to two months, making it suitable for assessing perceived stress levels in psychiatric populations.⁶

Previous research has highlighted the differential impact of humor styles on psychological well-being. Affiliative and self-enhancing humor styles are generally associated with adaptive outcomes, such as reduced perceived stress and lower levels of depression.⁷ In contrast, aggressive and self-defeating humor styles have been linked to maladaptive outcomes, including heightened stress and increased depressive symptoms.⁸

Psychiatry residents undergo rigorous training characterized by heavy workloads, intense emotional demands, and exposure to complex patient scenarios, placing them at heightened risk for stress and depression.^{9,10} Understanding how humor styles relate to their perceived stress and depression levels is essential for supporting their mental health and well-being. Given the unique challenges faced by psychiatry residents, examining how humor styles interact with perceived stress and depression can provide valuable insights into protective factors and risk markers within this population. Thus, this study aims to measure the levels of depression and stress and explore their correlation with different humor styles among psychiatry residents in Saudi Arabia.

Materials and Methods

Study Design

A cross-sectional study design was employed to examine humor styles, perceived stress, and depression among psychiatry residents in Saudi Arabia. The study was conducted across various provinces in Saudi Arabia, including Makkah, Riyadh, Tabuk, Madinah, Aseer, Eastern Province, Qassim, Jizan, Northern Borders, Najran, and Hail.

Study Population

The study population was all psychiatry residents who were registered in the Saudi Board of Psychiatry and were under active training in Saudi Arabia at the time of the study. Instead of selective sampling, we adopted census-based recruitment strategy whereby all the eligible residents were invited to take part. Electronic recruitment was carried out between March and May 2025 using official psychiatry residency communication channels, such as program groupings in specific regions throughout Saudi Arabia. Among the eligible residents contacted, 100 responded to the survey, which is equal to 76 percent response rate. Recruitment messages were sent to official residency program groups across all Saudi regions to ensure geographical representation.

Data Collection

Data collection was conducted through an online survey administered via a secure platform (Google Forms). The survey comprised demographic questions followed by three validated instruments: the Humor Styles Questionnaire (HSQ), Beck Depression Inventory-II (BDI-II), and Perceived Stress Scale (PSS).^{2,5,6} The HSQ was used to assess participants' humor styles, consisting of 32 items measuring four distinct styles: affiliative, self-enhancing, aggressive, and self-defeating humor.² The BDI-II was used to assess depressive symptom severity.⁵ The PSS was utilized to measure participants' perceived stress levels.⁶

Statistical Analysis

The statistical analysis was carried out using the statistical package for social sciences (IBM SPSS Statistics version 27.0 (IBM Corp., Armonk, NY, USA)).¹¹ Descriptive statistics, including medians and interquartile ranges (IQR), were computed for humor styles, perceived stress scores, and depression scores after checking the normal distribution using the Shapiro-Wilk test. Spearman's correlation was used to examine the relationships among age, humor styles, perceived stress, and depression. Nonparametric tests (Mann-Whitney U and Kruskal-Wallis) were used to analyze differences in humor styles, depression, and stress scores across demographic variables. All *P*-values less than 0.05 were considered to be significant. There was no formal correction made to multiple comparisons; hence, the subgroup analysis and the secondary comparisons are to be viewed as exploratory.

Ethical Considerations

The study received ethical approval from the Institutional Review Board (IRB) of the Ministry of Health (ref No. A0184). Measures were implemented to ensure participant confidentiality, voluntary participation, and informed consent. No direct compensation was offered to participants; however, they were informed that their participation would contribute to understanding humor styles and mental health among psychiatry residents, potentially informing future wellness interventions. All data was anonymized before analysis, and will be used for research purposes only. This study followed the STROBE (Strengthening the Reporting of Observational studies in Epidemiology) guidelines for reporting.

Results

A total of 100 psychiatry residents participated in this cross-sectional study. The demographic characteristics revealed that 61% were male and 39% were female. The vast majority (99%) were Saudi nationals. Regarding marital status, 65% were single, and 31% were married. Participants' ages ranged from 24 to 37 years, with a median age of 28 years (IQR: 27–29). The residents were distributed across various provinces in Saudi Arabia, with the highest representation from Makkah (30%), followed by Riyadh (17%), and Tabuk (12%). Regarding psychiatric history, 27% reported a previous diagnosis of major depressive disorder, 8% reported adjustment disorder, 1% reported bipolar disorder, and 34% reported other psychiatric disorders (Table 1).

The descriptive analysis of humor styles revealed that affiliative humor had the highest median score (46, IQR: 38.5–50), followed by self-enhancement humor (36.5, IQR: 29–43), self-defeating humor (26, IQR: 18.5–33.5), and aggressive humor (25, IQR: 19–30). The Beck Depression Inventory-II (BDI-II) showed a median score of 10 (IQR: 4.5–17.5), while the Perceived Stress Scale (PSS) had a median score of 18.5 (IQR: 13–24). When categorized, the majority of participants (62%) exhibited minimal depression scores, while 18% had mild depression scores, 12% had moderate depression scores, and 8% had severe depression scores. Regarding stress levels, 60% of participants had moderate stress scores, 27% had low stress scores, and 13% had high perceived stress scores.

Correlation analysis revealed significant positive associations between several humor styles. Affiliative humor was positively correlated with self-enhancement humor ($r = 0.394$, $P < 0.001$) and self-defeating humor ($r = 0.308$, $P = 0.002$). Self-enhancement humor showed a positive correlation with self-defeating humor ($r = 0.225$, $P = 0.024$). Aggressive humor was strongly correlated with self-defeating humor ($r = 0.550$, $P < 0.001$). Notably, self-defeating humor demonstrated significant positive correlations with both depression ($r = 0.427$, $P < 0.001$) and perceived stress ($r = 0.269$, $P = 0.007$) scores. A strong positive correlation was also observed between depression and perceived stress scores ($r = 0.712$, $P = 0.001$). Age was not significantly correlated with any humor styles, depression scores, or perceived stress scores.

Analysis of affiliative humor scores revealed no statistically significant differences in affiliative humor scores across demographic and clinical variables among psychiatry

Table 1. **Demographic and clinical characteristics of participants “psychiatry residents” (*N* = 100)**

		<i>N</i>	%
Gender	Male	61	61.0%
	Female	39	39.0%
Nationality	Saudi	99	99.0%
	Non-Saudi	1	1.0%
Marital status	Single	65	65.0%
	Married	31	31.0%
	Divorced	1	1.0%
	Prefer not to answer	3	3.0%
Province	Makkah	30	30.0%
	Riyadh	17	17.0%
	Tabuk	12	12.0%
	Madinah	9	9.0%
	Aseer	8	8.0%
	Eastern	7	7.0%
	Qassim	5	5.0%
	Jizan	3	3.0%
	Northern borders	2	2.0%
	Najran	2	2.0%
	Hail	2	2.0%
	Prefer not to say	3	3.0%
Are you enrolled in a program where you were originally living?	Yes	58	58.0%
	No	42	42.0%
Which year are you currently in?	R1	31	31.0%
	R2	26	26.0%
	R3	27	27.0%
	R4	16	16.0%
Have you ever been diagnosed with MDD?	Yes	27	27.0%
	No	73	73.0%
Have you ever been diagnosed with Adjustment disorder?	Yes	8	8.0%
	No	92	92.0%
Have you ever been diagnosed with bipolar disorder?	Yes	1	1.0%
	No	99	99.0%
Have you ever been diagnosed with other psychiatric disorder?	Yes	34	34.0%
	No	66	66.0%

Values are presented as *n* (%).

residents. A gender comparison showed nearly identical mean ranks for male (50.66) and female (50.24) residents ($P = 0.944$). Similarly, no significant differences were observed across residency years ($P = 0.894$). Although marital status showed some variation in mean ranks (single: 52.99, married: 43.87, divorced: 12), these differences did not reach statistical significance ($P = 0.088$). The detailed results are presented in Table 2. The analysis of self-enhancement humor

Table 2. **Comparison of affiliative humor scores across demographic and clinical variables among psychiatry residents (*N* = 100)**

Variable	Groups	Affiliative humor mean rank	<i>P</i> -value
Gender	Male	50.66	0.944
	Female	50.24	
Marital status	Single	52.99	0.088
	Married	43.87	
	Divorced	12	
	Prefer not to answer	77.83	
Are you enrolled in a program where you were originally living?	Yes	47.79	0.272
	No	54.24	
Which year are you currently in?	R1	49.84	0.894
	R2	47.42	
	R3	53.33	
	R4	52	
Have you ever been diagnosed with MDD?	Yes	46.09	0.355
	No	52.13	
Have you ever been diagnosed with Adjustment disorder?	Yes	40.25	0.297
	No	51.39	
Have you ever been diagnosed with other psychiatric disorder?	Yes	56.6	0.131
	No	47.36	

P-value <0.05 was deemed as statistically significant.

scores showed an overall difference across marital status categories ($P = 0.03$). Single residents demonstrated higher self-enhancement humor scores (mean rank = 52.42) compared to married (mean rank = 43.1) and divorced (mean rank = 30.5) residents. Those who preferred not to disclose their marital status showed notably higher scores (mean rank = 92). However, some marital-status subgroups were very small; therefore, subgroup-specific rank differences should be interpreted cautiously. The detailed results are presented in Table 3.

Analysis of aggressive humor scores revealed a statistically significant gender difference among psychiatry residents ($P = 0.004$). Male residents demonstrated significantly higher aggressive humor scores (mean rank = 57.1) compared to female residents (mean rank = 40.18). No statistically significant differences in aggressive humor scores were observed across other demographic variables. The detailed results are presented in Table 4. Analysis of self-defeating humor scores revealed a statistically significant gender difference among psychiatry residents ($P = 0.001$). Male residents demonstrated significantly higher self-defeating humor scores (mean rank = 58.11) compared to female residents (mean rank = 38.59). No statistically significant differences in self-defeating humor scores were observed across marital status, residency year, or history of psychiatric diagnoses. The detailed results are presented in Table 5.

Analysis of Beck Depression Inventory-II (BDI-II) scores revealed that residents with a prior diagnosis of major

Table 3. **Comparison of self-enhancement humor scores across demographic and clinical variables among psychiatry residents (N = 100)**

Variables	Groups	Self-enhancement humor mean rank	P-value
Gender	Male	48.89	0.488
	Female	53.01	
Marital status	Single	52.42	0.03*
	Married	43.1	
	Divorced	30.5	
	Prefer not to answer	92	
Are you enrolled in a program where you were originally living?	Yes	49.31	0.629
	No	52.14	
Which year are you currently in?	R1	49.31	0.878
	R2	54.38	
	R3	49.74	
	R4	47.78	
Have you ever been diagnosed with MDD?	Yes	47.3	0.501
	No	51.68	
Have you ever been diagnosed with Adjustment disorder?	Yes	48.81	0.864
	No	50.65	
Have you ever been diagnosed with other psychiatric disorder?	Yes	50.19	0.939
	No	50.66	

*; Statistically significant.

depressive disorder (MDD) demonstrated significantly higher BDI-II scores (mean rank = 62.37) compared to those without such a history (mean rank = 46.11; $P = 0.013$). Other findings were not statistically significant. The detailed results are presented in Table 6. Based on the analysis of Perceived Stress Scale (PSS) scores across demographic and clinical variables, significant gender differences were observed: female residents reported higher perceived stress levels (mean rank = 58.24) than male residents (mean rank = 45.55; $P = 0.033$). Additionally, residents with a prior diagnosis of major depressive disorder (MDD) demonstrated significantly elevated perceived stress scores (mean rank = 61.48) compared to those without such a history (mean rank = 46.44; $P = 0.021$). While not reaching statistical significance, there was a trend toward higher perceived stress among residents with adjustment disorder ($P = 0.080$). No significant differences in perceived stress were observed based on marital status, residency year, enrollment location, or history of other psychiatric disorders. The detailed results are presented in Table 7.

Discussion

The current research is an addition to the existing literature regarding the interaction between humor styles and mental health as it focuses on a group of psychiatry residents in Saudi Arabia, which is especially susceptible to mental distress throughout training. Such framing is justified by the larger resident literature which indicates that there is a significant burden of depressive symptoms and psychiatry-specific evidence that indicates that burnout is high among psychiatry residents.^{3,12} Our findings highlight that humor is not a uniformly adaptive resource; rather, its effects on psychological well-being depend on the style employed. While affiliative

Table 4. **Comparison of aggressive humor scores across demographic and clinical variables among psychiatry residents (N = 100)**

Variables	Groups	Aggressive humor mean rank	P-value
Gender	Male	57.1	0.004*
	Female	40.18	
Marital status	Single	49.08	0.481
	Married	50.65	
	Divorced	68	
	Prefer not to answer	73.83	
Are you enrolled in a program where you were originally living?	Yes	47.15	0.174
	No	55.13	
Which year are you currently in?	R1	47.98	0.841
	R2	50.52	
	R3	50.06	
	R4	56.09	
Have you ever been diagnosed with MDD?	Yes	50.3	0.966
	No	50.58	
Have you ever been diagnosed with Adjustment disorder?	Yes	50.06	0.964
	No	50.54	
Have you ever been diagnosed with other psychiatric disorder?	Yes	51.74	0.76
	No	49.86	

*; Statistically significant.

Table 5. **Comparison of self-defeating humor scores across demographic and clinical variables among psychiatry residents (N = 100)**

Variables	Groups	Self-defeating humor mean rank	P-value
Gender	Male	58.11	0.001*
	Female	38.59	
Marital status	Single	47.31	0.173
	Married	53.77	
	Divorced	60	
	Prefer not to answer	82.67	
Are you enrolled in a program where you were originally living?	Yes	48.06	0.323
	No	53.87	
Which year are you currently in?	R1	49.77	0.875
	R2	50.48	
	R3	53.8	
	R4	46.38	
Have you ever been diagnosed with MDD?	Yes	55.37	0.307
	No	48.7	
Have you ever been diagnosed with Adjustment disorder?	Yes	45.31	0.598
	No	50.95	
Have you ever been diagnosed with other psychiatric disorder?	Yes	53.47	0.462
	No	48.97	

*; Statistically significant.

Table 6. **Comparison of Beck Depression Inventory-II (BDI-II) scores across demographic and clinical variables among psychiatry residents (N = 100)**

Variables	Groups	BDI-II Mean rank	P-value
Gender	Male	46.54	0.087
	Female	56.69	
Marital status	Single	49.6	0.29
	Married	49.45	
	Divorced	46	
	Prefer not to answer	82.33	
Are you enrolled in a program where you were originally living?	Yes	48.09	0.329
	No	53.82	
Which year are you currently in?	R1	45.6	0.262
	R2	55.19	
	R3	56.46	
	R4	42.31	
Have you ever been diagnosed with MDD?	Yes	62.37	0.013*
	No	46.11	
Have you ever been diagnosed with Adjustment disorder?	Yes	65.5	0.127
	No	49.2	
Have you ever been diagnosed with other psychiatric disorder?	Yes	56.04	0.17
	No	47.64	

*; Statistically significant.

Table 7. Comparison of perceived stress scale (PSS) scores across demographic and clinical variables among psychiatry residents (N = 100)

Variables	Groups	PSS Mean rank	P-value
Gender	Male	45.55	0.033
	Female	58.24	
Marital status	Single	47.32	0.054
	Married	53.37	
	Divorced	40.5	
	Prefer not to answer	93	
Are you enrolled in a program where you were originally living?	Yes	49.53	0.693
	No	51.85	
Which year are you currently in?	R1	50.23	0.45
	R2	50.81	
	R3	56.04	
	R4	41.19	
Have you ever been diagnosed with MDD?	Yes	61.48	0.021*
	No	46.44	
Have you ever been diagnosed with Adjustment disorder?	Yes	67.69	0.08
	No	49.01	
Have you ever been diagnosed with other psychiatric disorder?	Yes	55.09	0.256
	No	48.14	

*; Statistically significant.

humor emerged as the most endorsed style, the most striking result was the association of self-defeating humor with elevated levels of perceived stress and depressive symptoms. This trend is in line with previous research that maladaptive humor styles, especially self-defeating humor is correlated with worse mental health outcomes, but self-enhancing humor is more reliably correlated with positive psychological functioning.^{1,8} These findings corroborate the adaptive and maladaptive humor styles, especially in high-stress training environments, and are most aligned with the literature that specifically attributes self-defeating humor to worse mental health outcomes.^{13,14}

In addition to humor styles, the levels of depression and stress reported by the residents provide important insights into their psychological well-being. Median depression and stress scores in our cohort fell within the moderate range, with most residents endorsing minimal depressive symptoms; however, nearly one in five reported moderate to severe depressive symptoms. This finding aligns with resident-focused literature that medical trainees frequently experience clinically relevant levels of psychological distress.^{3,14,15} A systematic review in Saudi Arabia has also indicated high rates of depression, stress, anxiety, and burnout in medical trainees,¹⁵ and a national study in psychiatry residents indicated burnout and depressive symptoms in training.⁹ The moderate stress scores observed here may reflect the high demands and workload inherent to residency training, underscoring the need for systemic strategies that address not only individual coping mechanisms but also organizational and structural stressors. These data reinforce that humor, while relevant, represents only one facet of a broader constellation of risk and resilience factors influencing resident mental health.

These findings are consistent with prior research linking maladaptive humor styles to adverse psychological outcomes. Current evidence suggests that self-defeating humor is negatively correlated with mental health and more recent studies also suggest that darker/maladaptive humor patterns are positively correlated with depression, anxiety, and stress. Adaptive styles of humor have been linked to less psychological symptoms among the healthcare professionals, and vice versa.^{13,16,17} A recent study among healthcare professionals demonstrated that self-defeating and aggressive humor were positively associated with psychopathological symptoms, whereas affiliative and self-enhancing humor were inversely associated with psychological distress.¹⁸ Similarly, an investigation of emotional distress in a community sample showed that darker humor styles predicted higher levels of depression, anxiety, and stress, while positive humor was protective.¹³ The current study reinforces these observations by highlighting the potential detrimental role of self-defeating humor in a population at high risk for stress and depression.

The predominance of affiliative humor in this sample aligns with evidence that medical trainees often use humor to promote social cohesion and manage stressful environments.¹⁹ While affiliative humor may foster peer bonding and improve the clinical learning environment, its lack of direct correlation with lower depression or stress in this study suggests that it may serve more as a social resource than a direct protective factor. Recent work has shown that affiliative humor may buffer against depression primarily when combined with other adaptive traits such as cognitive flexibility, suggesting that its role may be more nuanced than linear associations reveal.²⁰ Contrary to some prior studies, age was not related to humor,

stress, or depression scores in this sample. Previous research has suggested that older individuals may gravitate toward more adaptive humor and report lower stress reactivity.²¹ The lack of association observed here is likely attributable to the restricted age range of psychiatry residents, limiting variability.

The implications of these findings are significant for residency training. Since psychiatry residents seem to be experiencing a significant level of burnout and burden of depressive symptoms, the current correlations among self-defeating humor, perceived stress, and depressive symptoms might be clinically applicable in terms of resident wellness screening and preventive measures.^{22,23} These findings are also important in the Saudi/Gulf area, where the Saudi and Gulf studies have indicated a significant stress and burnout load among residents.^{24,25} In this context, the identified correlation between self-defeating humor and increased stress and depressive symptoms can be applied in practice in terms of screening and wellness-based intervention in training programs. Psychoeducational workshops or cognitive-behavioral strategies aimed at shifting humor from self-defeating to more adaptive forms may reduce vulnerability to psychological distress. Residency programs may also capitalize on the widespread use of affiliative humor to strengthen peer support structures, which may be particularly effective in collectivist cultural contexts such as Saudi Arabia.^{19,21,26}

The present study has several strengths, including the use of validated, widely applied instruments (HSQ, BDI-II, and PSS) and its focus on psychiatry residents, an understudied yet vulnerable group. The simultaneous assessment of humor, depression, and stress provides a multidimensional perspective on resident mental health.^{26,27} When interpreting these findings, several limitations are to be taken into consideration. Even though the survey was sent to the entire population of eligible psychiatry residents in Saudi Arabia, participation was voluntary, thus the study is susceptible to non-response and self-selection bias, which could have an impact on representativeness. Moreover, some subgroup categories were small, especially in some strata in terms of marital-status and psychiatric-history, and this might have decreased the statistical power and limited the stability and interpretability of subgroup comparisons. In addition, subgroup analyses should be interpreted cautiously because several categories contained very small numbers of participants, limiting statistical power and the stability of subgroup-specific estimates. These are some of the factors that should be taken into consideration when interpreting subgroup-specific findings. Furthermore, since several statistical comparisons were conducted in the absence of a formal multiplicity adjustment, the risk of a type I error must be taken into account, especially when comparing secondary and subgroup analyses. Moreover, the sample was relatively homogenous, composed almost entirely of Saudi nationals, and the limited

age range may constrain generalizability to broader populations of medical trainees.²⁸

Conclusion

Our study revealed significant associations between humor styles, perceived stress, and depression among psychiatry residents in Saudi Arabia. Notable findings include higher self-defeating humor in male residents, greater perceived stress in female residents, and increased depression and stress scores among those with previous MDD diagnoses. These subgroup observations should be interpreted with appropriate caution given the small size of some comparison groups. These results highlight the importance of gender-specific wellness interventions and targeted support for residents with a psychiatric history. The lack of significant differences across training years suggests that psychological factors remain relatively stable throughout residency. We recommend implementing routine screening for maladaptive coping mechanisms and instituting institutional policies that promote work-life balance. Despite the limitations of a cross-sectional design, these findings provide valuable insights for improving mental health support systems in psychiatric training programs in Saudi Arabia.

Ethics Approval and Consent to Participate

The study received IRB approval from the Ministry of health research department (ref No. A0184) and adhered to the declaration of Helsinki. All participants provided informed consent.

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Competing Interests

None.

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None.

Consent for Publication

Not applicable.

Availability of Data and Materials

The data is available upon request from the corresponding author. ■

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