



The association between happiness and meaning of life in students of Golestan University of Medical Sciences, Iran

Maede Mansouri¹ , Fatemeh Mehravar² , Hamideh Fegghi³ , Farzaneh Barati^{4*}

1. Student Research Committee, Golestan University of Medical Sciences, Golestan, Iran

2. Ischemic Disorders Research Center, Jorjani Clinical sciences Research Institute, Golestan University of Medical Sciences, Gorgan, Iran

3. York University, Toronto, Ontario, Canada, North America

4. Department of Medical Surgical Nursing, School of Nursing and Midwifery, Golestan University of Medical Sciences, Golestan, Iran

* Correspondence: Farzaneh Barati. Department of Medical Surgical Nursing, School of Nursing and Midwifery, Golestan University of Medical Sciences, Golestan, Iran. Tel: +989159222474; Email: farzanehb86@yahoo.com

Abstract

Background: Meaning in life is an important determinant of psychological well-being, and happiness is considered one of the fundamental concepts and components of human life, particularly among students. This study aimed to examine the association between meaning in life and happiness among students at Golestan University of Medical Sciences.

Methods: This cross-sectional study was conducted at Golestan University of Medical Sciences from September 2023 to June 2024. A stratified convenience sampling method (Non-probability stratified sampling) was used, with participants recruited proportionally from each academic school. Data were collected using three instruments: A demographic information form, the standardized Oxford Happiness Questionnaire (OHQ), and Crumbaugh and Maholick's Purpose in Life Test to assess meaning in life. Multivariable linear regression analysis was performed to examine the association between happiness and meaning in life, adjusting for potential confounders, using SPSS version 26.

Results: A total of 457 students participated in the study, with a mean age of 21.70 ± 2.81 years. The mean score for meaning in life was 95.88 ± 18.76 , and the mean happiness score was 38.58 ± 12.54 . Regarding happiness status, 5.7% of students were within the normal range, while the majority (54.3%) had scores below the normal range for happiness. Multivariable linear regression analysis showed that happiness had a strong and statistically significant positive association with meaning in life ($\beta = 0.58$, 95% CI: 0.51 - 0.65, $P < 0.001$).

Conclusion: The findings indicate that although the level of meaning in life among medical university students was relatively desirable, fewer than 10% of students were within the normal range of happiness, highlighting the importance of addressing this issue.

Article Type: Research Article

Article History

Received: 21 October 2025

Received in revised form: 7 November 2025

Accepted: 1 December 2025

Available online: 15 December 2025

DOI: [10.29252/IJHMD.2.2.1](https://doi.org/10.29252/IJHMD.2.2.1)

Keywords

Happiness
Education, Medical
Well-being



© The author(s)

Highlights

What is current knowledge?

The strong, positive relationship between “meaning in life” and “happiness,” as key components of psychological well-being - particularly among student populations - is well established in the scientific literature. Numerous studies conducted worldwide have confirmed this association across diverse academic settings.

What is new here?

Focusing on students at Golestan University of Medical Sciences in Iran, this study confirmed a strong association ($\beta = 0.58$) but also revealed a novel and concerning discrepancy: Although students' average meaning-in-life score was “relatively desirable” (95.88), only 5.7% fell within the normal range for happiness, while the majority (54.3%) scored below normal. This finding suggests that, in this specific population, a sense of meaning in life does not effectively translate into subjective happiness.

recognized as a core psychological need and a multifaceted construct, shaped by the interaction of internal dispositions and external sociocultural, economic, and environmental factors (10-13).

University students, particularly those engaged in medical education, constitute a population exposed to considerable psychological strain. The transition to adulthood, combined with intensive academic demands, financial pressures, and, for medical students, early clinical exposure to suffering and death, creates a high-risk environment for reduced well-being (14,15). Global trends indicating increasing dissatisfaction and depressive symptoms further underscore the urgency of this issue (15,16). Existing research provides a baseline, suggesting that students often report only moderate levels of both happiness and meaning in life. For example, studies among Iranian and Turkish students have reported suboptimal or lower-than-normal scores on these constructs (21,22). Although a positive correlation ($R = 0.45 - 0.60$) between the presence of meaning and happiness is consistently observed in student samples, the dynamics of this relationship within specific high-stress academic contexts require further investigation (23).

Despite this existing knowledge, significant gaps remain. There is a paucity of research that simultaneously examines both dimensions of meaning - presence and search - in relation to happiness, particularly within non-Western cultural contexts (24,25). Moreover, although the mental health challenges faced by medical students are well documented (26), fewer studies have specifically explored the potential protective role of meaning in life in relation to their happiness. This study seeks to address these gaps by examining the association between meaning in life and happiness among medical students at Golestan University of Medical Sciences in Iran. The findings are intended to contribute to a more nuanced understanding of well-being in this vulnerable student population and to inform the development of targeted support strategies.

Introduction

The pursuit of meaning and happiness represents a fundamental aspect of human psychological well-being. Meaning in life, encompassing both the presence of purpose and the active search for it, provides a critical framework for understanding human experience (1-3). A substantial body of literature has demonstrated that a strong sense of meaning is positively associated with key indicators of well-being, including happiness, life satisfaction, and general health, while being inversely related to depression, anxiety, and stress (4-10). Happiness itself is

Methods

This analytical cross-sectional study was conducted among Iranian, Persian-speaking students enrolled at Golestan University of Medical Sciences in Gorgan, Iran, during the academic period from September 2023 to June 2024. Participants were required to meet three key eligibility criteria: (1) Current full-time enrollment at Golestan University of Medical Sciences, (2) completion of at least two academic semesters, and (3) voluntary provision of informed consent to participate in the study. These criteria ensured that participants had sufficient academic exposure to the university environment while adhering to ethical research standards through appropriate consent procedures.

The required sample size was calculated for a Pearson correlation analysis examining the association between happiness and meaning in life. Based on Cohen's (1988) conventions for correlation studies, a small effect size ($R = 0.12$) was assumed, reflecting conservative estimates from prior literature on similar psychosocial constructs (27). Using G*Power 3.1, with a significance level (α) of 0.05 and statistical power ($1 - \beta$) of 95%, and accounting for potential covariates (e.g., age and gender), the minimum required sample size was estimated to be 423 participants. To ensure adequate statistical power, allow for subgroup analyses, and reduce the impact of non-response bias, the target sample size was increased to 500 students.

A stratified convenience sampling approach (Non-probability stratified sampling) was employed, in which each faculty within the university was treated as a distinct stratum. The sample size allocated to each stratum was determined proportionally based on student enrollment numbers within each school. Following stratification, participants were selected through convenience sampling from each school population. After estimating the total sample size, a proportion of the sample corresponding to the size of each school was allocated accordingly.

Data were collected using three instruments: (1) A demographic information form (age, gender, ethnicity, educational level, school, residential status, and employment status), (2) the standardized Oxford Happiness Questionnaire (OHQ), and (3) Crumbaugh and Maholick's Purpose in Life Test (PIL). The PIL is a 20-item instrument designed to assess existential purpose and meaning in life, with responses rated on a 7-point Likert scale (28). The total score is obtained by summing all item responses, yielding a composite score ranging from 20 to 140, with higher scores indicating a greater self-reported sense of existential meaning and purpose in life. Developed in accordance with Frankl's

logotherapy principles, the PIL demonstrates strong content validity (29). In the Iranian context, the instrument has shown excellent reliability (Cronbach's $\alpha = 0.93$) when administered to 206 students at Mashhad University using stratified random sampling (30).

The Oxford Happiness Questionnaire (OHQ) is a validated 29-item self-report instrument designed to assess subjective happiness across multiple psychological domains, including positive affect, life satisfaction, and personal fulfillment. Using a four-point Likert scale, the questionnaire yields a total score ranging from 0 to 87, with scores below 40 - 42 indicating clinically significant depressive symptomatology (31). The psychometric properties of the Persian version were previously validated in a sample of 727 Iranian university students by Liaghatdar et al. (2008), demonstrating strong internal consistency (Cronbach's $\alpha = 0.87$) and acceptable test-retest reliability over a two-week interval ($R = 0.82$), thereby supporting its suitability for use in the present study (32).

The questionnaires were administered through supervised, paper-based sessions conducted on campus. A trained researcher provided standardized instructions, ensured confidentiality, and collected completed questionnaires to maximize response completeness and minimize variability. Data were analyzed using SPSS version 26 and included descriptive statistics, normality testing, and bivariate analyses (t-test, ANOVA, and Pearson's correlation). A multivariable linear regression model (Adjusted $R^2 = 0.45$) was used to assess the association between happiness (Independent variable) and meaning in life (Dependent variable), adjusting for gender, ethnicity, income, and employment status. All statistical assumptions were verified, and the significance level was set at 0.05.

Results

A total of 457 students participated in the study (Response rate: 91.4%), of whom 68.3% were female, with a mean age of 24.13 ± 9.12 years. Most participants were enrolled in the faculties of Nursing (33%) and Medicine (28.4%). As shown in Table 1, the mean scores for happiness and meaning in life were 38.58 ± 12.54 and 95.88 ± 18.76 , respectively. Overall, 5.7% of students were within the normal range for happiness (Scores of 40 to 42), whereas 54.3% were below the desirable range for happiness (scores less than 40). The results further indicated that gender ($P = 0.0001$), ethnicity ($P = 0.030$), educational level ($P = 0.030$), school ($P = 0.020$), residential status ($P = 0.020$), and employment status ($P = 0.040$) were significantly associated with happiness scores among medical students.

Table 1. The mean scores of the meaning of life and happiness by characteristics of medical sciences students in Golestan, N=457

Variable		Frequency (%)	Happiness Mean $\pm$ SD	P-value*	Meaning of life Mean $\pm$ SD	P-value*
Gender	Male	145 (31.7)	42.28 $\pm$ 12.14	< 0.001	96.36 $\pm$ 19.52	0.710
	Female	312 (68.3)	36.86 $\pm$ 12.37		95.66 $\pm$ 18.42	
Ethnicity	Fars	234 (90.6)	37.14 $\pm$ 13.16	0.030	95.00 $\pm$ 19.09	0.060
	Turkman	147 (9.4)	40.64 $\pm$ 11.43		98.10 $\pm$ 16.87	
	Sistani	18 (9.4)	42.33 $\pm$ 11.71		101.94 $\pm$ 18.62	
	Turk	28 (10.7)	37.85 $\pm$ 14.12		87.50 $\pm$ 21.46	
	Others	30 (0.33)	38.13 $\pm$ 10.41		96.10 $\pm$ 20.43	
Monthly family income	50-100 million Rials	63 (0.13)	37.55 $\pm$ 11.72	0.100	95.04 $\pm$ 20.02	0.200
	100-200 million Rials	208 (0.46)	37.76 $\pm$ 12.41		94.14 $\pm$ 18.77	
	Over 200 million Rials	186 (0.41)	39.83 $\pm$ 12.90		98.11 $\pm$ 18.17	
Grade	Bachelor	241 (52.7)	41.13 $\pm$ 6.02	0.030	87.94 $\pm$ 9.58	0.250
	Master	8 (33.0)	32.75 $\pm$ 15.89		100.87 $\pm$ 26.52	
	Doctor of medicine	208 (28.4)	40.18 $\pm$ 13.00		96.82 $\pm$ 18.26	
School	Health	43 (11.6)	36.67 $\pm$ 13.33	0.020	95.90 $\pm$ 21.63	0.150
	International campus and tuition fee college	49 (4.4)	41.48 $\pm$ 11.72		101.24 $\pm$ 18.28	
	Nursing and midwifery	151 (2.4)	37.13 $\pm$ 12.79		94.96 $\pm$ 18.59	
	Medicine	130 (0.90)	39.57 $\pm$ 11.83		96.69 $\pm$ 16.36	
	Paramedical	53 (51.9)	39.39 $\pm$ 11.77		95.73 $\pm$ 20.02	
	Dentistry	20 (1.8)	42.65 $\pm$ 11.82		89.90 $\pm$ 18.28	
	Advanced technologies in medical sciences	11 (45.5)	29.81 $\pm$ 17.26		86.72 $\pm$ 28.13	
Native to the province	Native	305 (66.7)	39.51 $\pm$ 12.08	0.020	97.30 $\pm$ 17.84	0.020
	Non-native	152 (33.3)	36.70 $\pm$ 13.26		93.03 $\pm$ 20.23	
Accommodation status	University-dormitory	268 (58.6)	37.78 $\pm$ 12.52	0.100	95.05 $\pm$ 18.79	0.260
	Others	189 (41.4)	39.70 $\pm$ 12.50		97.06 $\pm$ 18.69	
Employment status	Working	67 (14.7)	41.49 $\pm$ 12.89	0.040	101.95 $\pm$ 19.25	< 0.001
	Unemployed	390 (85.3)	38.08 $\pm$ 12.42		94.84 $\pm$ 18.50	

*Independent t test or ANOVA tests

Furthermore, residential status ($P = 0.020$) and employment status ($P < 0.001$) showed statistically significant associations with students' meaning in life scores. Employed students reported significantly higher levels of happiness (41.49 ± 12.89 , $P = 0.040$) and meaning in life (101.95 ± 19.25 , $P < 0.001$) compared with unemployed students. Analysis of demographic characteristics revealed significant variations in happiness and meaning in life among medical students. Male students reported significantly higher happiness scores (42.28 ± 12.14) than female students (36.86 ± 12.37 , $P < 0.001$), whereas no significant gender difference was observed in meaning in life scores ($P = 0.710$). Ethnicity was also significantly associated with happiness ($P = 0.030$), with Sistani students reporting the highest happiness scores (42.33 ± 11.71), while Turk students exhibited the lowest meaning in life scores (87.50 ± 21.46). Higher family income (Over 20 million Tomans) was associated with greater happiness (39.83 ± 12.90) and meaning in life (98.11 ± 18.17); however, these differences were not statistically significant ($P > 0.05$). Students enrolled in the Doctor of Medicine program demonstrated higher levels of happiness (40.18 ± 13.00) and meaning in life (96.82 ± 18.26) compared with students in other academic levels ($P = 0.030$ for happiness and $P = 0.045$ for meaning in life).

As shown in Table 2, Pearson's correlation analysis indicated a strong positive correlation between happiness and age ($R = 0.63$, $P = 0.0001$). A weak but statistically significant positive correlation was also observed between happiness and grade point average (GPA) ($R = 0.11$, $P = 0.020$). No significant correlations were found between happiness and the number of family members ($R = 0.01$, $P = 0.670$), birth rank ($R = 0.04$, $P = 0.300$), academic semester ($R = -0.06$, $P = 0.190$), or age ($R = 0.01$, $P = 0.720$). In addition, Pearson's correlation analysis showed no significant associations between meaning in life and any of the examined variables, including age ($R = 0.05$, $P = 0.230$), number of family members ($R = 0.06$, $P = 0.150$), birth rank ($R = 0.01$, $P = 0.760$), academic semester ($R = -0.05$, $P = 0.280$), or GPA ($R = 0.08$, $P = 0.080$).

Table 2. The correlation coefficients of mean scores of happiness and meaning of life with characteristics of medical sciences students in Golestan, $N=457$

Variable	Meaning of life	Age	Number of family members	Birth rank	Academic semester	Grade point average
Happiness	$r=0.63$ $P=0.0001$	$r=0.01$ $P=0.67$	$r=0.04$ $P=0.30$	$r=-0.06$ $P=0.19$	$r=0.01$ $P=0.72$	$r=0.11$ $P=0.02$
Meaning of life	-	$r=0.05$ $P=0.23$	$r=0.06$ $P=0.15$	$r=0.01$ $P=0.76$	$r=-0.05$ $P=0.28$	$r=0.08$ $P=0.08$

The multivariable linear regression analysis (Table 3) demonstrated that happiness had a strong and statistically significant positive association with meaning in life ($\beta = 0.58$, 95% CI: 0.51 - 0.65, $P < 0.001$), indicating that higher levels of happiness were consistently associated with greater perceived meaning in life among medical students. Significant demographic differences were also observed. Female students reported lower meaning in life scores than male students ($\beta = -3.85$, $P < 0.001$), whereas students from the Sistani ($\beta = 3.62$, $P = 0.006$) and Turkman ($\beta = 2.05$, $P = 0.032$) ethnic groups reported higher meaning in life compared with Fars students. Employment status emerged as an important factor, with employed students scoring significantly higher on meaning in life than unemployed students ($\beta = 4.75$, $P < 0.001$). Although family income showed a positive trend in the highest income category (>20 million Tomans, $\beta = 1.92$), this association did not reach statistical significance ($P = 0.080$). Collectively, these findings suggest that while happiness is the strongest predictor of meaning in life, gender, ethnicity, and employment status act as important demographic modifiers that should be considered in student well-being interventions. The model explained a substantial proportion of the variance in meaning in life (Adjusted $R^2 = 0.45$), supporting the robustness of the observed associations.

Table 3. Multivariable linear regression analysis of the association between happiness and meaning in life, adjusted for confounding variables ($N=457$)

Variable	Adjusted β (95% CI)	P-value
Meaning in life	0.58 (0.51, 0.65)	< 0.001
Gender	-	-
Male (Ref)	-	-
Female	-3.85 (-6.12, -1.58)	0.001
Ethnicity	-	-
Fars (Ref)	-	-
Turkman	2.05 (0.18, 3.92)	0.032
Sistani	3.62 (1.05, 6.19)	0.006
Family income	-	-
5-10 million (Ref)	-	-
10-20 million	-0.88 (-2.95, 1.19)	0.40
> 20 million	1.92 (-0.25, 4.09)	0.08
Employment status	-	-
Unemployed (Ref)	-	-
Employed	4.75 (2.30, 7.20)	< 0.001

Discussion

The present study identified a positive correlation between meaning in life and happiness among medical students, which is consistent with previous research demonstrating a significant relationship between these constructs (33). Supporting evidence also indicates that meaning in life is negatively correlated with anxiety, suggesting a buffering effect against psychological stress (34). The broader literature further confirms that a sense of purpose enhances coping abilities, information processing, and future orientation (35,36), thereby serving as an important adaptive resource (2,6,37). The mean meaning in life score observed in this study (95.88) reflects a moderate to high level among students, a finding that is consistent with reports from other Iranian student populations (38,39).

The study also found that male students reported significantly higher happiness scores than female students. This finding is consistent with the results reported by Sharifi et al. (40), but contrasts with studies that have found no significant gender differences (41) or higher happiness scores among female students (42). Additionally, other studies have documented associations between gender and meaning in life, further supporting the relevance of gender as an influential factor in psychological well-being (43,44).

Educational level and type of school were not significantly associated with meaning in life among students; however, both variables were related to happiness scores. Specifically, students at the Master's and Doctoral levels reported the highest happiness scores, a finding consistent with some previous studies. The highest levels of happiness were observed among students in the School of Dentistry, whereas the lowest scores were reported by students in the School of New Technologies. Similarly, Chalesghar-Kordasiabi et al. reported higher happiness scores among dental students compared with those in other faculties (45). This pattern may be attributed to the relatively high professional status of dentistry or to characteristics of the profession itself, which may contribute to greater satisfaction with the chosen field of study. As also noted by Thomas, satisfaction with one's field of study plays an important role in student happiness (46). In contrast, some studies, such as that conducted by Jiang et al. (47), did not identify a significant relationship in this regard.

The findings of the present study also indicated that students who were native to Golestan province and those living outside dormitories reported higher happiness scores, which is consistent with the results of some previous studies (40,48). In addition, a significant association was observed between ethnicity and happiness, with happiness levels ranked as follows: Sistani, Turkmen, Other, Turk, and Fars. However, ethnicity was not significantly associated with meaning in life.

The study identified a significant association between overall GPA and happiness, which is consistent with findings from previous research (49). While academic achievement appears to be related to happiness, it does not show a significant association with meaning in life (50). The pursuit of meaningful goals has been shown to play an important role in cognitive and mental health within this population (51). Accordingly, educational planning in the medical sciences should place greater emphasis on strategies that enhance students' happiness and overall satisfaction. Future studies should focus on developing and evaluating interventions that simultaneously target happiness and meaning in life, and students should be equipped with skills that promote psychological well-being and improve future professional performance.

This study has several limitations that should be acknowledged. Its cross-sectional design precludes causal inferences. The use of self-reported measures introduces the possibility of response bias. Convenience sampling may limit the generalizability of the findings, and unmeasured confounding variables could have influenced the observed associations. In addition, the Persian versions of the OHQ and PIL may not fully capture all cultural nuances related to happiness and meaning in life.

Conclusion

This study confirms a strong association between happiness and meaning in life among medical students, while also demonstrating that both constructs are influenced by demographic and socioeconomic factors. Overall, students exhibited moderate levels of well-being, with gender, ethnicity, and employment status independently predicting meaning in life. These findings underscore the need for tailored support programs that address specific vulnerabilities, particularly among female students, unemployed students, and certain ethnic minority groups.

Application of results

The strong correlation between happiness and meaning in life suggests that these constructs may mutually reinforce one another among medical students. Given that the majority of students scored below desirable levels of happiness, the implementation of targeted interventions should be prioritized. The significant associations with employment and residential status further highlight the importance of addressing socioeconomic factors within student support programs. Moreover, the observed relationship between happiness and academic performance (GPA) underscores the potential academic benefits of integrating well-being initiatives into medical education.

Recommendations for future research

To build on the present findings, future research should prioritize longitudinal study designs to clarify causal relationships between happiness, meaning in life, and academic outcomes. Intervention-based studies are also needed to develop and evaluate targeted well-being programs, particularly for demographic groups at higher risk. In addition, qualitative approaches and comparative multi-site studies are recommended to explore underlying contextual factors and enhance the generalizability of findings. Further investigations should examine differential outcomes across demographic subgroups and explore potential threshold effects whereby happiness exerts a significant influence on academic performance.

Acknowledgement

The authors sincerely thank the students who participated in the study for their time and cooperation. The authors also acknowledge the Student Research Committee Affairs at Golestan University of Medical Sciences for their support.

Funding sources

This project was financially supported by the Deputy of Research and Technology of Golestan University of Medical Sciences.

Ethical statement

Ethical approval for this study was obtained from the Ethics and Research Committee of Golestan University of Medical Sciences (IR.GOUMS.REC.1402.452). All procedures involving human participants adhered strictly to the principles of beneficence, non-maleficence, veracity, confidentiality, and voluntarism, in accordance with the Helsinki Declaration. Participants incurred no costs for participation, and no financial incentives were provided.

Conflicts of interest

The authors declare no conflicts of interest related to the material presented in this paper.

Author contributions

M. M., F. M., and F. B. conceptualized the study design. All authors contributed to the implementation of the study. F. M. performed the data analysis and interpretation. M. M. and F. M. drafted the manuscript. All authors participated in revising the manuscript, and all authors read and approved the final version.

Data availability statement

The datasets generated and analyzed during the current study are available from the corresponding author upon reasonable request.

References

- Schmid MJ, Oblinger-Peters V, Örencik M, Schmid J, Conzelmann A, Ronkainen NJ. Meaning in life of elite athletes: A person-oriented study. *Psychol Sport Exerc*. 2025;76:102730. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
- Zhou S, Jiang L, Li W, Leng M. Meaning in life from a cultural perspective: the role of cultural identity, perceived social support, and resilience among Chinese college students. *Humanit Soc Sci Commun*. 2025;12(1):1-13. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
- Hu J. Dispositional awe, meaning in life, and socially responsible consumption. *Serv Ind J*. 2025;45(1):27-53. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
- Martela F. Being as having, loving, and doing: A theory of human well-being. *Pers Soc Psychol Rev*. 2024;28(4):372-97. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
- Frankl VE. *Embracing Hope: On Freedom, Responsibility & the Meaning of Life*. Boston (MA): Beacon Press; 2024. [[View at Publisher](#)] [[Google Scholar](#)]
- Soghi I, Saeedi S, Sanagoo A, Jouybari L, Ebrahimirad M, Mehravar F. Quality of life in a group of Iranian patients with neurofibromatosis type 1 with cutaneous expressions. *J Mazandaran univ med sci*. 2018;28(162):95-103. [[View at Publisher](#)] [[Google Scholar](#)]
- Russo-Netzer P, Tarrasch R. The path to life satisfaction in adolescence: life orientations, prioritizing, and meaning in life. *Curr Psychol*. 2024;43(18):16591-603. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
- Dehghan M, Khodabakhshi-Koolaei A, Heidari H, Najdi N. Improving daily spiritual experiences and hope among infertile women: The impact of spiritually integrated psychotherapy. *J Res Dev Nurs Midw*. 2024;21(1):34-7. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
- Mohabi Nuruddin Vand B, Bladi NM. Medical analysis of mutual effects on the academic progress of primary school students based on health and mental health. *EJCMPr*. 2023;2(2):75-96. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
- Khoshnood G, Shayan N, Babaie Amiry N, Ashoori J. Relationship between Religious Orientation, Happiness, Locus of Control and Coping Strategies, and Spiritual Well-being Among Nursing Students. *J Res Dev Nurs Midw*. 2016;12(3):9-18. [[View at Publisher](#)] [[Google Scholar](#)]
- Oishi S, Westgate EC. A psychologically rich life: Beyond happiness and meaning. *Psychol Rev*. 2022;129(4):790-811. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
- Cai B, Chen W. Research on the Micro-Renewal of Street Space Vitality in Mituo Road Block Based on Space Syntax. In: *Proceedings of the 9th International Conference on Modern Management, Education and Social Sciences (MMET 2024)*; 2024 Dec 9; Xi'an, China. Amsterdam: Atlantis Press; 2024. p. 786-800. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
- Lee MT, McNeely E, Weziak-Bialowolska D, Ryan KA, Mooney KD, Cowden RG, et al. Demographic predictors of complete well-being. *BMC Public Health*. 2022;22(1):1687. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]

14. Krishnan L. Happiness research from the psychological perspective: thoughts of an optimist. *Handbook of happiness: Reflections and praxis from around the world*: Springer; 2023. p. 3-35. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
15. Brandy S. Mapping Global Joy: Descriptive Analytics of Subjective Well-Being from the World Happiness Report. *IJITCSA*. 2024;2(1):32-46. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
16. Lopes CDS, Gomes NL, Junger WL, Menezes PR. Trend in the prevalence of depressive symptoms in Brazil: results from the Brazilian National Health Survey 2013 and 2019. *Cad Saude Publica*. 2022;38:e00123421. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
17. Kazem nejad E, Dehghani F, Buraki S. Sources of stress among students in Guilan University of Medical Sciences. *J Res Dev Nurs Midw*. 2015;12(1):118-26. [[View at Publisher](#)] [[Google Scholar](#)]
18. Kamruzzaman M, Hossain A, Islam MA, Ahmed MS, Kabir E, Khan MN. Exploring the prevalence of depression, anxiety, and stress among university students in Bangladesh and their determinants. *Clin Epidemiol Glob Healt*. 2024;28:101677. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
19. Tempiski P, Bellodi PL, Paro HB, Enns SC, Martins MA, Schraiber LB. What do medical students think about their quality of life? A qualitative study. *BMC Med Educ*. 2012;12:106. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
20. Al-Najdi S, Mansoor A, Al Hayk O, Al-Hashimi N, Ali K, Daud A. Silent struggles: a qualitative study exploring mental health challenges of undergraduate healthcare students. *BMC Med Educ*. 2025;25(1):157. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
21. Kazeminejad S, Abtahi M, Askari M, Marbini MH, Jalilpiran Y, Azadbakht L. Impact of DASH and mediterranean diets on mood and happiness in young adult males: a cross-sectional study. *BMC Res Notes*. 2025;18(1):100. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
22. Yıldırım M, Arslan G, Green ZA, Ashraf F, Sugawara D, Tanhan A, et al. Validation and utility of the Meaning in Life Measure for Turkish university students. *Journal of Happiness and Health*. 2021;1(1):40-8. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
23. Martinez-Calderon J, García-Muñoz C, Heredia-Rizo AM, Cano-García FJ. Meaning and purpose in life, happiness, and life satisfaction in cancer: Systematic review with meta-analysis. *Psychooncology*. 2023;32(6):846-61. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
24. Lee O-S, Jang S-H. The Relationships between Meaning in Life and Happiness among University Students. *J. Korea Acad.-Ind. Cooper. Soc*. 2017;18(9):113-22. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
25. Ganai NN, Navarez JC. Meaning in life and happiness among tertiary education students. *AsTEN JTE*. 2018;3. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
26. Aljuwaiser S, Brazzelli M, Arain I, Poobalan A. Common mental health problems in medical students and junior doctors-an overview of systematic reviews. *J Ment Health*. 2024;33(6):779-815. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
27. Li PJ, Wong YJ, Chao RC-L. Happiness and meaning in life: Unique, differential, and indirect associations with mental health. *Couns Psychol Q*. 2019;32(3-4):396-414. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
28. Rubio-Belmonte C, Mayordomo-Rodríguez T, Marco-Ahullo A, Aragonés-Barberá I, editors. Psychometric Validation of the Purpose in Life Test-Short Form (PIL-SF) in Individuals Diagnosed with Severe Mental Illness. *Healthcare*. 2024;12(20):2082. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
29. Burris LS. What is the meaning of this? A proposed assessment tool for exploring meaning of life in the therapeutic realm [dissertation]. Richmond (KY): Eastern Kentucky University; 2025. [[View at Publisher](#)] [[Google Scholar](#)]
30. Javad M, Parsa R, Rabbani E. Factor structure of " Purpose in Life" questionnaire. *Educational Measurement*. 2022;12(47):7-32. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
31. Hills P, Argyle M. The Oxford Happiness Questionnaire: a compact scale for the measurement of psychological well-being. *Pers Individ Dif*. 2002;33(7):1073-82. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
32. Liaghatdar MJ, Jafari E, Abedi MR, Samiee F. Reliability and validity of the Oxford Happiness Inventory among university students in Iran. *Span J Psychol*. 2008;11(1):310-3. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
33. Ghahramani S, Jahromi AT, Khoshsoroor D, Seifooripour R, Sepehrpoor M. The relationship between emotional intelligence and happiness in medical students. *Korean J Med Educ*. 2019;31(1):29-38. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
34. Dehdari T, Yarahmadi R, Taghdisi MH, Daneshvar R, Ahmadpoor J. The relationship between meaning in life and depression, anxiety and stress status among college students of Iran University of Medical Sciences in 2013. *Iran J Health Educ Health Promot*. 2013;1(3):83-92. [[View at Publisher](#)] [[Google Scholar](#)]
35. Dursun P, Alyagut P, Yılmaz I. Meaning in life, psychological hardness and death anxiety: individuals with or without generalized anxiety disorder (GAD). *Curr Psychol*. 2022;41(6):3299-317. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
36. Scott A, Gould R, Quidore L, Koeut-Futch K, Bock E, Kumar PS, et al. Stress, Anxiety and Coping in Adults With Down Syndrome: An Exploratory Co-Research Study. *J Appl Res Intellect Disabil*. 2025;38(1):e13311. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
37. Park CL, Malone MR, Suresh DP, Bliss D, Rosen RI. Coping, meaning in life, and quality of life in congestive heart failure patients. *Qual Life Res*. 2008;17(1):21-6. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
38. Barati F, Ashrafi Z, Najafi F, Karimi A, Sharifzadeh G. The investigation of happiness status and its related factors in students of Birjand University of Medical Sciences in 2013. *jmsthums*. 2015;3(2):30-26. [[View at Publisher](#)] [[Google Scholar](#)]
39. Hassanien DSAE, William M, Emam NE. The Relative Contribution of Spiritual Intelligence in Predicting Happiness among High School Female Students. *Buhūth*. 2024;4(7):124-50. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
40. Sharifi K, Sooky Z, Tagharrobi Z, Akbari H. Happiness and its related factors among the students of Kashan university of medical sciences in 2006-7. *Feyz Med Sci J*. 2010;14(1):62-9. [[View at Publisher](#)] [[Google Scholar](#)]
41. Siamian H, Naeimi OB, Shahrabi A, Hassanzadeh R, Abazari MR, Khademloo M, et al. The status of happiness and its association with demographic variables among the paramedical students. *J Mazand Univ Med Sci*. 2012;22(86):159-66. [[View at Publisher](#)] [[Google Scholar](#)]
42. Sahraian A, Vakili SM. Studying the happiness level among medical students of Shiraz Medical Sciences University in 2010. *Shiraz E Med J*. 2012;13(4):179-86. [[View at Publisher](#)] [[Google Scholar](#)]
43. Karataş Z, Uzun K, Tagay Ö. Relationships between the life satisfaction, meaning in life, hope and COVID-19 fear for Turkish adults during the COVID-19 outbreak. *Front Psychol*. 2021;12:633384. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
44. Kashdan TB, Goodman FR, McKnight PE, Brown B, Rum R. Purpose in life: A resolution on the definition, conceptual model, and optimal measurement. *Am Psychol*. 2024;79(6):838-53. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
45. Chaleshgar-kordasiabi M, Abbasi-shavazi M, karimi O, Hasanpoori yolme S, lakhi H, Nikookaran J. Happiness and Self-efficacy among Students of Mazandaran University of Medical Sciences. *J Tolooebehdasht*. 2022;20(6): [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
46. Thomas S. Does higher ranking ensure higher student satisfaction: evidence from higher education institutions in India. *J Appl Res Ind Eng*. 2025;17(1):320-33. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]

47. Jiang Y, Lu C, Chen J, Miao Y, Li Y, Deng Q. Happiness in university students: Personal, familial, and social factors: A cross-sectional questionnaire survey. *Int J Environ Res Public Health*. 2022;19(8):4713. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
48. Barati F, Ashrafi Z, Najafi F, Karimi A, Sharifzade G. The investigation of happiness status and its related factors in students of Birjand University of Medical Sciences in 2013. *jmsthms*. 2015;3(2):30-26. [[View at Publisher](#)] [[Google Scholar](#)]
49. Thongsri N, Seksan J, Warintarawej P. Factors Affecting the Happiness of Learners in Higher Education: Attitude, Grade Point Average, and Time Management. *Sustainability*. 2024;16(18):8214. [[View at Publisher](#)] [[DOI](#)] [[Google Scholar](#)]
50. Sutin AR, Luchetti M, Stephan Y, Sesker AA, Terracciano A. Purpose in life and stress: An individual-participant meta-analysis of 16 samples. *J Affect Disord*. 2024;345:378-85. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]
51. Sattar K, Yusoff MSB, Arifin WN, Yasin MAM, Nor MZM. Effective coping strategies utilised by medical students for mental health disorders during undergraduate medical education-a scoping review. *BMC Med Educ*. 2022;22(1):121. [[View at Publisher](#)] [[DOI](#)] [[PMID](#)] [[Google Scholar](#)]

Cite this article as:

Mansouri M, Mehravar F, Feghhi H, Barati F. The association between happiness and meaning of life in students of Golestan University of Medical Sciences, Iran. *IJHMD*. 2025;2(2):1-6. <http://dx.doi.org/10.29252/IJHMD.2.2.1>