

Original Article



The Association Between Happiness and Spiritual Well-being in Students in Iran

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Abstract

Background: Ensuring individuals' health and well-being has always been important in all societies, and its promotion is considered one of the essential factors in the development of any country. Hence, this study examined the association between happiness and spiritual well-being (SWB) in students.

Methods: The present cross-sectional study was conducted on 376 students who were selected by stratified simple random sampling from Hamadan universities in Iran in June 2020. A three-part questionnaire, including a socio-demographic questionnaire, Oxford Happiness Inventory, and SWB questionnaires was used to collect the data. The SPSS software (version 23) was then employed to analyze the data, and the significance level was considered at $P < 0.001$.

Results: Based on the results, the mean (\pm standard deviation) scores of happiness and SWB were 36.73 ± 17.63 and 90.87 ± 16.96 , respectively. In addition, there was a significant correlation between SWB and the total and happiness dimensions ($P < 0.001$). Furthermore, the simple linear regression analysis results revealed that the students' SWB ($\beta = 0.203$, $P < 0.001$) is a predictor of happiness.

Conclusion: In general, students' happiness and SWB were at a moderate level. Therefore, designing and implementing spirituality-based educational interventions to improve the students' happiness could be helpful.

Keywords: Mental health, Student, Well-being

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Introduction

Inequitable Access to Health Care and Mental Health

As the principle of human beings, spiritual well-being (SWB) affects many aspects of our health, including mental health (1). Several studies reported that SWB is associated with positive and negative mental health outcomes such as happiness, hope, self-esteem, depression, suicide, anxiety, substance use disorders, cigarette smoking, and marital instability (2,3). There is a lack of research on measuring young people's mental health, especially in a developing country that may have fragile health systems, scarce resources and workforce capacity, and overall scarce and inequitable access to health care (4-6). However, some evidence in a developed country indicates more critical risks of emotional disorders (7). On the other hand, some studies were conducted on the prevalence of mental health disorders in low- and middle-income countries, indicating that more than 100 000 individuals in Bangladesh reported

a 33% and 5% prevalence of depression and suicidal ideation, respectively (8).

In addition, the study results showed that 35.3% of college students had mental illness in 2018 (9). The evidence indicated that 23% of people in Iran suffer from at least one mental disorder (10). However, the health system in Iran is faced with growing changes regarding socioeconomic dimensions and changes in communicable to non-communicable burdens of diseases. Moreover, some important challenges of the health system in Iran are rising health costs, non-coverage of costs by insurance, incomplete coverage of primary health care, the lack of a referral system, and the fragmentation of policymaking. These changing needs are the foundation of social and economic evolutions (11).

Response to Emergency Mental Health Crises

The complications of emergency response to mental health may include violence, anxiety, mismanagement



in response to this disease, difficulty sleeping, and fatigue (6,12,13). People who experience a mental health condition not only need support from health and social care services but, at times, need an emergency response from the front-line services such as improved care pathways, and the development of new community-based pre-crisis responses to people who try to seek help before distress escalates into crisis (14).

Mental Health as an Urgent Need for the Progress of any Country

Ensuring individuals' health and well-being has always been important in different societies, and its promotion is considered one of the essential factors in the progress of any country (15). Happiness is one of the most critical issues in psychology, which is widely considered by psychologists and thinkers due to its widespread effects on people's satisfaction with life (16).

Spiritual health is one of the most critical aspects of health in individuals as spiritual health and religion cope with and adapt to anxieties (17). According to previous research, religious people have a higher happiness rate and are healthier, which is more evident in religious communities (18,19). However, a robust positive relationship exists between happiness and social behavior (20). Spirituality has different connotations for different people. Essentially, it is a universal human experience, more precisely, something that affects all individuals (21). Notably, mental health support depends on the stage of the pandemic. For example, mental health examination and prevention programs such as peer counseling services and family-based interventions were implemented during this period (22,23). Nevertheless, research has been delayed due to a lack of attention to students' mental health, personal characteristics, student adaptation, and flexibility to the new environment (24).

The student community is essential to human society. There has been a recall for examining young people's mental health (25). Previous research proved that 30% of students experience depression, anxiety, and stress, and 12% of students at Hamadan University suffered from fear during the coronavirus pandemic (26,27). Additionally, a prior study on adults in Iran found that stress, anxiety, and depression are reported in 34.8%, 32.2%, and 29% of adults, respectively (28). On the other hand, the evidence indicated that recent situations have unprecedentedly impacted all aspects of life, including mental outcomes such as death, distress, and decreased happiness (29), and results of a study indicated that more than half of the students might have a mental disorder (30). Thus, this study aimed to investigate the psychological consequences and the association between happiness and SWB in the students of Hamadan University in Iran in June 2020.

Materials and Methods

The current descriptive-analytical cross-sectional study was performed on 376 Hamadan University students

selected using stratified random sampling methods in 2020.

Sample Size

This is a descriptive-analytical study, and the desired level of mental health among students in previous studies has been reported as 36% (31). The sample size was estimated to be 354 people considering the degree of accuracy ($d=0.05$). According to the 10% probability of non-response, the final sample number was estimated at 390 people.

$$n = \frac{z^2 pq}{d^2} = \frac{(1.96)^2 \times 0.36 \times 0.64}{(0.05)^2} = \frac{(3.84)(0.2304)}{0.0025} \cong 354$$

Of this figure, 376 students completed the questionnaire with a response rate of 96%, while about 14 people submitted incomplete questionnaires, so they were excluded from the study.

Data Collection

Data collection tools included a three-part questionnaire, including a demographic information questionnaire (age, gender, family income, marital status, academic achievement, and access to health information via social networks, networking platforms, and friends as a non-credible source (27,32), and health care professionals, medical university booklets, newspaper and magazines, radio, and TV, as credible sources (27,33)), Oxford Happiness Inventory (OHI) (34,35), and spiritual well-being scale (SWBS) (35-37). The required data were collected in June 2020.

OHI evaluates happiness in six dimensions: life satisfaction, joy, self-esteem, calm, control, and efficacy (38). The OHI was first developed by Argil et al in 1989. It has 29 items with a four-point rating scale of agreement ranging from 1 (strongly disagree) to 4 (strongly agree), and the scores range from 0 to 87 (34,39). Higher scores indicate a greater happiness level, but the score range of 40-42 is considered normal. The validity and reliability of this scale were confirmed in various studies in Iran (1,38,40,41).

The SWBS, which was developed by Paloutzian and Ellison, involves 20 positive and negative items with a six-point Likert-type scale. This questionnaire includes two subscales of religious well-being (RWB) and existential well-being (EWB). Each subscale has ten items in the range of 10-60. The total SWBS score is computed by summing up RWB and EWB scores, ranging from 20 to 120 (24,35-37). The validity and reliability of the Persian version of SWBS were previously approved by some studies (1,42).

Participants of the present study were selected by stratified simple random sampling. Therefore, the number of students in each university was obtained by proportional assignment of students to the university (i.e., the university with the most significant number of students and the largest number of students were selected

for the study), and they were rationed after coordinating with university officials and the research units. Then, the samples were randomly collected and included in the study.

The inclusion criteria were being a student of Hamadan universities, studying for at least one semester, and showing a willingness to participate in the study and complete the questionnaire. On the other hand, the exclusion criteria were a non-Muslim religion, a history of using psychoactive drugs, having chronic disorders, experiencing a mental disorder during the past six months, the unwillingness to continue working with the research team, and the incomplete completion of questionnaires.

Questionnaires were completed through students' self-reporting with informed consent to participate in the study.

Statistical Analysis

The SPSS software (version 23) was used to analyze the data by descriptive statistics methods. The Kolmogorov–Smirnov test showed that data were normally distributed, and the independent *t* test and one-way ANOVA were used to compare OHI and SWBS item scores. Furthermore, a regression analysis test was used to investigate relationships between variables.

Results

The age range of the study participants was between 19 and 47 years, with a mean of 23.26 ± 4.58 years. The data indicated that 68.4% of the participants are women, and 83% are single. Approximately 55.0% of the participants had a moderate economic status (Table 1). According to the results, the mean happiness score was 36.73 ± 17.63 , while that of SWB was 90.87 ± 16.96 . In addition, there was a significant association between SWB and the total and happiness dimensions ($P < 0.001$), as depicted in Table 2. Moreover, a significant association was found

Table 1. Participant's Demographic Characteristics

Variables	No. (%)
Age	
<20	84 (22.3)
>20	292 (77.7)
Gender	
Men	119 (31.6)
Female	257 (68.4)
Economic status	
Low < 100 million rials	21 (5.6)
Medium 100-200 million rials and Good > 200 million rials	355 (94.4)
Marital status	
Single	312 (83)
Married	64 (17)
Education status	
Bachelor's degree	236 (62.8)
Master and upper	140 (37.2)

between happiness and age ($P = 0.019$), economic status ($P < 0.001$), marital status ($P = 0.005$), education status ($P = 0.007$), and access to health information ($P = 0.014$). In other words, the level of happiness was less in students under the age of 20 compared to those above 20 years old (mean = 32.77 ± 13.41 vs. 37.87 ± 18.53 ; $P < 0.001$), in students who had a bachelor's degree compared to those with master's degree and above (mean = 34.88 ± 16.74 vs. 39.91 ± 18.66 ; $P < 0.007$), and in students who were married than in single ones (mean = 31.16 ± 15.79 vs. 37.88 ± 1.92 ; $P < 0.005$). Similarly, the level of happiness was less in students who had an excellent economic state than those with low-medium socioeconomic status (mean = 36.02 ± 1.30 vs. 48.80 ± 19.12 ; $P < 0.001$) and in those who had access to health information from non-credible sources than people who had access to credible sources (mean = 34.37 ± 16.55 vs. 38.83 ± 18.32 ; $P = 0.014$). Although there was a significant association between SWB and age ($P = 0.01$), SWB in students under 20 was less (Table 3). Additionally, 52.9% of students had access to health information from credible sources (Figure 1).

Based on the simple linear regression analysis results, SWB ($\beta = 0.203$) was identified as a predictor of the students' happiness in the study (Table 4). After adjusting age and educational achievement, SWB ($\beta = 0.379$, $P < 0.001$) significantly predicted happiness.

Discussion

This study examined the association between happiness and SWB in students. According to the findings, the student's level of happiness was moderate. In the study by Delavar and Shokouhi Amirabadi, the students were happy during the crisis (43). In addition, Fardisi et al reported a moderate level of happiness for the students in their study (44). In line with this study, Feizi et al found that the total scores of SWBS were moderate (24). The main reasons for such discrepancies can be different populations and study times.

Further, the unawareness of the COVID-19 may be one reason for the lack of high vitality and happiness or SWB. It should also be noted that, in principle, the definitions of energy and dynamism in people's minds are different depending on their perspectives of life, which can also cause differences in the answers and results of such studies. The reviews of the average scores of students' happiness in Iranian universities indicated moderate happiness, while student studies in Turkey represented perfect happiness (45). Comparing the happiness results in different universities, it can be noted that various factors affect students' happiness which are different in other societies and countries at the university level. These factors include scientific self-efficacy, academic social capital, hope for the future, and health determinants. Unfortunately, factors such as the growth of the documentarian phenomenon and the COVID-19-related damage to the whole society, which are gradually gripping our education, have caused our universities to be less lively and dynamic compared

Table 2. Mean Score and Correlations of the SWB and Happiness Dimensions

Variables	Mean±SD	SWB	Happiness	Life Satisfaction	Joy	Self-esteem	Calm	Control	Efficacy
1) Spiritual well-being	90.87±16.96	1							
2) Happiness	36.73±17.63	0.203**	1						
3) Life satisfaction	9.12±5.58	0.209**	0.948**	1					
4) Joy	9.91±5.0	0.193**	0.949**	0.879**	1				
5) Self-esteem	6.57±3.25	0.198**	0.924**	0.832**	0.845**	1			
6) Calm	4.81±2.20	0.192**	0.812**	0.706**	0.711**	0.761**	1		
7) Control	4.54±2.56	0.073	0.841**	0.788**	0.766**	0.724**	0.602**	1	
8) Efficacy	1.48±0.92	0.126*	0.626**	0.53**	0.549**	0.559**	0.502**	0.511**	1

Note. SWB, spiritual well-being; SD, standard deviation.

** P value is significantly different ($P < 0.001$); * P value is significantly different ($P < 0.05$).

Table 3. Association between Happiness and SWB With Demographic Variables in Study Participants

Variables	Total Happiness	Life Satisfaction	Joy	Self-esteem	Calm	Control	Efficacy	Total SWB	RWB Subscale	EWB Subscale
	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Age										
<20	32.77±13.41	7.01±4.28	8.57±3.83	6.24±2.68	4.31±1.89	4.23±2.29	1.37±0.88	86.68±15.37	41.20±9.07	45.48±9.11
≥20	37.87±18.53	9.50±5.85	10.29±5.23	6.66±3.4	4.95±2.26	4.63±2.63	1.51±0.93	92.08±17.22	43.86±9.40	48.22±9.29
P value	0.019*	0.014*	0.005	0.294	0.019*	0.199	0.205	0.010*	0.022*	0.017*
Gender										
Men	38.21±18.15	9.47±5.70	10.66±5.29	6.88±3.45	4.71±2.13	4.49±2.71	1.63±0.9	91.81±16.1	43.13±9.52	48.25±8.19
Female	36.05±17.36	8.96±5.53	9.56±4.82	6.42±3.15	4.84±2.23	4.57±2.5	1.41±0.92	90.44±17.35	43.56±9.12	47.31±9.79
P value	0.269	0.41	0.046*	0.201	0.58	0.777	0.033*	0.464	0.677	0.361
Economic status										
Low	48.80±19.12	13.28±6.45	13.43±5.59	8.24±3.46	5.95±1.80	2.69±5.43	2.1±1.0	90.66±17.1	44.52±9.07	49.95±7.11
Good	36.02±1.30	8.87±5.43	9.70±4.89	6.66±3.11	4.74±2.20	2.55±4.49	1.45±0.85	94.48±14.21	43.19±9.41	47.47±9.41
P value	0.001*	0.001*	0.001*	0.03*	0.014*	0.103	0.001*	0.317	0.528	0.235
Marital status										
Single	37.88±1.92	9.50±5.67	10.13±5.01	6.81±3.28	4.93±2.21	2.63±4.69	1.52±0.91	91.56±15.86	43.62±9.01	47.94±8.59
Married	31.16±15.79	7.26±4.70	8.84±4.83	5.39±2.87	4.22±2.05	2.09±3.84	1.3±0.97	87.52±21.33	41.53±10.96	45.99±12.19
P value	0.005	0.003*	0.061	0.001*	0.019*	0.016*	0.078	0.082	0.105	0.126
Education status										
Bachelor	34.88±16.74	8.72±5.28	9.23±4.68	6.25±3.01	4.61±2.24	4.37±2.43	1.46±0.89	94.48±14.21	43.42±8.97	47.66±8.98
Master and upper	39.91±18.66	9.79±6.01	11.06±5.32	7.11±3.44	5.13±2.10	4.84±2.75	1.51±0.98	90.65±17.1	43.01±10.08	47.51±9.88
P value	0.007	0.075	0.001*	0.013*	0.028*	0.005	0.594	0.762	0.689	0.883
Academic achievement										
Good=GPA>17	44.43±18.95	11.50±6.08	12.04±5.32	7.77±3.50	5.63±2.24	5.40±2.75	1.69±0.97	95.79±12.47	49.58±7.17	46.21±6.97
Moderate and low=GPA<16.99	27.30±9.54	6.20±2.93	7.30±2.92	5.09±2.14	3.80±1.67	3.49±1.82	1.23±0.79	84.85±19.61	45.19±10.94	39.66±10.64
P value	0.001*	0.001*	0.001*	0.001*	0.001*	0.001*	0.001*	0.001*	0.001*	0.001*
Access health information										
Credible sources	38.83±18.32	9.72±5.78	10.47±5.28	7.03±3.38	5.05±2.26	4.63±2.55	1.38±0.92	89.53±17.14	44.08±9.20	48.0±8.90
Non-credible sources	34.37±16.55	8.44±5.27	9.28±4.59	6.05±3.02	4.53±2.1	4.45±2.58	1.57±0.92	92.07±16.74	42.36±9.53	47.17±9.75
P value	0.014*	0.026*	0.022*	0.003*	0.022*	0.493	0.041*	0.147	0.076	0.391

Note. SWB: Spiritual well-being; RWB: Religious well-being; EWB: Existential well-being; SD: Standard deviation; GPA: Grade point average.

* Asterisk symbol indicates that the P-value is significantly different ($P < 0.05$) from that obtained by the independent t-test.

Table 4. Linear Regression Analysis to Predict the SWB

Independent Variables	Univariate Analysis					Multivariable Analysis				
	B	SE	β	95% CI		P Value	β^*	95% CI		P Value
				Lower	Upper			Lower	Upper	
Happiness	0.195	0.094	0.203	0.099	0.291	0.001	0.379	3.428	6.834	0.001

Note. SWB: Spiritual well-being; β : Standardized regression coefficient; SE: Standard error; CI: Confidence interval.
*Adjusted by age and educational achievement.

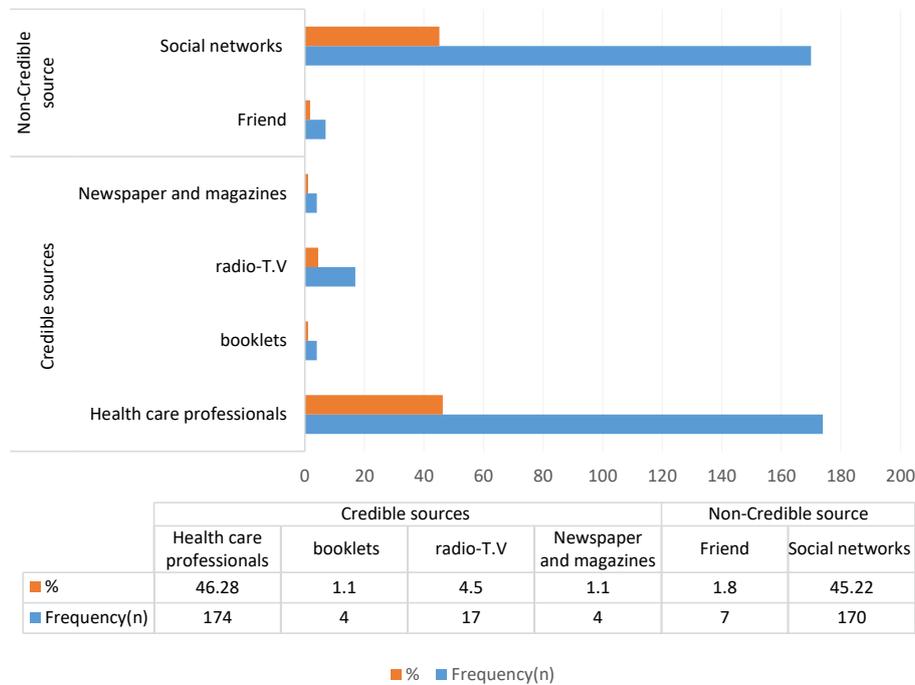


Figure 1. Access Health Information in Study Participants

to many other countries. Therefore, planning and implementing studies to promote happiness and SWB in medical universities is necessary.

Another finding of this study was the existence of a significant association between SWB and happiness. In line with this result, Tabibi et al concluded that having spiritual health is associated with responsibility, purposefulness, and the ability to deal with life problems in the individuals (33).

The results also demonstrated a significant relationship between happiness and age, economic status, education status, and marital status. In other words, older students with low financial status experienced more happiness and were happier. Sedlarski noted that increasing income levels do not increase happiness, which is in line with the result of the present study (46). In older people, creating a sense of responsibility leads to an increase in mental health and happiness in this group of people. Therefore, designing and implementing an educational and promotional intervention for young students' happiness is necessary.

Likewise, there was a significant relationship between happiness and access to credible health information by health staff, TV, and radio. Generally, the World Health Organization (WHO) and the organization and administration of health community services create

credible COVID-19- and health-related media messages. These organizations' critical goals are to ensure the health promotion and well-being of all age groups (32). Furthermore, Morganstein underlined that healthcare workers help correct inaccurate information and misperceptions by sharing credible and established public health resources and emphasized limiting exposure to fake media messages, especially during the Coronavirus crisis (47). Notably, the coronavirus outbreak has affected global mental health (48); thus, it is essential to pay attention to the media's role in health and public health's effect on the optimal functioning of individuals, especially healthy media consumption (49). Therefore, health-promoting media literacy education using health-oriented media messages seems necessary.

The results of this study highlighted a significant relationship between SWB and age. Based on the results, the students' SWB would grow with age, which matches the result of Ziapour et al (42), which may be due to the adaptation to the reality of death.

In the current study, SWB was identified as a predictor of students' happiness, which is in line with the results of a survey conducted on undergraduate university students by Vahedi and Nazari, confirming a positive association between life satisfaction and spirituality (50).

Accordingly, designing and implementing an educational and promotional intervention to improve mental health is necessary, especially during the COVID-19 pandemic.

Strengths and Limitations

One of the limitations of this study was the completion of the questionnaires using the self-report method. Thus, qualitative research was suggested for future research. Another limitation of this study was the lack of participation of some students in this research project, which might have been due to being prevented from any public activities during the COVID-19 pandemic. Therefore, it is suggested that further investigations be conducted after this pandemic. Although environmental, cultural, and psychological factors and family contribute to happiness and spirituality, we did not consider them in the present study. Thus, it is recommended that future studies focus on examining these factors to find whether they affect university students' happiness and spirituality. In addition, the cross-sectional design of the present study was one of its limitations, and the correlations found here failed to form a causal relationship. On the other hand, the strength of this study was paying attention to acquiring health information, especially in this era of media that is facing increasingly fake news and unreliable media messages. It is hoped that the results of this study can improve students' mental health.

Conclusion

In general, the students of this study represented a moderate level of happiness and SWB. The findings demonstrated an association between happiness and age, economic status, education status, and marital status, as well as obtaining valid health information and credible media messages. Moreover, there was a significant association between SWB and age. Additionally, a significant correlation was found between SWB and the total and happiness dimensions ($P < 0.001$). Based on the results, SWB ($\beta = 0.203$) was identified as a predictor of happiness in university students. Therefore, developing the pre-crisis spirituality-based educational interventions to improve the students' happiness could be helpful. Further studies are suggested to better understand the pathways of the actions that mediate SWB in happiness.

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Authors' Contribution

Conceptualization: Majid Barati, Hanieh Jormand.

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Funding acquisition: Majid Barati.

Competing Interests

The authors declare that they have no competing interests.

Consent for Publication

Not applicable.

Data Availability Statement

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

Ethical Approval

The Ethics Committee of the Hamadan University of Medical Sciences approved this study with all consent processes (No: IR.UMSHA.REC.1398.1001). Informed consent was obtained from all students. They were informed about the confidentiality of the information, the project's purpose, and their voluntary participation in the study. All methods were also performed based on relevant guidelines and regulations.

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