



# Gratitude, Spirituality, and Life Satisfaction of Pakistani and Malaysian University Students: A Cross-Cultural Study

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Received: 26 April 2025

Accepted: 23 September 2025

DOI: <https://doi.org/10.32479/irmm.20211>

## ABSTRACT

The aim of this research was to investigate the gratitude, spirituality, and life satisfaction of Pakistani and Malaysian university students. The research design of this study was correlational. The total sample (n = 470) were collected from Pakistani and Malaysian universities through purposive sampling. Both men and women regular university students with age range of 20-35 years were included in this research. The data were collected using Gratitude Questionnaire, Satisfaction with Life and The Centrality of Religiosity Scale. The results were calculated through SPSS (24.0). The results from correlation found gratitude has significant positive relationship with life satisfaction and spirituality. While life satisfaction has a significant and positive relationship with spirituality. The results also found that gratitude, spirituality, age and education are significant predictors in life satisfaction. The gender differences found significant higher the mean score of gratitude, life satisfaction and spirituality among female students than male students. In cultural differences, the gratitude, life satisfaction, and spirituality have significantly higher among Pakistani university students as compared with Malaysian university students. While gratitude, spirituality and life satisfaction are higher among Muslim university students as compared with non-Muslim university students. This research will be helpful for psychologist, researcher, teachers, university students and government agencies of Pakistani and Malaysian for policymaking.

**Keywords:** Gratitude, Spirituality, Life Satisfaction, University Students, Cross Cultural Study

**JEL Classifications:** I31 - General Welfare, Well-Being

## 1. INTRODUCTION

As modern civilization likes more material prosperity, more importance is placed on the significance of people's life satisfaction and quality of life. Huebner (2004) refers the life satisfaction as the degree to which a person feels satisfied with the various facets of his or her entire existence. Life satisfaction is a complex and subjective feelings of gratification that contains an emotional as well as cognitive assessment of a person's satisfaction with life (You et al., 2018). According to Sousa and Lyubomirsky (2001), the cognitive method of assessing person's own satisfaction with life, contrasting what one has wanted for and what one has really accomplished. Regarding university students, much research has been reported that university students face mental health issues

with low wellbeing particularly life satisfaction (Casey et al., 2022; Donald and Jackson, 2022; Faisal et al., 2022; Kupciewicz et al., 2022). While Seo et al. (2018) suggested that the enhancement of life satisfaction would be the key in management and prevention of university students' mental health problems. Past studies found the significant positive connection between life satisfaction and gratitude (Kardas et al., 2019; Yildirim and Alanazi, 2018).

### 1.1. Gratitude and Life Satisfaction

In the domain of positive psychology, gratitude is an essential positive notion that has drawn strong interest that has attracted a great deal of interest from the last two decades. According to certain definition, the idea of gratitude is a consistent attitude that refers to "a general tendency to recognize and respond with

grateful emotion to the roles of other people's benevolence in the positive experiences and outcomes that one obtains" (McCullough et al., 2002). Feelings of gratefulness have a variety of positive effects on one's various life dominions as social, psychical, and mental well-being (Lambert et al., 2009; Valikhani et al., 2019). People with gratitude try more to participate in prosocial behavior, for example being more understanding, empathic, and helpful to others, while also pursuing less materialistic goals (Chaplin et al., 2019; Oguni and Otake, 2022; Sapmaz et al., 2016).

Having gratitude for what they have in life also enables people to improve their social interactions, enjoy life more, and handle stressful situations in life (Lin, 2016; Lyubomirsky et al., 2005; McCanlies et al., 2018; Osborn et al., 2020). Furthermore, those individuals who report higher gratefulness, they also report greater positive feelings level, life satisfaction, as well as lesser negative feelings containing depressive, anxious, and stressful feelings (Froiland, 2018; Geng, 2018; Huang et al., 2020; Lee, 2022; McCanlies et al., 2018; Zhang et al., 2018).

There are several empirical relationships that have been developed which clearly demonstrate that there is a strong effective and positive relationship between life satisfaction and gratitude. According to many researchers, gratitude is also considered as a strongest factor to predict life satisfaction (Algoe et al., 2008; Datu and Mateo, 2015; Green et al., 2020; Yildirim and Alanazi, 2018). Consequently, gratitude can be regarded as an adaptive psychological strategy which is used to evaluate, assess and interpret the daily experiences and also get the benefits at the same time (Salvador-Ferrer, 2017). Therefore, many recent researchers also concluded and presented that gratitude has positive effect on life satisfaction (Datu et al., 2022; Unanue et al., 2022). In university students, Lantz et al. (2022) found that gratitude plays a significant predicting role in life satisfaction. Whereas Munawar and Tariq (2018) explored the relationship between spirituality and life satisfaction of Pakistani Muslims.

## 1.2. Spirituality and Life Satisfaction

Spirituality is frequently described as the degree to which people accept and revere a frightening force or transcendent in their lives, a force that frequently offers a sense of meaningful purpose (Benson et al., 2005). While spirituality is a universal or general people experience, which relates to greater feelings that contain a purposeful life and sense of connectedness (Craig et al., 2022; Hyde, 2008). Human qualities like honesty, tolerance, love, patience, and the ability to understand detachment, as well as compassion, happiness, faith, hope, life satisfaction are more prevalent among spiritual people because of their connection to a higher spirit that gives them a peaceful sense of belonging to the entire universe (Aftab and Irshad, 2021).

Studies have shown that the spirituality has a favorable effect on mental as well as physical health and also on other good health outcomes like life satisfaction, life quality, coping mechanisms, recovery from psychological illness, reduced addiction and suicidal behavior (Brown et al., 2013; Choi and Kim, 2011; Debnam et al., 2018; Dastgheib et al., 2015; Kharitonov, 2012; Leung and Pong, 2021; Mousavimoghadam et al., 2022; Oxhandler et al., 2018; Yoo et al., 2022).

Additionally, studies have also shown a strong connection between spirituality and measures of subjective wellbeing (Kor et al., 2019; Villani et al., 2019) and more life satisfaction (Deb et al., 2020; Lau et al., 2015; Perez et al., 2021; Kelley and Miller, 2007; Kim et al., 2013).

## 1.3. Demographics and Life Satisfaction

Numerous investigations have been made to identify the correlations and predictors of life satisfaction across cultural boundaries (Cabras and Mondo, 2018; Kang et al., 2003). Empirical evidences have been confirmed that there are wide variety of factors as like gratitude and spirituality influence life satisfaction and some of these factors are age, education, gender, cultural prospective, and religion (Alorani and Alradaydeh, 2018; Bibi et al., 2015; Jovanovic et al., 2017; Malik et al., 2021; Munawar and Tariq, 2018; Ng et al., 2009; Perez et al., 2021; Robustelli and Whisman, 2018). In Pakistani university students, Bibi et al. (2015) found that age has positive association with life satisfaction. While Cheung and Chan (2009) conducted a study among people of 35 countries and the findings of that study reported that people with higher education have higher life satisfaction. In gender differences with life satisfaction among university students, Alorani and Alradaydeh (2018) found that female students have more life satisfaction compared with male students. In a cross-cultural study with students' sample, Chen et al. (2020) found that life satisfaction has significant difference in students of Qianjiang, Taipei, and Macau. While Musbahi et al., (2022) found that people with Muslim religion are extra satisfied in their lives than non-Muslim religion people.

## 1.4. The Present Research

Though a substantial amount of research has been examined the relationship of gratefulness and spirituality towards life satisfaction, the opposite association has not been examined. Recent cross-cultural studies also looked at the relationship between gratefulness and life satisfaction in Western and non-Western nations, and the results revealed that the advantages of gratitude may only be prevalent in Western culture (Robustelli and Whisman, 2018). Although, the cross-cultural previous investigation has differentiated only cultures between western (such as American) and eastern (such as Japanese), but previous cross-cultural study does not sufficiently account the variety in the world. To extend literature, the present research aims to measure the gratitude, spirituality and life satisfaction among Pakistani and Malaysian university students. On the base of literature, the study hypothesized that (H<sub>1</sub>) There is likely to be a positive relationship between gratitude, spirituality and life satisfaction among Pakistani and Malaysian university students. (H<sub>2</sub>) gratitude, spirituality, age, and education would be predicted of life satisfaction among university students. (H<sub>3</sub>) There would be a significant gender difference in the level of gratitude, spirituality and life satisfaction among university students. (H<sub>4</sub>) There would be a difference in the level of gratitude, religiosity and life satisfaction between Muslim and Non-Muslim university students. (H<sub>5</sub>) There would be a difference in the level of gratitude, religiosity and life satisfaction between Pakistani and Malaysian university students.

## 2. METHOD AND DATA

### 2.1. Participants

The total sample (n = 470) were collected from Pakistani university and Malaysian universities.

The period of data collection was from March to May 2023, and the purposive sampling method was used. For the representation of Pakistani universities, university of agriculture Faisalabad (UAF), The Islamia University of Bahawalpur (IUB), and Government College University Faisalabad (GCUF) were considered from Pakistan and for the representation of Malaysian universities, University of Utara (UUM), University of Malaya (UM) and Universiti Teknologi MARA Perlis (UiTM) were considered from Malaysia. Both male and female full time regular university students with age range of 20-35 years were included in this research. Only Malaysian local students from Malaysian universities will be selected in context of Malaysian students. Whereas the participants with any physical diseases and psychological problems were also excluded from research.

### 2.2. Measure

#### 2.2.1. Demographic sheet

Demographic sheet was used to collect the demographic information such as age (continuous), gender (male and female), academic institution (university name), education (Bachelor, Master, and PhD), religion (Muslim and Non-Muslims), Race (Pakistani, Malaysian, Chinese and Indian Tamil) and country in term of culture (Pakistan and Malaysia).

#### 2.2.2. Gratitude questionnaire (GQ)

GQ is a self-report questionnaire developed by McCullough et al. (2001) in order to assess gratitude in this research. The scale encompasses six items that have seven Likert responses; from strongly disagree to strongly agree. The maximum (score) is 42, and the minimum (score) is at 6. Cronbach's alpha of Gratitude Questionnaire was estimated to be total items to have 0.87 (McCullough et al., 2001).

#### 2.2.3. Spirituality scale (SS)

Parsian and Dunning developed spirituality scale (2009). This scale is unidimensional and contains 23 items. The response varies from strongly disagreeing to strongly agree on six points Likert. The more spiritual response shows higher scores, and the minimum score is 23 and maximum score is 138. Cronbach's alpha was calculated for internal consistency and was reported 0.94 excellent (Parisian and Dunning, 2009).

#### 2.2.4. Satisfaction with life scale (SWL)

The five items, SWL were developed by Diener et al. (1985). This scale measures the cognitive perception of one's life satisfaction on 7-point Likert type scale; with response of strongly disagree (1) to strongly agree (7). The minimum score is 5, while the maximum score in 35. Higher score shows satisfaction extremely and lower score shows dissatisfaction extremely. The reliability ( $\alpha = 0.75$ ) of this scale was reported in satisfactory (Diener et al., 1985).

### 2.3. Research Procedure

The official acquiescence was reserved from the ethical committee to keep ethical deliberations. After receiving formal endorsement from the developers of all research instruments, the data collection began with the aim of the study, which was explained by researcher to participants through informed consent. The participants were contacted directly from various departments of each university. All information and input were kept private and only used for educational reasons. The respondents were given 30 min to complete the surveys. The compulsory ethical deliberations were taken into account before conducting this study, in accordance with ethics, individuals' written informed permission was obtained. Participants received an explanation of the study's goal. They received guarantees regarding the privacy

**Table 1: Demographics profile (n=470)**

Participant's characteristics	f (%)	M (SD)
Age		26.30 (4.75)
Gender		
Male	198 (42.1)	
Female	272 (57.9)	
Religion		
Muslims	341 (72.6)	
Non-Muslims	129 (27.4)	
Nationality		
Pakistan	237 (50.4)	
Malaysia	233 (49.6)	
Education		
Bachelor	349 (74.3)	
Master	91 (19.4)	
PhD	30 (6.4)	
Race		
Pakistan	237 (50.4)	
Malaysia	124 (26.4)	
Chinese	75 (16.0)	
Indian (Tamil)	34 (7.2)	

SD: Standard deviation

**Table 2: Correlation among gratitude, spirituality and life satisfaction (n=470)**

Variables	Gratitude	Spirituality	Life satisfaction
Gratitude	-	0.31***	0.39***
Spirituality		-	0.34***
Life satisfaction			-
M (SD)	21.46 (6.95)	84.70 (8.85)	21.29 (6.64)
A	0.82	0.87	0.89

\*\*\*P<0.001. SD: Standard deviation

**Table 3: Hierarchical regression analysis for life satisfaction with predicting role of age, education, gratitude and spirituality (n=470)**

Variables	Life satisfaction					
	R <sup>2</sup>	B	$\beta$	F	P	95% CI
Step 1	0.17			49.01	0.00	
Age		0.46	0.24		0.00	(0.16, 0.76)
Education		1.94	0.19		0.02	(0.30, 3.57)
Step 2	0.33			57.54	0.00	
Gratitude		0.26	0.27		0.00	(0.18, 0.34)
Spirituality		0.17	0.23		0.00	(11, 0.23)

Age (continuous variable) education (bachelor=1, Master=2 and PhD=3). CI: Confidence interval

**Table 4: Comparison of gender, religion and nationality in gratitude, spirituality and life satisfaction**

Variables	Gratitude				Spirituality				Life satisfaction			
	M	SD	t	P	M	SD	t	P	M	SD	t	P
Gender												
Male	20.55	7.20	-2.45	0.02	82.87	9.29	-3.86	0.00	18.20	7.18	-3.14	0.00
Female	22.13	6.70			86.02	8.29			20.14	6.22		
Religion												
Muslim	22.20	6.67	3.81	0.00	85.41	8.58	2.91	0.00	20.31	6.67	5.33	0.00
Non-Muslim	19.50	7.31			82.78	9.30			16.72	6.11		
Country												
Pakistani	22.60	6.59	3.64	0.00	85.65	8.64	2.37	0.02	21.66	7.26	8.14	0.00
Malaysian	20.30	7.13			83.72	8.98			16.94	5.10		

SD: Standard deviation

of their data and the anonymity of their identity. The respondents had the freedom to leave at any time if they felt uncomfortable. The voluntary therapeutic services were made available to them if they encountered any psychological issues.

### 2.4. Data Analysis

The obtained data were entered in Statistical Package for the Social Sciences (SPSS, 25V) for data analysis. The frequency distribution, reliability and descriptive analysis were performed before the hypotheses testing. For hypotheses testing, bivariate correlation, hierarchical regression analysis and independent sample t-test were used.

## 3. RESULTS

The results of the above Table 1 revealed the frequency (with percentage) distribution of the study demographics. The average age of the sample is (M = 26.30; SD = 4.75). In gender, 198 (42.1%) were male respondents and 272 (57.9%) were female respondents. In religion, 341 (72.6%) were Muslim respondents and 129 (27.4%) respondents were non-Muslim. Whereas 237 (50.4%) were Pakistani respondents and 233 (49.6%) were Malaysian respondents. In education the data were collected from students enrolled in bachelor, master and PhD program, 349 (74.3%) students were from bachelor program, 91 (19.4%) students were from master program, and only 30 (6.4%) students were from PhD program. In race (ethnicity) of respondents, 237 (50.4%) respondents were Pakistani, 124 (26.4%) respondents were Malaysian (local Muslim), 75 (16.0%) respondents were Chinese (local) and 34 (7.2%) respondents were Indian (local Tamil).

### 3.1. Correlation among Gratitude, Spirituality, and Life Satisfaction (H<sub>1</sub>)

The results of Table 2 show that gratitude has a significant but positive weak relationship with spirituality ( $r = 0.3$ ;  $P < 0.001$ ) and life satisfaction ( $r = 0.39$ ;  $P < 0.001$ ) among university students. While spirituality also has significant and positive weak relationship with life satisfaction ( $r = 0.34$ ;  $P < 0.001$ ).

### 3.2. Gratitude, Spirituality, Age, and Education predictors of life satisfaction (H<sub>2</sub>)

The results of Table 3 show the hierarchical regression analysis that was conducted in step 2. In step 1 age and education, while in step 2 gratitude and spirituality are taken. The results from

step 1 show that age ( $B = 0.46$ ,  $\beta = 0.24$ ,  $P < 0.001$ ) and education ( $B = 1.94$ ,  $\beta = 0.19$ ,  $P < 0.05$ ) are significant ( $R^2 = 0.17$ ,  $F [2, 467] 49.01$ ,  $P < 0.001$ ) predictors of life satisfaction. From step 2, gratitude ( $B = 0.26$ ,  $\beta = 0.27$ ,  $P < 0.001$ ) and spirituality ( $B = 0.17$ ,  $\beta = 0.23$ ,  $P < 0.001$ ) are also found significant ( $R^2 = 0.33$ ,  $F [4, 465] 57.54$ ,  $P < 0.001$ ) positive predictor of life satisfaction.

### 3.3. Gender, Religion and Culture differences in Gratitude, Spirituality, and life satisfaction (H<sub>3-5</sub>)

The results in Table 4 show the gender, religion and nationality (culture) significant difference in the mean score of gratitude, spirituality and life satisfaction. While the mean (average) score of gratitude ( $t = -2.45$ ,  $P < 0.05$ ), spirituality ( $t = -3.86$ ,  $P < 0.001$ ) and life satisfaction ( $t = -3.14$ ,  $P < 0.001$ ) are significantly higher among female students than male student. Although, the mean (average) score of gratitude ( $t = 3.81$ ,  $P < 0.001$ ), spirituality ( $t = 2.91$ ,  $P < 0.001$ ) and life satisfaction ( $t = 5.33$ ,  $P < 0.001$ ) are significantly higher among Muslim university students as compared with non-Muslim university student. Though, the mean (average) score of gratitude ( $t = 3.64$ ,  $P < 0.001$ ), spirituality ( $t = 2.37$ ,  $P < 0.05$ ) and life satisfaction ( $t = 8.14$ ,  $P < 0.001$ ) are significantly higher among Pakistani university students as compared with Malaysian university student.

## 4. DISCUSSION AND CONCLUSION

The purpose of existing study is to measure association in gratitude, spirituality, and life satisfaction of university students from Pakistan and Malaysia. The results of current research revealed for H<sub>1</sub> that gratitude has significant but affirmative association with spirituality as well as life satisfaction of university students. While spirituality also has significant and positive relationship with life satisfaction. Several studies also revealed associations between life satisfaction and gratitude (Froh et al., 2009; Sun and Kong, 2013; Yildirim and Alanazi, 2018). Kong et al. (2015) also established the positive link of gratitude towards life satisfaction. Feeling of gratitude to God, life, others and existence can lead to wellbeing, including happiness, mental as well as physical health, and further adequate interpersonal relations. Salvador-Ferrer (2017) examined, how a sample of Spanish university students' feelings of gratefulness and life satisfaction related to one another.

Past studies also reported significant affirmative association of spirituality with life satisfaction (Maier and Surzykiewicz, 2020; Kasapoglu and Yabanigul, 2018; Kress et al., 2015; Joshanloo

and Daemi, 2014). Likewise, significant connotation between spirituality and well-being have been also addressed (Yoo et al., 2022), happiness (Aydogan et al., 2017), and life satisfaction (Ozdemir et al., 2022). People who identified as spiritual generally reported feeling happier and more satisfied with their lives than people who did not identify as spiritual (Dierendonck and Mohan, 2006). The past studies also support the positive relationship between gratitude and spirituality (Gabana et al., 2019). Pant and Srivastava, 2019; Bali et al., 2022). According to Emmons and Kneezel (2005), spirituality has positive as well as significant link with higher gratefulness feelings. Individuals who were reported spiritually disposed were extra willing to identify the affirmative features of life as compared with less spiritual people. In support of present research, Loi and Ng (2021) were also found positive relation among gratitude, spirituality and life satisfaction.

The results of this research revealed for H<sub>2</sub> that gratitude, spirituality, age, and education are significant predictors of life satisfaction. Several empirical studies have shown that gratitude is significantly strong predictor of life satisfaction (Algoe et al., 2008; Aricioglu, 2016; Datu et al., 2022; Salvador-Ferrer, 2017). It has been noticed that grateful people have generated positive emotions that lead to increase happiness and life satisfaction (Datu et al., 2022; Przepiorka and Sobol-Kwapinska, 2021). In recent study by Kardas and Yalcin (2021) they have also demonstrated the positive role of gratitude in life satisfaction.

The previous studies also supported that spirituality has influences on life satisfaction as well as physical, social, and psychological aspects of person's life (Kasapoglu and Yabanigul, 2018; Shahzadi and Khan, 2022). During the COVID-19 pandemic, research also reported that spirituality is a significant predictor of life satisfaction (Esteban et al., 2021). Studies have looked at the connection between spirituality and life satisfaction. For instance, spirituality has been proven to protect university students from dangerous behavior including substance abuse, and delinquency, as well as the emotional issues like depression, suicidality, and anxiety (Alorani and Alradaydeh, 2017; Leung and Pong, 2021; Papazisis et al., 2014; Salas-Wright et al., 2013; Stauner et al., 2019; Ulya, 2022; Foroughi et al., 2022).

Past studies also support for age and education in the favor of life satisfaction (Cheung and Chan, 2009; Joshanloo and Jovanovic, 2021). Although, the many mechanisms of well-being may upsurge with age, for example the past studies confirmed that with a big countrywide representative Americans sample, the affirmative effect improved, and adverse effect reduced across cohorts (Mroczek and Kolarz 1998). Age was positively connected with life satisfaction, according to Prenda and Lachman (2001), who conducted their study on persons between the ages of 25 and 75. In terms of education, according to McKee-Ryan et al. (2005)'s meta-analysis, people with higher levels of education are higher satisfied with their lives and have better mental health. As a result, those with higher levels of education seem to have more success keeping up their wellbeing than their less educated counterparts because the higher educated individuals have more social links and incline to be extra publicly active therefore they also escalate their

satisfaction with life (Alorani and Alradaydeh, 2018; Nieminen et al., 2008; Pichler and Wallace, 2009; Wetzel et al., 2016).

The results of this study found for H<sub>3</sub> that the gratitude, spirituality and life satisfaction are significantly higher among female students than male student. According to past research on gender differences in gratitude, female is extra grateful than male (Lim, 2012; Sun and Kong, 2013). Same in line with many other researchers also found that female scored higher on gratitude than male (Froh et al., 2009; Kashdan et al., 2009; Lasota et al., 2020). This is most likely due to the fact that male view expressing and experiencing gratitude as signs of vulnerability and weakness, which could endanger their social position and masculinity (Levant and Kopecky, 1995). Same this, past studies reported female are more spiritual than male (Hammermeister et al., 2005; Robinson et al., 2019; Yadav et al., 2017). Jackson et al. (2014) found through empirical research that females reported higher levels of life satisfaction than males. Furthermore, previous research has shown that gender and subjective well-being are associated, women often reporting higher levels of life satisfaction than men (Becchetti and Conzo, 2022; Joshanloo and Jovanovic, 2020). Kong et al. (2015) report that female students receive more social support, which is the reason of higher life satisfaction.

The result of current research revealed for H<sub>4</sub> that the gratitude, spirituality and life satisfaction are significantly higher among Muslim university students as compared with non-Muslim university student. In Islam, the concept of *shukr* is recognized via gratitude that one takes to acknowledge God's benefits rather than just words of thanks or debt (Shah-Kazemi, 2014). According to Muslim scholars, showing gratefulness is a need for every Muslim as recompense for their transgressions and misdeeds. They make the connection that this is a submission to God in reaction to what each person does and what he receives in return (Al-Ghazzali et al., 2015; Ali et al., 2020). Therefore the gratitude is higher among Muslim university students as compared with non-Muslim university students. Regarding spirituality, Anand et al. (2015) found that Muslim students reported more spirituality than other religions e.g. Hindu and Christian. In Turkish perspective, Muslims are more possibly to perceive "spirituality" as something covered through religion as well as religiosity than non-Muslims (Streib and Hood, 2016). In context of life satisfaction, literature support that Muslim population report better life satisfaction and lower level of mental illness than non-Muslim population (Musbahi et al., 2022). Past studies reported that Muslim people have higher hope that increase their life satisfaction (Aghababaei et al., 2016; Sharif et al., 2021).

The results of this research revealed for H<sub>5</sub> that gratitude, spirituality and life satisfaction are significantly higher among Pakistani university students than Malaysian university students. From the Pakistani universities, all the respondents were Muslim therefore they have more gratitude, spirituality, and life satisfaction, while from Malaysia, universities, respondents were also non-Muslim and consequently they reported lower level of gratitude, spirituality and life satisfaction.

According to earlier research, students who don't drink alcohol or any other substance abuse are more spiritual than those who do,

and their level of spirituality declines as substance abuse intake rises (Nelms, 2005; Nagel and Sgoutas-Emch, 2007). While research has also proved negative link between gratitude and alcohol consumption (Krentzman, 2017). According to Islamic law about halal and harm, all types of alcohol is haram (Fattah and Suhirman, 2019). In Pakistan, according to the law, the sale and use of alcohol is strictly banned for Muslim population (Ghazal, 2015). Therefore, the gratitude, spirituality and life satisfaction are higher among Pakistani students compared Malaysian students.

It is concluded that gratitude and spirituality have positive relation with life satisfaction among Pakistani and Malaysian university students. While gratitude, spirituality, age and education play an important contribution in the enhancement of life satisfaction of university students. In gender differences, female university students show more gratitude, life satisfaction and religiosity than male university student. Whereas on cultural differences, gratitude, life satisfaction and religiosity have higher among Pakistani university students as compared with Malaysian university student. Also in religion differences, Muslim university students have more gratitude, spirituality, and life satisfaction as compared non-Muslim university students.

The existing study has many strengths. In first this study, the relationship is identified among gratitude, spirituality and life satisfaction of university students from two countries Pakistan and Malaysia. Although there is no available a cross-cultural study on gratitude, spirituality, and life satisfaction among university students from Pakistan and Malaysia. Second, as for practical contributions of this study, this study provides guidelines to the higher authorities of Pakistani and Malaysian universities to address the students' life satisfaction. Because this study also establishes the necessity of university students in Pakistan and Malaysia to increase their wellbeing with improving their gratitude as well as spirituality. Third, this study provides findings about gender differences in favor of female university students in terms of higher gratitude, spirituality and life satisfaction, so this study points out to psychologists to conduct psychological interventions among male university students to improve their wellbeing. Fourth, this study also provides the role of education, because university students with higher education have higher life satisfaction, so this study highlights the importance of education in life satisfaction. Fifth, this study also provides evidence regarding cross cultural differences and reports that university students from different cultural and religion have different levels of gratitude, spirituality and life satisfaction.

While present study has few limits, first in this study the data were gathered only from public sector universities both from Pakistan and Malaysia. Therefore, the findings of current study are limited in terms of generalizability. Second in this research, the data were gathered only Muslim students from Pakistani universities, if non-Muslim students from Pakistani university were also a part of this study, the findings of this study were interested. Third, in this study the data were gathered only from two Asian countries (Pakistan and Malaysia), which represent only East culture, so in future data will be collected from both East and West culture to compare the findings.

## REFERENCES

- Aftab, R., Irshad S. (2021), Gratitude among university students in relation to their spirituality and certain demographic variables. *International Journal of Indian Psychology*, 9(1), 1664-1669.
- Aghababaei, N., Sohrabi, F., Eskandari, H., Borjali, A., Farrokhi, N., Chen, Z.J. (2016), Predicting subjective well-being by religious and scientific attitudes with hope, purpose in life, and death anxiety as mediators. *Personality and Individual Differences*, 90, 93-98.
- Al-Ghazzali, A.H.M., Daniel, E.D., Field, C. (2015), *The Alchemy of Happiness*. England, UK: Routledge.
- Algoe, S.B., Haidt, J., Gable, S.L. (2008), Beyond reciprocity: Gratitude and relationships in everyday life. *Emotion*, 8(3), 425.
- Ali, S.A., Ahmed, M., Bhatti, O.K., Farooq, W. (2020), Gratitude and its conceptualization: An Islamic perspective. *Journal of Religion and Health*, 59(4), 1740-1753.
- Alorani, O.I., Alradaydeh, M.F. (2017), Depression, aggression and spiritual well-being among the university students in Jordan. *European Scientific Journal*, 13(2), 269-280.
- Alorani, O.I., Alradaydeh, M.T.F. (2018), Spiritual well-being, perceived social support, and life satisfaction among university students. *International Journal of Adolescence and Youth*, 23(3), 291-298.
- Anand, V., Jones, J., Gill, P.S. (2015), The relationship between spirituality, health and life satisfaction of undergraduate students in the UK: An online questionnaire study. *Journal of Religion and Health*, 54(1), 160-172.
- Aricioglu, A. (2016), Mediating the effect of gratitude in the relationship between forgiveness and life satisfaction among university students. *International Journal of Higher Education*, 5(2), 275-282.
- Aydogan, D., Ozbay, Y., Büyüköztürk, Ş. (2017), Adaptation of the Authenticity Scale and the mediator role of spirituality in the relationship between authenticity and happiness. *The Journal of Happiness and Well-Being*, 5(1), 38-59.
- Bali, M., Bakhshi, A., Khajuria, A., Anand, P. (2022), Examining the association of Gratitude with psychological well-being of emerging adults: The mediating role of spirituality. *Trends in Psychology*, 30, 1-18.
- Becchetti, L., Conzo, G. (2022), The gender life satisfaction/depression paradox. *Social Indicators Research*, 160(1), 35-113.
- Benson, P.L., Scales, P.C., Sesma, A. Jr., Roehlkepartain, E.C. (2005), Adolescent spirituality. In: Moore, K.A., Lippman, L., editors. *What Do Children Need to Flourish? Conceptualizing and Measuring Indicators of Positive Development*. New York: Springer. p. 25-40.
- Bibi, F., Chaudhry, A.G., Awan, E.A. (2015), Impact of gender, age and culture on life satisfaction. *Pakistan Association of Anthropology*, 27(2), 1649-1652.
- Brown, D.R., Carney, J.S., Parrish, M.S., Klem, J.L. (2013), Assessing spirituality: The relationship between spirituality and mental health. *Journal of Spirituality in Mental Health*, 15(2), 107-122.
- Cabras, C., Mondo, M. (2018), Coping strategies, optimism, and life satisfaction among first-year university students in Italy: Gender and age differences. *Higher Education*, 75(4), 643-654.
- Casey, S.M., Varela, A., Marriott, J.P., Coleman, C.M., Harlow, B.L. (2022), The influence of diagnosed mental health conditions and symptoms of depression and/or anxiety on suicide ideation, plan, and attempt among college students: Findings from the Healthy Minds Study, 2018-2019. *Journal of Affective Disorders*, 298, 464-471.
- Chaplin, L.N., John, D.R., Rindfleisch, A., Froh, J.J. (2019), The impact of gratitude on adolescent materialism and generosity. *The Journal of Positive Psychology*, 14(4), 502-511.
- Chen, S., Ho, W.K.Y., Ahmed, M.D. (2020), Physical activity and its relationship with life satisfaction among middle school students: A cross-culture study. *Sustainability*, 12(17), 6932.

- Cheung, H.Y., Chan, A.W. (2009), The effect of education on life satisfaction across countries. *Alberta Journal of Educational Research*, 55(1), 124-136.
- Choi, S.O., Kim, S.N. (2011), Suicidal ideation and spirituality of college students. *The Journal of Korean Academic Society of Nursing Education*, 17(2), 190-199.
- Craig, D.J., Fardouly, J., Rapee, R.M. (2022), The effect of spirituality on mood: Mediation by self-esteem, social support, and meaning in life. *Journal of Religion and Health*, 61(1), 228-251.
- Dastgheib, Z., Gharlipour, Z., Dashdebi G.K., Hoseini, F., Vafae, R. (2015), Association of between mental health and spiritual health among students in Shiraz University. *Advances in Nursing and Midwifery*, 24(84), 53-59.
- Datu, J.A.D., Mateo, N.J. (2015), Gratitude and life satisfaction among Filipino adolescents: The mediating role of meaning in life. *International Journal for the Advancement of Counselling*, 37(2), 198-206.
- Datu, J.A.D., Valdez, J.P.M., McInerney, D.M., Cayubit, R.F. (2022), The effects of gratitude and kindness on life satisfaction, positive emotions, negative emotions, and COVID-19 anxiety: An online pilot experimental study. *Applied Psychology: Health and Well-Being*, 14(2), 347-361.
- Deb, S., Thomas, S., Bose, A., Aswathi, T. (2020), Happiness, meaning, and satisfaction in life as perceived by Indian university students and their association with spirituality. *Journal of Religion and Health*, 59(5), 2469-2485.
- Debnam, K.J., Milam, A.J., Mullen, M.M., Lacey, K., Bradshaw, C.P. (2018), The moderating role of spirituality in the association between stress and substance use among adolescents: Differences by gender. *Journal of Youth and Adolescence*, 47(4), 818-828.
- Diener, E.D., Emmons, R.A., Larsen, R.J., Griffin, S. (1985), The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75.
- Dierendonck, D.V., Mohan, K. (2006), Some thoughts on spirituality and eudaimonic well-being. *Mental Health, Religion and Culture*, 9(03), 227-238.
- Donald, W.E., Jackson, D. (2022), Subjective wellbeing among university students and recent graduates: Evidence from the United Kingdom. *International Journal of Environmental Research and Public Health*, 19(11), 6911.
- Emmons, R.A., Kneezel, T.T. (2005), Giving thanks: Spiritual and religious. *Journal of Psychology and Christianity*, 24(2), 140-148.
- Esteban, R.F.C., Turpo-Chaparro, J.E., Mamani-Benito, O., Torres, J.H., Arenaza, F.S. (2021), Spirituality and religiousness as predictors of life satisfaction among Peruvian citizens during the COVID-19 pandemic. *Heliyon*, 7(5), e06939.
- Faisal, R.A., Jobe, M.C., Ahmed, O., Sharker, T. (2022), Mental health status, anxiety, and depression levels of Bangladeshi university students during the COVID-19 pandemic. *International Journal of Mental Health and Addiction*, 20(3), 1500-1515.
- Fattah, A., Suhirman, S. (2019), The influence of scientific literacy, understanding of the Quran hadith, and naturalist intelligence on students' environmental care attitudes. *Tadris: Journal of Islamic Education*, 14(2), 227-246.
- Foroughi, B., Griffiths, M.D., Iranmanesh, M., Salamzadeh, Y. (2022), Associations between Instagram addiction, academic performance, social anxiety, depression, and life satisfaction among university students. *International Journal of Mental Health and Addiction*, 20(4), 2221-2242.
- Froh, J.J., Yurkewicz, C., Kashdan, T.B. (2009), Gratitude and subjective well-being in early adolescence: Examining gender differences. *Journal of Adolescence*, 32(3), 633-650.
- Froiland, J.M. (2018), Promoting gratitude and positive feelings about learning among young adults. *Journal of Adult Development*, 25(4), 251-258.
- Gabana, N.T., D'Addario, A., Luzzi, M., Soendergaard, S., Wong, Y.J. (2019), Examining the relationships between gratitude and spiritual and religious identification among collegiate athletes. *Journal of Clinical Sport Psychology*, 14(2), 203-219.
- Geng, Y. (2018), Gratitude mediates the effect of emotional intelligence on subjective well-being: A structural equation modeling analysis. *Journal of Health Psychology*, 23(10), 1378-1386.
- Ghazal, P. (2015), The growing problem of alcoholism in Pakistan: An overview of current situation and treatment options. *International Journal of Endorsing Health Science Research*, 3, 15-21.
- Green, Z.A., Noor, U., Ahmed, F. (2020), The body-mind-spirit dimensions of wellness mediate dispositional gratitude and life satisfaction. *Journal of Happiness Studies*, 21(8), 3095-3119.
- Hammermeister, J., Flint, M., El-Alayli, A., Ridnour, H., Peterson, M. (2005), Gender differences in spiritual well-being: Are females more spiritually-well than males? *American Journal of Health Studies*, 20, 80-84.
- Huang, N., Qiu, S., Alizadeh, A., Wu, H. (2020), How incivility and academic stress influence psychological health among college students: The moderating role of gratitude. *International Journal of Environmental Research and Public Health*, 17(9), 1-10.
- Huebner, E.S. (2004), Research on assessment of life satisfaction of children and adolescents. *Social Indicators Research*, 66(1), 3-33.
- Hyde, B. (2008), *Children and Spirituality: Searching for Meaning and Connectedness*. United States: Jessica Kingsley Publishers.
- Jackson, L.T., Van de Vijver, F.J., Fouché, R. (2014), Psychological strengths and subjective well-being in South African white students. *Journal of Psychology in Africa*, 24(4), 299-307.
- Joshanloo, M., Daemi, F. (2015), Self-esteem mediates the relationship between spirituality and subjective well-being in Iran. *International Journal of Psychology*, 50(2), 115-120.
- Joshanloo, M., Jovanovic, V. (2020), The relationship between gender and life satisfaction: Analysis across demographic groups and global regions. *Archives of Women's Mental Health*, 23(3), 331-338.
- Joshanloo, M., Jovanovic, V. (2021), Similarities and differences in predictors of life satisfaction across age groups: A 150-country study. *Journal of Health Psychology*, 26(3), 401-411.
- Jovanovic, V., Joshanloo, M., Đunda, D., Bakhshi, A. (2017), Gender differences in the relationship between domain-specific and general life satisfaction: A study in Iran and Serbia. *Applied Research in Quality of Life*, 12(1), 185-204.
- Kang, S.M., Shaver, P.R., Sue, S., Min, K.H., Jing, H. (2003), Culture-specific patterns in the prediction of life satisfaction: Roles of emotion, relationship quality, and self-esteem. *Personality and Social Psychology Bulletin*, 29(12), 1596-1608.
- Kardas, F., Yalcin, I. (2021), The broaden-and-built theory of gratitude: Testing a model of well-being and resilience on Turkish college students. *Participatory Educational Research*, 8(1), 141-159.
- Kardas, F., Zekeriyi, C.A.M., Eskisu, M., Gelibolu, S. (2019), Gratitude, hope, optimism and life satisfaction as predictors of psychological well-being. *Eurasian Journal of Educational Research*, 19(82), 81-100.
- Kasapoglu, F., Yabanigul, A. (2018), Marital satisfaction and life satisfaction: The mediating effect of spirituality. *Spiritual Psychology and Counseling*, 3(2), 177-195.
- Kashdan, T.B., Mishra, A., Breen, W.E., Froh, J.J. (2009), Gender differences in gratitude: Examining appraisals, narratives, the willingness to express emotions, and changes in psychological needs. *Journal of Personality*, 77(3), 691-730.
- Kelley, B.S., Miller, L. (2007), Life satisfaction and spirituality in adolescents. *Research in the Social Scientific Study of Religion*, 18, 233-261.

- Kharitonov, S.A. (2012), Religious and spiritual biomarkers in both health and disease. *Religions*, 3(2), 467-497.
- Kim, S., Miles-Mason, E., Kim, C.Y., Esquivel, G.B. (2013), Religiosity/spirituality and life satisfaction in Korean American adolescents. *Psychology of Religion and Spirituality*, 5(1), 33-40.
- Kong, F., Ding, K., Zhao, J. (2015), The relationships among gratitude, self-esteem, social support and life satisfaction among undergraduate students. *Journal of Happiness Studies*, 16(2), 477-489.
- Kor, A., Pirutinsky, S., Mikulincer, M., Shoshani, A., Miller, L. (2019), A longitudinal study of spirituality, character strengths, subjective well-being, and prosociality in middle school adolescents. *Frontiers in Psychology*, 10, 377.
- Krentzman, A.R. (2017), Gratitude, abstinence, and alcohol use disorders: Report of a preliminary finding. *Journal of Substance Abuse Treatment*, 78, 30-36.
- Kress, V.E., Newgent, R.A., Whitlock, J., Mease, L. (2015), Spirituality/religiosity, life satisfaction, and life meaning as protective factors for nonsuicidal self-injury in college students. *Journal of College Counseling*, 18(2), 160-174.
- Kupcewicz, E., Mikla, M., Kadučáková, H., Grochans, E. (2022), Loneliness and Satisfaction with Life among Nursing Students in Poland, Spain and Slovakia during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, 19(5), 2929.
- Lambert, N.M., Fincham, F.D., Braithwaite, S.R., Graham, S.M., Beach, S.R. (2009), Can prayer increase gratitude? *Psychology of Religion and Spirituality*, 1(3), 139-149.
- Lantz, E.D., Stearns, M., McKay, I., Nadorff, D.K. (2022), The mediating effect of gratitude on the relation between religiosity and well-being in samples of undergraduate students and adults formerly raised by grandparent caregivers. *Journal of Happiness Studies*, 23(3), 969-984.
- Lasota, A., Tomaszek, K., Bosacki, S. (2020), Empathy, resilience, and gratitude—does gender make a difference? *Annals of Psychology*, 36(3), 521-532.
- Lau, W.W., Hui, C.H., Lam, J., Lau, E.Y., Cheung, S.F. (2015), The relationship between spirituality and quality of life among university students: An autoregressive cross-lagged panel analysis. *Higher Education*, 69(6), 977-990.
- Lee, B. (2022), A serial mediation model of gratitude on life satisfaction in people with multiple sclerosis: The intermediary role of perceived stress and mental health symptoms. *Multiple Sclerosis and Related Disorders*, 58, 103421.
- Leung, C.H., Pong, H.K. (2021), Cross-sectional study of the relationship between the spiritual wellbeing and psychological health among university students. *PLoS One*, 16(4), e0249702.
- Levant, R.F., Kopecky, G. (1995), *Masculinity Reconstructed*. New York: Plume.
- Lim, K.H. (2012), The effects of gratitude enrichment program on school adjustment, life satisfaction and emotional-behavioral problems of children. *The Korean Journal of Elementary Counseling*, 11(1), 107-122.
- Lin, C.C. (2016), The roles of social support and coping style in the relationship between gratitude and well-being. *Personality and Individual Differences*, 89, 13-18.
- Loi, N.M., Ng, D.H. (2021), The relationship between gratitude, wellbeing, spirituality, and experiencing meaningful work. *Psych*, 3(2), 85-95.
- Lyubomirsky, S., Sheldon, K.M., Schkade, D. (2005), Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, 9(2), 111-131.
- Maier, K., Surzykiewicz, J. (2020), Mediated association between spirituality and life satisfaction in chronically ill undergraduate students. *Psychology of Religion and Spirituality*, 12(3), 311.
- Malik, N.I., Rehman, A., Rehman, B., Riaz, N., Bashir, A. (2021), Impact of religiosity on life satisfaction among christian and muslim faith groups. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(18), 1419-1428.
- McCanlies, E.C., Gu, J.K., Andrew, M.E., Violanti, J.M. (2018), The effect of social support, gratitude, resilience and satisfaction with life on depressive symptoms among police officers following Hurricane Katrina. *International Journal of Social Psychiatry*, 64(1), 63-72.
- McCullough, M.E., Emmons, R.A., Tsang, J.A. (2002), The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology*, 82(1), 112-127.
- McKee-Ryan, F., Song, Z., Wanberg, C.R., Kinicki, A.J. (2005), Psychological and physical well-being during unemployment: A meta-analytic study. *Journal of Applied Psychology*, 90(1), 53.
- Mousavimoghadam, S.R., Farzi, M., Kouchaki, Z. (2022), Investigating the relational pattern of psychological capital, spirituality, and psychological well-being in students. *Islamic Studies in Health*, 5(4), 49-58.
- Mroczek, D.K., Kolarz, C.M. (1998), The effect of age on positive and negative affect: A developmental perspective on happiness. *Journal of Personality and Social Psychology*, 75(5), 1333.
- Munawar, K., Tariq, O. (2018), Exploring relationship between spiritual intelligence, religiosity and life satisfaction among elderly Pakistani Muslims. *Journal of Religion and Health*, 57(3), 781-795.
- Musbahi, A., Khan, Z., Welsh, P., Ghouri, N., Durrani, A. (2022), Understanding the stigma: A novel quantitative study comparing mental health attitudes and perceptions between young British Muslims and their non-Muslims peers. *Journal of Mental Health*, 31(1), 92-98.
- Nagel, E., Sgoutas-Emch, S. (2007), The relationship between spirituality, health beliefs, and health behaviors in college students. *Journal of Religion and Health*, 46(1), 141-154.
- Nelms, L.W. (2005), *The Relationship between Spirituality and the Health of College Students in a University Setting* [Dissertation, Knoxville, TN: University of Tennessee.
- Ng, K.M., Loy, J.T.C., Gudmunson, C.G., Cheong, W. (2009), Gender differences in marital and life satisfaction among Chinese Malaysians. *Sex Roles*, 60(1), 33-43.
- Nieminen, T., Martelin, T., Koskinen, S., Simpura, J., Alanen, E., Härkänen, T., Aromaa, A. (2008), Measurement and socio-demographic variation of social capital in a large population-based survey. *Social Indicators Research*, 85(3), 405-423.
- Oguni, R., Otake, K. (2022), How does gratitude promote prosocial behavior? Developmental differences in the underlying motivation. *Japanese Psychological Research*, 67, 24-34.
- Osborn, T.L., Venturo-Conerly, K.E., Wasil, A.R., Schleider, J.L., Weisz, J.R. (2020), Depression and anxiety symptoms, social support, and demographic factors among Kenyan high school students. *Journal of Child and Family Studies*, 29(5), 1432-1443.
- Oxhandler, H.K., Narendorf, S.C., Moffatt, K.M. (2018), Religion and spirituality among young adults with severe mental illness. *Spirituality in Clinical Practice*, 5(3), 188-200.
- Ozdemir, A.A., Kavak Buda, F., Dural, G., Gültekin, A. (2022), The relationship between spiritual well-being, life satisfaction and hope in elderly individuals in turkey. *Journal of Religion and Health*, 62, 3123-3136.
- Pant, N., Srivastava, S.K. (2019), The impact of spiritual intelligence, gender and educational background on mental health among college students. *Journal of Religion and Health*, 58(1), 87-108.
- Papazisis, G., Nicolaou, P., Tsiga, E., Christoforou, T., Sapountzi-Krepia, D. (2014), Religious and spiritual beliefs, self-esteem, anxiety, and depression among nursing students. *Nursing and Health Sciences*,



- 16(2), 232-238.
- Parsian, N., Dunning, T. (2009), Developing and validating a questionnaire to measure spirituality: A psychometric process. *Global Journal of Health Science*, 1(1), 2-11.
- Perez, J.A., Peralta, C.O., Besa, F.B. (2021), Gratitude and life satisfaction: The mediating role of spirituality among Filipinos. *Journal of Beliefs and Values*, 42(4), 511-522.
- Pichler, F., Wallace, C. (2009), Social capital and social class in Europe: The role of social networks in social stratification. *European Sociological Review*, 25(3), 319-332.
- Prenda, K.M., Lachman, M.E. (2001), Planning for the future: A life management strategy for increasing control and life satisfaction in adulthood. *Psychology and Aging*, 16(2), 206.
- Przepiorka, A., Sobol-Kwapinska, M. (2021), People with positive time perspective are more grateful and happier: Gratitude mediates the relationship between time perspective and life satisfaction. *Journal of Happiness Studies*, 22(1), 113-126.
- Robinson, O.C., Hanson, K., Hayward, G., Lorimer, D. (2019), Age and cultural gender equality as moderators of the gender difference in the importance of religion and spirituality: Comparing the United Kingdom, France, and Germany. *Journal for the Scientific Study of Religion*, 58(1), 301-308.
- Robustelli, B.L., Whisman, M.A. (2018), Gratitude and life satisfaction in the United States and Japan. *Journal of Happiness Studies*, 19(1), 41-55.
- Salas-Wright, C.P., Olate, R., Vaughn, M.G. (2013), The protective effects of religious coping and spirituality on delinquency: Results among high-risk and gang-involved Salvadoran youth. *Criminal Justice and Behavior*, 40(9), 988-1008.
- Salvador-Ferrer, C. (2017), The relationship between Gratitude and Life satisfaction in a sample of Spanish university students. *Annals of Psychology*, 33(1), 114-119.
- Sapmaz, F., Yıldırım, M., Topçuoğlu, P., Nalbant, D., Sızır, U. (2016), Gratitude, forgiveness and humility as predictors of subjective well-being among university students. *International Online Journal of Educational Sciences*, 8(1), 38-47.
- Seo, E.H., Kim, S.G., Kim, S.H., Kim, J.H., Park, J.H., Yoon, H.J. (2018), Life satisfaction and happiness associated with depressive symptoms among university students: A cross-sectional study in Korea. *Annals of General Psychiatry*, 17(1), 52.
- Shah-Kazemi, R. (2014), The wisdom of gratitude in Islam. In: Walsh, R., editor. *The world's Great Wisdom: Timeless Teachings from Religions and Philosophies*. United States: State University of New York Press. p. 55-85.
- Shahzadi, S., Khan, W. (2022), Impact of resilience and spirituality on life satisfaction among women: Mediating role of Self Esteem. *Journal of Positive School Psychology*, 6, 7023-7032.
- Sharif, S.P., Lehto, R.H., Amiri, M., Ahadzadeh, A.S., Nia, H.S., Haghdoost, A.A., Goudarzian, A.H. (2021), Spirituality and quality of life in women with breast cancer: The role of hope and educational attainment. *Palliative and Supportive Care*, 19(1), 55-61.
- Sousa, L., Lyubomirsky, S. (2001), Life satisfaction. In: Worell J, editor. *Encyclopedia of Women and Gender: Sex Similarities and Differences and the Impact of Society on Gender*. Vol. 2. San Diego, CA: Academic Press. p667-676.
- Stauner, N., Exline, J.J., Kusina, J.R., Pargament, K.I. (2019), Religious and spiritual struggles, religiousness, and alcohol problems among undergraduates. *Journal of Prevention and Intervention in the Community*, 47(3), 243-258.
- Streib, H., Hood, R.W. (2016), *Semantics and Psychology of "Spirituality"*. Cham, Switzerland: Springer International Publishing.
- Sun, P., Kong, F. (2013), Affective mediators of the influence of gratitude on life satisfaction in late adolescence. *Social Indicators Research*, 114(3), 1361-1369.
- Ulya, Z. (2022), Self-harm behavior, emotion and spirituality towards undergraduate student's mental health. *Psychology*, 13(4), 566-573.
- Unanue, J., Oriol, X., Oyanedel, J.C., Unanue, W., Gómez, M. (2022), Basic psychological needs satisfaction and frustration prospectively mediates the link between dispositional gratitude and life satisfaction: Longitudinal evidence from a representative sample in Chile. *Personality and Individual Differences*, 193, 111608.
- Valikhani, A., Ahmadnia, F., Karimi, A., Mills, P.J. (2019), The relationship between dispositional gratitude and quality of life: The mediating role of perceived stress and mental health. *Personality and Individual Differences*, 141, 40-46.
- Villani, D., Sorgente, A., Iannello, P., Antonietti, A. (2019), The role of spirituality and religiosity in subjective well-being of individuals with different religious status. *Frontiers in Psychology*, 10, 1525.
- Wetzel, M., Huxhold, O., Tesch-Römer, C. (2016), Transition into retirement affects life satisfaction: Short-and long-term development depends on last labor market status and education. *Social Indicators Research*, 125(3), 991-1009.
- Yadav, R., Khanna, A., Singh, D. (2017), Exploration of relationship between stress and spirituality characteristics of male and female engineering students: A comprehensive study. *Journal of Religion and Health*, 56(2), 388-399.
- Yıldırım, M., Alanazi, Z.S. (2018), Gratitude and life satisfaction: Mediating role of perceived stress. *International Journal of Psychological Studies*, 10(3), 21-28.
- Yoo, J., You, S., Lee, J. (2022), Relationship between neuroticism, spiritual well-being, and subjective well-being in Korean university students. *Religions*, 13(6), 1-10.
- You, S., Lee, J., Lee, Y., Kim, E. (2018), Gratitude and life satisfaction in early adolescence: The mediating role of social support and emotional difficulties. *Personality and Individual Differences*, 130, 122-128.
- Zhang, M., Mou, N., Tong, K., Wu, A. (2018), Investigation of the effects of purpose in life, grit, gratitude, and school belonging on mental distress among Chinese emerging adults. *International Journal of Environmental Research and Public Health*, 15(10), 2147-2156.