# (ARO

#### Content list available at:

https://journals.carc.com.pk/index.php/CRISS/issue/view/5

### CARC Research in Social Sciences

Journal homepage: journals.carc.com.pk



## A Correlational Study of Spiritual Intelligence, Resilience and Perceived Stress among University Students of Peshawar, Khyber Pakhtunkhwa



Sommaya Khan<sup>1</sup>, Syeda Nadia Shah<sup>\*1</sup>, Aman Ullah<sup>2</sup>

- <sup>1</sup> Department of Psychology, Islamia College Peshawar
- <sup>2</sup> Department of Sociology, University of Swabi

#### ARTICLE INFO

#### Article history:

Received: September 08, 2023 Revised: September 28, 2023 Accepted: September 29, 2023 Published: September 30, 2023

#### Keywords:

Perceived stress Resilience Spiritual intelligence

#### ABSTRACT

A better feeling of meaning and purpose, as well as advancements in crucial personal and professional skills, are all results of spiritual intelligence. The purpose of the current study was to look at the relationships between perceived stress, resilience, and spiritual intelligence. The total sample of the current study was comprised of 200 Peshawar university students (N=200). One hundred (n=100) were males, and one hundred (n=100) were females. The sample was approached from various universities of Peshawar. For the collection of data a research tool, the spiritual intelligence self-report inventory (SISRI) along with Brief resilience scale (BRS) and Perceived stress scale (PSS) were administered both individually and in groups. The study's findings clearly illustrated a moderately negative link between spiritual intelligence and perceived stress (=-.426\*\*) and a moderately positive correlation between spiritual intelligence and resilience (=.163\*). While with respect to male and female differences in spiritual intelligence (t=1.20, p=.231) and perceived stress (t=1.55, p=.122) have been obtained. The linear regression analysis shows that spiritual intelligence predicts statistically significant at p.05 with a variance R2 of.181 and an adjusted R2 of.177, and it also predicts resilience at .05 with a variance R2 of.26 and an adjusted R2 of 0.22. Similarly, results show that perceived stress and resilience are predicted by spiritual intelligence. In light of the findings, it is inferred that spiritual intelligence and resilience are positively correlated, while perceived stress and spiritual intelligence are negatively correlated. Spiritual IQ and perceived stress did not show any conclusive gender differences. However, students' perceptions of stress and spiritual IQ were slightly higher for female students.

Copyright © 2023 CARC Research in Social Sciences. Published by Center for Advocacy Research & Communication–Pakistan. This is an open access article licensed under CC BY:

(https://creativecommons.org/licenses/by/4.0)

#### 1. INTRODUCTION

Students are challenged to meet the high demands required of them to succeed at a university, making the start

\*Corresponding author: Syeda Nadia Shah, Department of Psychology, Islamia College Peshawar

E-mail: nadiashah@icp.edu.pk

#### How to cite:

Khan, S., Shah, S. N., & Ullah, A. (2023). A Correlational Study of Spiritual Intelligence, Resilience and Perceived Stress among University Students of Peshawar, Khyber Pakhtunkhwa. *CARC Research in Social Sciences*, 2(3), 76–85. DOI: https://doi.org/10.58329/criss.v2i3.33

of the duration a crucial time for preparing for the future. This is a critical phase of a student's life because they can prepare for life after college graduation. Student success requires the ability to work and function under pressure. In general, stressors arise due to academic exposure, classroom dynamics, and interaction with teachers, illness, and emotional concerns outside the classroom. This pressured lifestyle can lead to stress. (Kizhakkeveettil; and Vosko, 2017).

Keeping in view the phenomenon of intelligence several types of intelligence have been identified in Psychology. Psychologists have identified several types of intelligence, including fluid, crystallized, social, emotional, and spiritual intelligence. These all are indicators of adaptation

(Animasahun, 2010). Because people's characteristics and attributes differ from one another, they play an important role in their performance and behavior. A person's behavior cannot be understood and interpreted without considering the impact and relationship of these factors. One of these is spiritual intelligence (Javdan Moosa & Nickkerdar Mohammad Ali, 2011). As the highest level of intelligence, spiritual intelligence facilitates the connection between the individual and his surroundings (Hosseini et al., 2010). When faced with crises or problems, many people can rely on their spiritual intelligence to decide which path to take to achieve their goals (Shatery Hayat, 2018). A study suggested that people who scored high on spiritual intelligence have better ability to cope with stressfull life event as compared to others. Similarly, they turn life threats into best possible opportunities, which assures their mental health as well as other social abilities (Bakhtiari, 2013, Hadipour, Afkhami, 2011).

The concept of spiritual intelligence was introduced by Stevens (1966) and later developed by Emmons (2000). An individual's spiritual intelligence is defined as the capability to identify and solve existential problems to find meaning and purpose in everyday life. Internal and external integrity can only be fully attained by someone whose level of spiritual intelligence is at the highest level of development in their cognitive, ethical, emotional, and interpersonal areas (Mahmoodi A, Khani & Ghaffar, 2017). Similarly from different studies a significant connection between spirituality and resilience has been found. Spiritual intelligence and faith in God provide a person with resilience and the ability to cope with crisis in times of trouble (Sim, Loh, 2016). Higher degrees of spiritual intelligence increase resilience, which means that those individuals may handle challenges better if they rely on their inner resources (King, 2008).

Several studies suggest a relationship of resilience with that of spiritual intelligence and stress. It helps us overcome the deepest roots of human pain and answer issues of life and death. (Keykhosrovani et al., 2012; Sedighi et al., 2014). In Wadhawan's (2018) study, spiritual intelligence was found to be significantly and positively related to psychological resilience and overall health, and stress negatively associated to spiritual intelligence. The set of mental skills that make up a person's spiritual intelligence are those that are based on immaterial and transcendent parts of reality, especially those that are affected by the person's existence, sense of purpose, transcendence, and experiences of increased states of being (Hossein Chary & Zakeri, 2010). Spiritual intelligence is found to be associated with a number of benefits, such as the ability to manage stress, turn life threats into opportunities, and enjoy better mental health (Arnout, 2020).

Spiritual intelligence can help increase people's tolerance to stress and motivate them to work harder for problems solutions (Robinson et al. 2016). Likewise, in a more latest study, Mathew, Shetty, and Nair (2020) concluded that spiritual intelligence does correlate with work stress, while Khosravi and Nikmanesh (2014) concluded 'there is a negative relationship between spiritual intelligence and stress. While women scored significantly higher for some aspects of spiritual intelligence, while men performed better for others. The researchers explained gender differences by examining gender roles played in various socio-cultural contexts. Consequently, they argued that the gender gap in spiritual development can be explained as a socio-cultural process as well as being culturally relevant rather than a

universal issue. (Gehlawat, 2011; Girum, 2012, Ahanger & Khan, 2015).

#### Resilience

According to the American psychological association (2014), resilience refers to "the act of coping with adversity, trauma, tragedy, threats, or even major sources of stress." A higher level of equilibrium is associated with resilience, as well as the ability to deal with threatening circumstances (Rostami, Mousavi & Golestane, 2017). In general, resilience is an individual's ability to deal with stressful life situations and constant exposure to stressors. Resilient people are better able to cope with these environments (Mostafa Dehghani et al, 2012). As resilient people face risks and challenges, for example, a sense of inner locus of control implies the ability to take care for their social and personal problems, be self-confident, and be optimistic about life. (Ali Hatam ;Razieh Mahmoudi, 2019).

In terms of the development and manifestation of resilience and aggression, both men and women follow different pathways (Bezek, 2010). Men and women express their resilience and aggressiveness in different ways, determined in part by roles assigned to them by society and culture (Mwangi & Ireri, 2017). Research by Yang, Wang, Zhang, Zeng, and Ma (2014) suggests that women are more resilient than men. Researchers theorized that women's communication skills may make them better able to manage their negative emotions. This helps them to reappraise cognitively positively, thereby improving their resilience.

According to some studies, women have a lower level of resilience than men when exposed to aversive circumstances (RodriguezLlanes, et al., 2013). In contrast a study conducted by Masood, Masud, and Mazahir (2016) in Lahore, Pakistan, it was also found that men were more resilient than women. Erdogana, Ozdoganb, and Erdogan (2015), found that men had a lower emotional sensitivity and greater vulnerability when faced with challenges than women. It helps these men manage their emotions and act resiliently. As well, the difference in resilience and stress among men and women is greatly influenced by the mechanisms and resources that they use to cope with stress (Liddon et al., 2018).

#### **Perceived Stress**

Stress is the physical or psychological response to external or internal stressors. Stress brings about changes in almost every system in the body and changes the way people think, feel, and behave (APA, 2019). Based on the findings, spirituality, and particularly spiritual intelligence, is an effective means of coping with the problems of daily living (Pesut & Reimer-Kirkham, 2010). According to the study, spiritual intelligence and education level can be considered predictors of perceived stress in intensive care nurses (Shahrokhi & Elikaei, 2018). Hayrumyan stated that women had experienced more perceived stress, than male students, similar to what we found in a study (Harutyunyan & Musheghyan, 2020).

Other research studies have identified differences between female and male graduate students (Jeffrey, 2002; Thawabien & Qaisy, 2012). It was found from a study that female students experienced more stress as compared to male similarly female students are also reported to experience increased levels of general and academic stress compared to their male counterparts (Rahardjo, Juneman,

2013). Green and Noble (2010) analyzed the relationship between spirituality and that of resilience, which argues that spiritual experiences could support the capacity to face hardship (Green & Noble, 2010).

#### Philosophical Framework

The philosophical framework that underpins the integration of spiritual intelligence with that of resilience and stress. Which can be informed by a variety of philosophical ideas and notions. Here are a few philosophical frameworks that may be useful in comprehending these concepts.

Existentialism emphasises the individual's search for meaning, purpose, and authenticity in the face of life's challenges and problems. It acknowledges the inherent difficulties and challenges of human existence. From an existential standpoint, spiritual intelligence can be viewed as a means to navigating and finding meaning in life's obstacles, whereas resilience allows individuals to confront and overcome hardship while embracing their freedom to build their own lives. Similarly the interdependence of the different components of the human experience, such as the physical, psychological, social, and spiritual aspects, is acknowledged by holistic and integrative philosophies. For general well-being, these ideologies place a strong emphasis on the balancing and integration of various components. In this concept, spiritual intelligence is viewed as an essential component of human growth and resilience, adding to a comprehensive strategy for managing stress and adversity.

While mindfulness, which has its roots in Eastern traditions like Buddhism, places a strong emphasis on developing awareness and acceptance as well as being fully present in the present. By allowing people to step back from pressures, observe their thoughts and feelings without passing judgment, and develop inner peace and insight, it fosters spiritual growth and resilience. Practices of mindfulness can promote resilience, increase spiritual intelligence, and lower down the effects of stress.

#### Rationale of Study

Academic expectations, social pressures, and personal transitions are a few of the challenges that characterize university life, which is a crucial stage in life. Students in higher education may experience significant levels of stress as a result of these difficulties. Promoting students' general mental health requires an understanding of the variables that affect their capacity to handle stress and preserve wellbeing. Spiritual intelligence and resilience are two significant factors that have attracted attention in the literature. The ability to incorporate and put into practice spiritual and existential principles in daily life is referred to as spiritual intelligence. Contrarily, resilience describes a person's capacity to overcome hardship and preserve their mental health. Although resilience and spiritual intelligence have each been independently related to better mental health outcomes, little research has examined their relationship.

By investigating the connection of spiritual intelligence with that of resilience, and perceived stress among graduate and undergraduate students of Peshawar. This study seeks to close this research gap. Investigating how these characteristics interact might provide important understandings into the elements that affect students' stress levels and general wellbeing. Using this understanding,

customized interventions and support programs can be created to strengthen students' resilience and spiritual intelligence, which will lead to better stress management and psychological well-being. The findings of this research can also provide a context-specific consideration of these interactions among university students in Peshawar while advancing and improving our understanding of resilience, perceived stress, and spiritual intelligence.

#### 2. METHODOLOGY

#### **Objectives**

The main objectives of the study are as follows,

- To investigate the association spiritual intelligence and resilience.
- To examine the relationship between perceived stress and spiritual intelligence among university students.
- To explore gender differences with respect to spiritual intelligence, resilience perceived stress.
- To determine the impact of spiritual intelligence on resilience and perceived stress.

#### **Hypotheses**

Following are the hypotheses of the study

- The increased levels of spiritual intelligence will be associated with higher levels of resilience among participants.
- Spiritual intelligence and perceived stress will have a significant inverse relationship among university students in Peshawar.
- Gender differences in spiritual intelligence, resilience, and perceived stress will exist among graduate and undergraduate students of Peshawar.
- Spiritual intelligence will be the predictor of perceived stress and resilience among students.

#### Sample

The study's target population was university students in Peshawar. To select a representative sample, a multistage sampling technique was used. A list of universities in Peshawar was obtained in the first stage, and a stratified sampling method was used to select a subset of universities for inclusion in the study. The strata were determined by the type of university (public or private). A convenience sampling approach was used to recruit participants in the second stage within each selected university. The participants were approached in a variety of locations on campus, including libraries, common areas, and classrooms. Based on statistical considerations, the sample size was determined to ensure a sufficient number of participants for analysis. In total, 200 university students from various disciplines and academic levels volunteered to take part in the study. To ensure gender diversity, the sample included both male and female students. It should be noted that the sample may not be representative of all university students in Peshawar, but efforts were made to obtain a diverse sample from multiple universities in order to improve the generalizability of the results of the study.

#### Inclusion Criteria and Exclusion Criteria

Subjects with the age range of 18 to 25 years university students will be included. Subjects with the age range below

18 and above 25 years, schools and colleges students with a previous history of any mental health issues or substance abuse were excluded. Similarly students with previous history of substance abuse, and mental illness were also excluded.

#### Instruments

The following instruments will be used in this study:

#### Personal Information Sheet

This information sheet was used in the study to collect the basic information of the subjects. The subjects were asked to fill out the section related to their gender, age, education, and their socioeconomic status. So that the provided data can be further used during the analysis of the data.

#### The Spiritual Intelligence Self-Report Inventory

King David created the Spiritual Intelligence Self-Report Inventory (SISRI 24) in 2008 to measure a person's level of spiritual intelligence. The four dimensions of this test are the existence of critical thinking, the creation of personal meaning, the transmission of awareness, and the development of consciousness. With 24 items, item 6 uses reverse scoring on a four-point Likert scale, with the options of not at all true, not true, somewhat true, very true, and true (King & DeCicco, 2009; King, 2008). The alpha reliability coefficient is 0.92.

#### **Brief Resilience Scale**

One of the best and most widely regarded resilience scales is Smith and colleagues' (2008) Brief Resilience Scale (Windle et al., 2011). According to Smith et al. (2013), the BRS has a possible score range of 1 (low resilience) to 5 (high resilience). Things 1, 3, and 5 on the short resilience scale are positively stated, while things 2, 4, and 6 are adversely worded. Reverse coding items 2 through 6 and figuring out the mean of the six components yields the BRS. Interpretation of BRS scoring 1.00-2.99 low resilience 3.00-4.30 is considered moderate resilience, whereas 4.31-5.00 is considered high resilience. The scale is administered using the following instructions: "Please indicate your level of agreement with each of the following statements using the scale: 1 =strongly disagree, 2 =disagree, 3 =neutral, 4 =agree, 5 =strongly agree."

#### Perceived Stress Scale

The most widely used psychological tool for determining stress perception is the Perceived Stress Scale (PSS). It is a measure of how stressful one perceives their life to be. Cohen discovers connections between PSS and measures of stress, self-reported health, health service metrics, and indications of healthy behaviours like smoking status and help-seeking behaviour. The four affirmatively expressed items (items 4, 5, 7, and 8) are used to generate the PSS scores, which are then totaled across all scale items (e.g., 0 = 4, 1 = 3, 2 = 2, 3 = 1, and 4 = 0). The PSS's alpha reliability coefficient was 0.86.

#### Procedure

A correlational study was conducted on 200 sample on different universities students. A multistage sampling strategy will be used to choose participants from several universities in Peshawar for this study. To choose

representative universities, stratified random sampling was utilised, and convenience sampling was performed within each selected university. Based on statistical considerations, the sample size was set to guarantee an acceptable representation of university students in Peshawar. Data on spiritual intelligence, resilience, and perceived stress were collected using a detailed questionnaire. Validated instruments were used, such as the Spiritual Intelligence inventory by David king (2008) the brief resilience scale (Smith, 2009) and the Perceived stress scale (PSS) (Cohen, 1983).

All participants provided informed consent and received ethical approval. Data was collected using both online and offline approaches, with online surveys distributed across multiple platforms and offline surveys done on university campuses. Likewise during the delivery of the questionnaires, it was guaranteed that participants' comprehension and any other problems were addressed. At the end the data quality control methods were implemented, and descriptive statistics, correlation analysis, and regression analysis were used to investigate the relationship between spiritual intelligence, resilience, and stress while adjusting for relevant variables.

#### 3. RESULTS & ANALYSIS

**Table 1** Socio demographic information of Participants with respect to age, education, socioeconomic status and gender (N=200).

Variables	N	%								
Age										
18-19	48	24.0								
20-25	152	76.0								
Ger	nder									
Female	100	50.0								
Male	100	50.0								
Socioecone	omic Statu	s								
Higher Class	31	15.5								
Middle Class	146	73.0								
Lower Class	23	11.5								
Educ	ation									
BS	164	82.0								
MS	36	18.0								
Marital Status										
Unmarried	165	82.5								
Married	35	17.5								

Note. N=200(n-100 for Females and n-100 for Males)

Table 2

Frequencies and Chi-Square Results of age against gender and education

Variables	18-19		20-25		¥0(0)	
variables	N	%	N	%	X2(2)	
Gender						
Male	16	33.3	84	55.3	7.018	
Female	32	66.7	68	44.7	7.018	
Education						
BS	48	29.3	116	70.7	13.864	
MS	0	0	36	100	13.004	

Table 3

Pearson Correlation among spiritual intelligence scale (SIS), perceived stress scale (PSS) and brief resilience scale (BRS) (N=200).

Variables	SIS	SIS PSS		
SIS	1	-	-	
PSS	426**	1	-	
BRS	.163*	0.056	1	

Table 3 shows that there will be moderate negative correlation between perceived stress and spiritual intelligence (- .426\*\*) among university students. The result will be significant at 0.01 levels. Also indicate that there will be positive correlation between brief resilience and spiritual

intelligence (.163\*) and the result will be significant at 0.05 level.

Table 4

Mean difference, standard deviation & t-value of males and females on Spiritual Intelligence Scale (N=200)

Variables	Male		Variables Male		Fen	nale			95%	6CL	
	(n=	100)	(n=	100)							
	M	SD	M	SD	t(198)	P	LL	UL	Cohens'd		
SIS	55.5	11.5	58.2	19.4	1.2	0.231	-7.18	1.74	0.1693		

Table 4 displays the mean, SD and t-value of males and females on Spiritual Intelligence. On average females

(M=58.2, SD=19.4) scored higher than males (M=55,5, SD=11.5). This difference=2.71, 95%CI (1.74, -7.18) was statistically significant, t (198) = 1.20, p<.01.

Table 5

 $Mean \ difference, \ standard \ dev\underline{iation} \ \& \ t\text{-value of males and females on Perceived stress} \ (N=200)$ 

Varia	Variables Male		Male		nale			95%	CL	
		(n=1	100)	(n=	100)	•	•			
		M	SD	M	SD	t(198)	P	LL	UL	Cohens'd
PS	s	20.8	5.56	22.1	6.15	-1.55	0.122	-2.12	0.34	0.2217

Table 5 indicated t-value of males and females on Spiritual intelligence. On average females (M=22.1, SD=6.15) scored higher than males (M=20.8, SD=5.56). This

difference=1.3, 95%CI (.340, -2.12) was statistically significant, t(198)=-1.55, p<.001

 Table 6

 Mean difference, standard deviation, t-value of males and females on Brief Resilience Scale

Male Variables			Fen	nale			95%	CL	
variables	(n=	=100)	(n=	100)					
	M	SD	M	SD	t(198)	P	LL	UL	Cohens'd
BRS	20	4.44	19.6	3.39	0.787	0.432	-0.663	1.54	0.1012

Table 6 illustrates the t-value of males and females on Brief Resilience Scale. On average male (M=20.0, SD=4.44) scored higher than females (M=19.6, SD=3.39) on resilience. This difference=0.4, 95%CI (1.54, -.663) was statistically nonsignificant, t(198)= .787, p<.001

**Table 7**Linear Regression Analysis of spiritual intelligence Predicting perceived stress among University Students (N=200)

Variables	В	SE	В
Constant	12.588	1.396	
SIS	0.156	.024*	0.426
R <sup>2</sup>	0.181		
F	43.833		

Table 7 reveals that spiritual intelligence is the predictors of perceived stress among university student, The result reveals significant regression equation between spiritual intelligence and perceived stress responded by university student. The table is statistically significant at p< .05 with variance  $R^2$  of .181 and adjusted  $R^2$  is .177 Results reveals that spiritual intelligence predicts perceived stress among university students.

 Table 8

 Linear Regression Analysis of spiritual intelligence resilience among University Students (N=200)

Variables	В	SE	В
Constant	17.56	1.021	
SIS	0.04	0.017	0.163
R <sup>2</sup>	0.026		
F	5.381		

Table 8 indicated that spiritual intelligence is the predictors of resilience among university student, The result reveals significant regression equation between spiritual intelligence and perceived stress responded by university student. The table is statistically significant at p< .05 with variance  $R^2\,\text{of}$  .026 .Results reveals that spiritual intelligence predicts resilience among university students.

#### Discussion

The effect of spiritual intelligence on resilience and perceived stress was investigated in this study. This study looked into the effects of gender on spiritual intelligence and perceived stress, as well as the connections between spiritual intelligence, resilience, and perceived stress. According to one of the first hypothesis of the study there will be a strong positive relation of spiritual intelligence with that of resilience which was proved through statistical

analysis (=.163\*) (see table 3). Other research have found the same thing. Spirituality, spiritual intelligence, and resilience have a good and important relationship since there are people who can overcome specific threats and prevent negative repercussions (Khodabakhshi et al., 2010; Binaeian, 2011). According to Kallimpos and Roussi (2017) and Fatemie et al. (2018) studies, there is a considerably strong positive relationship of spiritual intelligence and that of resilience. Pournesaei discovered that there is a strong positive relationship between mental health and resilience, as well as a significant positive relationship between spiritual intelligence and resilience (Pournesaei et al. 2013)

The study's second hypothesis was that there will be a negative relationship between spiritual intelligence and perceived stress, that has been shown in table 3 (= -.246). Spiritual intelligence and the resilience of rehabilitation professionals have a substantial association (r = 0.38). According to the findings, enhancing spiritual intelligence can boost resilience (Abdi K, Bakhshi , 2019). A multiple regression analysis, on the other hand, revealed that the predictive variables strongly explain the criteria variables (see tables 7 and 8).

This study discovered a considerable negative association between spiritual intelligence and felt stress, anxiety, depression, or sadness. Spiritual intelligence improves perceptions of stress, anxiety, and sadness. Bayrami and Movahedi (2014). Spiritual intelligence and resilience have a negative association with perceived stress, according to Ong and Bergeman (2004, as referenced by Khosravi M, Nikmanesh Z. 2014). There has been minimal research in this field. However, there are some convincing findings indicating that there are significant disparities in stress response. According to Yousaf (2015), spiritual intelligence is vital in moulding human behaviour. Furthermore, numerous research have discovered unfavourable correlations between spiritual intelligence, stress, and mental health. Multiple regression analysis revealed a substantial inverse relationship between spiritual intelligence and reported stress, anxiety, and sadness.

The third hypothesis found no significant gender differences in spiritual intelligence (t=1.20, p=.231) or perceived stress (t=1.55, p=.122) (see tables 4 and 5). The study showed no significant differences in conscious state expansion, critical existential thinking, personal meaning production, or the Transcendent Awareness of Spiritual Intelligence Inventory between male and female students. There is no gender difference in spiritual intelligence, according to the stud (Kotnala, 2015). According to the findings of Shabani and colleagues (2011), spiritual and emotional intelligence have the capacity to predict the mental health of a sample of 100 teenagers. The study's findings revealed no significant differences based on gender (Shabani et al., 2011).

Pant and Srivastava explored the effects of spiritual intelligence, gender, and educational background on the mental health of college students. The study looked at levels of spiritual intelligence and mental health, as well as their relationship. A reasoned sampling strategy was used to pick 300 students based on gender and education. The findings revealed that there is no statistically significant difference in spiritual intelligence between male and female pupils. Pant and Srivastava (2019). The findings also revealed a tight relationship between males and girls in terms of emotional intelligence and spiritual intelligence. As a result, we can conclude that gender has no bearing on the development of emotional and spiritual intelligence (Guneet Kaur Cheema (2019). Alenzi's purpose was to assess spiritual intelligence and distinguish between gifted and non-gifted students. The sample for the school study included more than 500 male and 226 female students. According to their findings, gifted children have a high level of spiritual intelligence. Furthermore, no statistically significant gender difference exists between gifted and non-gifted pupils (Alenzi, 2016).

Results showed that deans had a higher level of resilience than the other respondents, who included 35 deans—16 males and 19 women. Only proactive (.046) of the resilience traits, as determined by the Mann-Whitney Utest, was significant at the 0.05 level. Many studies have demonstrated that women experience more problems at work than males do (Trentham & Larwood, 2004; Reskin, 1993). The aggregation of these issues has probably made women more resilient. Recognising different levels of resilience within university governance can help university leaders perform well during times of transition. (Albert J. Isaacs, 2014).

This population-based cross-sectional study in Brisbane, Australia, examines how age and gender affect mental health resilience and protective factors in primary school students. In 2004, surveys were given to more than 2000 male and female college students (N = 2492) to gauge how they felt about resilience and related protective factors. Female students report higher levels of communication, empathy, seeking assistance, and future goals and objectives Donald Stewart and Jing Sun (2012). The results of a multi-level logistic regression demonstrate that resilience is a good predictor of survival in older persons, even when the amount and degree of adversity are controlled for. Women's resilience is a stronger predictor of survival, whereas men face more and more severe hardship. Thus, resilience appears to be an essential role in later-life lifespan and survival, and the greater influence of resilience in women may help to explain the "gender paradox." Resilience has been shown to be protective against death, particularly through the utilisation of social resources, which are more prevalent in women and are not quantified in the majority of standard resilience assessments (Martin Lakomý & Marcela Petrova Kafkova, 2017).

Similarly the study discovered significant differences among male and female on perceived stress levels, with women reporting significantly higher score on perceived stress (table 6). Furthermore, women reported higher levels of mild stress than men. Being feminine is connected with lower levels of perceived stress (Deatherage S, ServatiSeib H, 2014). However, some studies found no overall differences in reported stress among their student populations, but the authors did not break down their findings by gender. As shown, the current literature yields inconclusive results when it comes to gender versus perceived stress levels. (Jones and Lehman, 2019; Torregrosa & Aparisi, 2019).

Female college students had higher stress levels, according to Brougham, Zail, Mendoza, and Miller (2000). This sensitivity to stress levels in women was consistent with previous research (Shaw MP, Peart DJ, 2017) (see table 4 and 5).

#### 4. CONCLUSION & RECOMMENDATIONS

The study has following limitations and recommendations.

- The obtained results cannot be generalized to a varied population as the sample size of the study was small. In future a larger sample from different areas or region of Pakistan can be selected so that the obtained results could be easily generalized over the population.
- The current study lack any intervention hence in future intervention based strategies could be incorporated so that once problem identified could be addressed through the use of different clinical tools.
- The impact of different family structure i.e joint or nuclear, birth order, impact of personality and that of socioeconomic status were not studied in this research. In future the impact of all these variables should be considered in order to obtain better results.

#### **Future Implications**

If research continues to show that spiritual intelligence has a good impact on resilience and perceived stress, it could lead to the development of focused interventions and program. These interventions may include spiritual practices like mindfulness, meditation, or contemplative exercises to increase psychological well-being and stress reduction. As the discipline of positive psychology gets recognition and acceptance, it is possible that spiritual intelligence examinations and interventions may be more widely used in healthcare settings. Spiritual aspects may be considered by healthcare providers as part of comprehensive patient care, given their potential impact on resilience and stress management. Organizations are becoming more aware of the significance of employee well-being and stress management. Future research could look into how spiritual intelligence affects workplace resilience and stress reduction. This could result in the deployment of workplace interventions that promote spiritual practices or resources for employees to build their spiritual intelligence, with the goal of improving their general well-being and coping capacities.

#### **Competing Interests**

The authors did not declare any competing interest.

#### References

Abdi, K., Bakhshi, E., Ebrahimi, B., Hosseini, M., & Shirozhan, S. (Dec 2019). The Relationship between Spiritual Intelligence and Resiliency of Rehabilitation Staff. J Pastoral Care Counsel, 73(4), 205-210. https://doi.org/10.1177/1542305019877158

Ahangar, M. M., & Khan, M. A. (2015). Gender difference on spiritual intelligence among university students. International Journal of Research in Management and Social Science, 3 (2), 117-120.

- Albert J. (2014) Isaacs Gender Differences in Resilience of Academic Deans. Journal of Research in Education Volume 24, Number 1, Spring and Summer.
- Alenzi, S. A. (2016). Spiritual intelligence and the differences among gifted and non-gifted students, according to gender and class level. American journal of educational research, 4(15), 1086-1095.
- Ali & Ghaffari , Mohtasham ,Rakhshanderou, Sakineh & Safari-Moradabadi.(2021). Structural Equation Modeling of the Spirituality and Self-efficacy Among College Students. Journal of Religion and Health. 60. https://doi.org/10.1007/s10943-020-00984-y
- American college of health Association. (2019). A survey on college students of America.
- American psychological Association. (2014). The road to resilience. Washington, DC.
- American psychological Association. (2019). perceived stress definition.
- Animasahun, R. A. (2010). Intelligent quotient, emotional intelligence and spiritual intelligence as correlates of prison adjustment among inmates in Nigeria Prisons. J Social Science, 22(2), 121-8. https://doi.org/10.1080/09718923.2010.11892792
- Aparisi, M. S., Torregrosa, C., Ingles, J., & Garcí, J. M. (2019). "Stress, burnout and health in a sample of Spanish teachers," Advances in Higher Education, vol. 3, no. 1, pp. 1–11, 2019. https://doi.org/10.18686/ahe.v3i1.1128
- Arnout, B. A. (2020). A structural equation model relating unemployment stress, spiritual intelligence, and mental health components: Mediators of coping mechanism. journal public affairs (2), e2025. https://doi.org/10.1002/pa.2025
- Asl, S., Bakhtiari, M., Raufi, A., Yousefi, V., Poursalman, M., & Ahmadi, S. (2013). Happiness and related factors in infertile women. International journal advanced stud humanities social science, 1:116.
- Bayrami, M., Movahedi, Y., & Movahedi, M. (2014). The Role of Spiritual Intelligence in Perceived Stress, Anxiety and Depression of Lorestan Medical University Students (Iran). Journal of babol university of medical sciences, 16(1), 56-62.
- Bezek, E. (2010). Gender Differences in Resilience in the Emerging Adulthood Population (Master's Thesis). Rochester Institute of Technology. Retrieved April 28, 2019.
- Deatherage, S., Servaty-Seib, H., Aksoz, I. (2014). Stress, coping, and internet use of college students. Journal of America College of Health, 62(1), 40–46. https://doi.org/10.1080/07448481.2013.843536
- Dehghan, M., Piri Kamrani, M., & Karami, J. (2012). The effectiveness of group spiritual therapy on resilience enhancement. Psychology and Religion Journal. 8(4), 81-92.

- Dr. Cheema, G. K., & Ms. Mangla, B. (2014). Gender in relation to Emotional Intelligence and Spiritual Intelligence among under graduates. Palarch's Journal of Archaeology of Egypt/Egyptology, 17(9), 1567-214x.
- Emmons, R. (2000). Is spirituality an intelligence? Motivation, cognition and the psychology of the ultimate concern. International Journal for the Psychology of Religion, Vol 10, no1, 3-26. https://doi.org/10.1207/s15327582ijpr1001\_2
- Erdogana, E., Ozdoganb, O. & Erdogan, M. (2015). University Students' Resilience Level: The Effect of Gender and Faculty. Journal of Procedia-Social and Behavioural Sciences, vol.186, pp.1262-1267. https://doi.org/10.1016/j.sbspro.2015.04.047
- Gehlawat, M. (2011). A Study of Adjustment among High School Students in relation to their Gender. International Referred Research Journal, 3 (33), 47-82.
- Green, W., & Noble, K. D. (2010). Fostering spiritual intelligence: Undergraduates' growth in a course about consciousness. International journal of research and advance development, 12, 26–48.
- Hadipour, M., Afkhami, M., & Takdastan, A. (2011). Identification and measurement of hospital waste materials and classification of them according to WHO criteria (Case Study: Amir-Al momenin Hospital and ShahidRajaee Polyclinic of Ahwaz). Jundishapur Journal of Health Sciences, 3, 39–51.
- Harutyunyan, A., Musheghyan, L., & Hayrumyan, V. (2020). Gender differences in perceived stress level among undergraduate students in Armenia. European journal public health supplement, 30(5). https://doi.org/10.1093/eurpub/ckaa166.102
- Hatami, A., Mahmoudi, R., & Hafezi, D., et al. (2019). Journal of Research in Medical and Dental Science, Volume 7, Issue 3, Page No: 8-13.
- Hossein, M., & Zakeri, H. (2010). The impact of academic backgrounds, religious sciences, and the arts, on spiritual intelligence: Effort in order to validate the feasibility and reliability of the intelligence scale. Journal of Educational Measurement, pp. 93-73.
- Hosseini, M., Elias, H., Krauss, S. E., & Aishah, S. (2010). A review study on spiritual intelligence, adolescence and spiritual intelligence, factors that may contribute to individual differences in spiritual intelligence, and the related theories. International Journal of Psychological Studies, 2(2), 179. https://doi.org/10.5539/ijps.v2n2p179
- Jing Sun & Donald Stewart. (2012) Age and Gender Effects on Resilience in Children and Adolescents. International Journal of Mental Health Promotion, Pages 16-25. https://doi.org/10.1080/14623730.2007.9721845
- Jones DR, Lehman BJ, Noriega A, Dinnel DL. (2019). The effects of a short-term mindfulness meditation intervention on coping flexibility. Anxiety Stress Coping;32(4):347–361.

https://doi.org/10.1080/10615806.2019.1596672

- Kaliampos, A., & Roussi, P. (2017). Religious beliefs, coping, and psychological well-being among Greek cancer patients. Journal of health psychology, 22(6), 754-764.
  - https://doi.org/10.1177/1359105315614995
- Khodabakhshi Koolaei, A. Heidari, S. Khoshkonesh, A. and Heidari, M. (2014). The relation between spiritual intelligence and resiliency toward stress in pregnant women. Iranian Journal of Obstetrics Gynecology and Infertility. 16(58):8-15.
- Khorasani, M Yazdkhasty, A., & Bidgoli, A. (2016). Prediction of stress coping styles based on spiritual intelligence in nurses. International Academic Journal of Social Sciences, 3(11), 1–10.
- Khosravi, M., & Nikmanesh, Z. (2014). Relationship of spiritual intelligence with resilience and perceived stress. Iranian Journal of Psychiatry and Behavioral Sciences, 8(4), 52.
- King, D. B., & DeCicco, T. L. (2010). A viable model and self-report measure of spiritual intelligence. The International Journal of Transpersonal Studies, 28, 68-85. https://doi.org/10.24972/ijts.2010.28.1.68
- King, D. B., Mara, C, & DeCicco, T. L. (2012). Connecting the spiritual and emotional intelligences: Confirming an intelligence criterion and assessing the role of empathy. The International Journal of Transpersonal Studies, 31, 11-20. https://doi.org/10.24972/ijts.2012.31.1.11
- Kizhakkeveettil A, Vosko A, Brash M, Philips M. (2017). Perceived stress and fatigue among students in a doctor of chiropractic training program. Journal of Chiropractic Education, 31(1):8–13. https://doi.org/10.7899/jce-15-27
- Kotnala, S. (2015). A Study of Spiritual Intelligence among Graduate Students.
- Liddon, L., Kingerlee, R. & Barry, J. (2018). Gender Differences in Preferences for Psychological Treatment, Coping Strategies and Triggers to Help-Seeking. The British Journal of Clinical Psychology, vol.57:1, pp.42-58. https://doi.org/10.1111/bjc.12147
- Martin Lakomý, Marcela Petrová Kafková. (2017). Gender Studies, Demography and human biology, Journal of Sociologic Ky Issue No: 03,Page Range: 369-392.
- Masood, A., Masud, Y. & Mazahir, S. (2016). Gender Differences in Resilience and Psychological Distress of Patients with Burns. Burns: Journal of the International Society for Burn Injuries, vol.42:2, pp.300-306.
  - https://doi.org/10.1016/j.burns.2015.10.006
- Mathew, J., Shetty, P., & Nair, S. (2020). Role of Spiritual Intelligence and Occupational Stress on Organizational Commitment: Evidence from Outsourcing Industry.776-781. https://doi.org/10.31838/jcr.07.06.135
- Mohammad Kadkhodaa, Hoorie Jahanic. (2012). Journal of Procedia Social and Behavioral Sciences 3,170 -

175.

- Moosa, J., & Ali N. M. (2011). Journal of Life Science and Biomedicine, 1(1), 24-27.
- Mortazavi M K (2014). Spiritual intelligence among adolescence for a healthy mind approach. Journal of Social Sciences & Interdisciplinary Research, 1(2), 60-69.
- Mwangi, C. & Ireri., A. (2017). Gender Differences in Academic Resilience and Academic Achievement among Secondary School Students in Kiambu County, Kenya. International Journal of Psychology and Behavioural Science, vol.5:5, pp. https://doi.org/10.19080/pbsij.2017.05.555673
- Ong AD, Bergeman CS. (2004 Resilience and adaptation to stress in later life: Empirical perspectives and conceptual implications. International journal of Ageing.;29(3):219–46. https://doi.org/10.1007/s12126-996-1000-z
- 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. https://doi.org/10.1007/s10943-017-0529-3
- Pesut, B., & Reimer K. S. (2010). Situated clinical encounters in the negotiation of religious and spiritual plurality: A critical ethnography. International Journal of Nurse Study, 47, 815 25. https://doi.org/10.1016/j.ijnurstu.2009.11.014
- Phillips A.C. (2013) Perceived Stress. In: Gellman M.D., Turner J.R. (eds) Encyclopedia of Behavioral Medicine. Springer, New York.
- Pournesaei, Gh. and Sotudeh, F. (2013). The relationship between mental health and spiritual intelligence and resilience among the sixth-grade students in the Bandar Anzali, Sixth International Congress of Child and Adolescent Psychiatry, University of Medical Sciences, Tabriz.
- Rahardjo W, Juneman J, Setiani Y. (2013). Computer anxiety, academic stress, and academic procrastination on college students. Journal of learn education,7(3):147–152. https://doi.org/10.11591/edulearn.v7i3.179
- Robinson, M. R., Thiel, M. M., Shirkey, K., Zurakowski, D., & Meyer, E. C. (2016). Efficacy of training interprofessional spiritual care generalists.Iranian Journal of Medical Education, 13(5), 431-440.

https://doi.org/10.1089/jpm.2015.0373

- Rodriguez-Llanes, J., Vos, F. & Guha-Sapir, D. (2013).

  Measuring Psychological Resilience to Disasters: Are Evidence Based Indicators an Achievable Goal? Environmental Health, vol.12, pp.115-125. https://doi.org/10.1186/1476-069x-12-115
- Rostami, S., Mousavi, S, A., & Golestane, S. M. (2017). Prediction of labor based on psychological hardiness, social support and resiliency in Bushehr nulliparous women. Journal of clinical nurses' midwife, 6, 23-36.
- Sedighi F; Pournesaei, Gh. (2014). The relationship between mental health and spiritual intelligence and

- resilience among the sixth-grade students in the Bandar Anzali, Sixth International Congress of Child and Adolescent Psychiatry, University of Medical Sciences, Tabriz.
- Shahrokhi, N., Elikaei, L., Yekefallah, A., Barikani. (2018). Relationship between spiritual intelligence and perceived stress among critical care nurses. JQUMS, Vol.22, No.3,, pp. 40-49. https://doi.org/10.29252/qums.22.3.40
- Shamita Mahapatra Reader &Head. (2018). Department of Psychology, Ravenshaw University, Cuttack, Odisha, India. IOSR Journal of Humanities and Social Science (IOSR-JHSS) Volume 23, Issue 7, Ver. 8. https://doi.org/10.9790/0837-1347679
- Shatery K, Hayat AA, Jayervand.(2018. H. The relationship between mental health and spiritual intelligence among primary school teachers. International Journal of School Health. https://doi.org/10.5812/intjsh.74031
- Sim TN, Loh BSM. (2016). Attachment to god: Measurement and dynamics. Journal of Social and Personal Relationships,20(3).Singh K, Yn XN. Psychometric evaluation of the Connor Davidson resilience scale (CD-RISC) in a sample of Indian Students. J Psychology. 2010;1(1):23–30. https://doi.org/10.1080/09764224.2010.11885442
- Smith, B.W., Daley, J., Wiggins, k., Tooley, E., Christopher, P., and Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. International journal of behavioral medicine, 15(3), 194-200.
  - https://doi.org/10.1080/10705500802222972
- Thawabien AM, Qaisy LM. Assessing stress among university students. American International Journal of Contempered Research. 2012;2(2):110–116.
- Wadhawan, K. (2018). Influence of spiritual intelligence on mental health and stress management of teacher educators. International Journal of Advanced Research and Development, 3(2), 626–630.
- Yang, Z., Wang, J., Zhang, B., Zeng, Y. & Ma., H. (2014). Factors Influencing Resilience in Patients with Burns during Rehabilitation Period. International Journal of Nursing. https://doi.org/10.1016/j.ijnss.2014.02.018
- Yousaf, H. (2015). The impact of spiritual intelligence in reducing job stress. Pollster Journal Academic Research, 02(02), 111–121.