



# Structural equation modeling of the relationship between spiritual intelligence and corona anxiety with the mediation of depression

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## ABSTRACT

**Objective:** The present study was conducted to identify the relationship between spiritual intelligence and anxiety caused by Corona as a traumatic global crisis with the mediation of depression.

**Methods and Materials:** The current research is a descriptive study using the correlation method, which was carried out with structural equation modeling. The statistical population of this research is all university students or graduates living in Tehran, from this statistical population, by calculating the sample size of 420 people using the formula to determine the sample size based on Cohen's effect size and including 20 dropouts, a total of 440 people were sampled by available sampling method. The data collection tools used in this research were King's Spiritual Intelligence Questionnaire (2009), DASS-21 (1998), Corona Anxiety Questionnaire by Alipour et al. (2020).

**Findings:** The findings of the present study showed that spiritual intelligence has a direct effect on depression and also an indirect effect on corona anxiety with the mediation of the depression variable.

**Conclusion:** According to the findings of the current research, it can be concluded that spiritual intelligence is one of the factors affecting depression and Corona anxiety. Therefore, spiritual intelligence can be used to prevent and deal with the mentioned disorders.

**Keywords:** structural equations model, spiritual intelligence, corona anxiety, depression.

## 1. Introduction

One of the phenomena that has attracted the attention of people and governments of different countries and made them aware of various damages is the spread of the coronavirus, which began in 2019 and continues until now (Planchuelo-Gómez et al., 2020; Van Den Heuvel et al.,

2020). COVID-19 is an acute respiratory illness with initial symptoms including fatigue, muscle pain, and fever, and it spreads very quickly (Shigemura et al., 2020). Generally, the spread of infectious diseases can cause an increase in anxiety; therefore, anxiety caused by this disease has also led to the emergence of a concept called "corona anxiety" (Batra et al., 2020). Corona anxiety is defined as the presence of

concern, worry, and depression in individuals about the coronavirus and the risks associated with it (Zangrillo et al., 2020), and due to people's cognitive ambiguity about this virus and its unknown nature, it has a high prevalence (Guan et al., 2020). Studies have shown that anxiety and fear caused by the coronavirus are related to depression and have contributed to the increasing prevalence of this disorder (Servidio et al., 2021).

One of the psychological disorders that can be observed as a global health problem in different cultures and has affected people in different countries is depression. The occurrence of this disorder in humans varies in severity (from mild to severe), but any degree of severity can cause the individual, their family, and subsequently the community to face many problems (Sadock, 2015). Given the prevalence of this disorder worldwide, it can be said that depression is one of the main causes of individuals' susceptibility to physical and mental illnesses (Shao et al., 2020). The incidence of depression in a family member, such as a student or a worker, leads to significant costs for the relevant social element, which can be tangible or intangible. For this reason, researchers are trying to identify the disorder and its causes as much as possible to prevent and treat it better (Gao, Ping, & Liu, 2020). The American Psychiatric Association in the latest edition of the Diagnostic and Statistical Manual of Mental Disorders defines depression as a set of mood, cognitive, and behavioral symptoms, including feelings of sadness, anhedonia, decreased concentration, changes in sleep and eating patterns, suicidal thoughts and feelings of hopelessness, feelings of guilt and loss of self-esteem, and decreased energy levels. These symptoms, along with each other, can reduce an individual's personal and social functioning (American Psychiatric Association, 2022).

One of the variables examined in this research that is related to COVID anxiety and depression is spiritual intelligence (Ajele et al., 2021). Studies show that individuals' level of spiritual intelligence also affects the onset of anxiety and depression and prevents the intensification of these disorders (Mohammadipour et al., 2021). One of the characteristics of individuals with depression is a low level of spiritual intelligence (Parattukudi et al., 2022). Spiritual intelligence is a set of adaptive mental abilities based on the transcendent and superior aspects of reality, especially those related to personal meaning-making, transcendence, expanded states of consciousness, and existential nature. These processes have a role in facilitating abstract reasoning, problem-solving, and adaptive coping (King, 2010). In other words,

spiritual intelligence is a problem-solving and adaptive behavior that provides the basis for achieving the highest level of cognitive, ethical, emotional, and interpersonal growth in various domains of human life. It guides individuals towards coordination with various phenomena and achieving internal and external coherence, and gives them the ability to find meaning, value, and purpose in life and to use spiritual values to enhance daily performance and mental and even physical health (Kaur, Sambasivan, & Kumar, 2015). Spiritual intelligence is effective in all aspects of human life and connects human life to an infinite and unlimited realm, ultimately leading them towards a meaningful life (de Diego-Cordero et al., 2022).

Overall, a review of previous research shows that there is a relationship between spiritual intelligence, depression and COVID anxiety (Giannone & Kaplin, 2020; Parattukudi et al., 2022; Roy et al., 2021). Diego-Cordero and colleagues (2022) showed in their qualitative review that spiritual intelligence has an inverse relationship with anxiety and depression, and the use of spirituality can be effective in improving depression and anxiety disorders during the COVID pandemic (de Diego-Cordero et al., 2022). Leung (2022) confirmed that spiritual intelligence is related to depression and anxiety during the COVID period (Leung, 2022). Sohrabian and Mirdrikvand (2017) also showed in their study that spiritual intelligence can predict depression and anxiety in students (Sohrabian & Mirdrikvand, 2017).

Given the importance of depression disorder due to its biological, psychological, economic, and social effects, and its increasing prevalence in various communities, this study aims to identify the relationship between this disorder and other psychological variables mentioned in this research that have not been previously investigated in this conceptual model. The ultimate goal is to gain a better understanding of the nature of this disorder and ultimately help prevent and control it and treat this disease.

## 2. Methods and Materials

### 2.1. Study Design and Participants

The present research was a descriptive study using the correlation method. The statistical population of the study consisted of all students and graduates of universities residing in Tehran, of whom 442 were selected by convenience sampling method. The study was conducted both in-person and online. In the in-person mode, the questionnaires were provided to the students and graduates of Tehran universities in person. In the online mode, the

questionnaires were created and prepared online and distributed among eligible individuals through virtual environments such as the internet and social networks. It should be noted that all participants in this study were justified by the researcher regarding the test procedure, questions, the purpose and nature of the research, and the rights of the participants in conducting the research. In case of any remaining ambiguities on the part of the participants, the researcher took steps to completely resolve them through communication channels that were provided to the participants (such as mobile number, email, social network username, etc.).

## 2.2. Measures

### 2.2.1. Depression

The Depression-Anxiety-Stress-Scale-21 (DASS-21) consists of 21 items and three subscales of stress, anxiety, and depression. Each subscale assigns seven questions to itself, and the final score of each of these subscales is obtained through the sum of the scores of the items related to it. Antony et al. (1998) subjected this scale to factor analysis, and the results of their research again indicated the existence of three factors of depression, anxiety, and stress (Antony et al., 1998).

### 2.2.2. Corona Anxiety

The Coronavirus Anxiety Scale (CDAS) is an 18-item scale designed by Alipour et al. in 2020, which measures two subscales of psychological symptoms and somatic (physical) symptoms using a four-point Likert scale (never=0, sometimes=1, often=2, always=3). As a result, the score range of this scale is between 0 and 54, and higher scores indicate a higher level of coronavirus anxiety. In Alipour et al.'s (2020) study, the content validity and structural validity of the scale were confirmed using confirmatory factor analysis, and its reliability was reported as 0.87, 0.79, and 0.91 using Cronbach's alpha coefficient for the subscales of physical symptoms, psychological symptoms, and the whole questionnaire, respectively (Alipour et al., 2020).

### 2.2.3. Spiritual Intelligence

Spiritual Intelligence Self-Report Test (SISRT) was designed and developed by King (2009) and consists of 24 items and four subscales: 1. Critical existential thinking, 2. Personal meaning production, 3. Transcendental awareness, and 4. Conscious state expansion. This scale is of the five-point Likert type (from 1= completely incorrect to 5= completely correct) King (2009) reported the overall reliability of this scale in a sample of 619 individuals using Cronbach's alpha coefficient of 0.95 and reliability through classification of 0.84 (King, 2009).

## 2.3. Data analysis

In this study, descriptive statistics including mean, standard deviation, frequency, etc. were used to describe the demographic characteristics of each variable using SPSS25 software. In addition, inferential statistical analysis was performed by calculating model fit indices using Amos24 software.

## 3. Findings and Results

In the present study, 323 women (73.1%) and 119 men (26.9%) participated. The number of adolescents (18 to 20 years old) present in the study was 30 (6.8%), the number of young adults (20 to 40 years old) was 358 (81%), the number of middle-aged individuals (40 to 65 years old) was 49 (11.1%), and the number of elderly individuals (65 years old and above) was 5 (1.1%). The number of married individuals in the study was 122 (27.6%) and the number of single individuals was 322 (72.4%). 238 individuals (53.8%) present in the study were employed and 204 others (46.2%) were unemployed.

Table 1 shows the mean, standard deviation, skewness, kurtosis, and Cronbach's alpha coefficient of each variable and its components for reporting the descriptive findings of the study.

**Table 1**

*Descriptive statistics (M= Mean; SD= Standard Deviation)*

Variable – Component	M	SD	Skewness	Kurtosis	Cronbach's Alpha
Spiritual Intelligence (SI)	77.48	13.04	-0.083	-0.304	0.89
SI – Critical thinking	24.07	4.80	0.045	-0.211	0.80
SI – Personal meaning	18.27	3.39	-0.268	0.083	0.78

SI - Transcendental consciousness	22.24	4.13	-0.205	-0.097	0.67
SI – Extending awareness	12.90	3.66	0.118	-0.190	0.77
Depression	6.86	5.45	0.698	-0.364	0.88
Corona Anxiety	8.66	7.83	0.923	0.415	0.92
CA – Psychological	7.21	5.49	0.785	0.283	0.90
CA – Somatic	1.45	3.17	1.296	1.187	0.89

According to Table 1, the internal consistency coefficient (Cronbach's alpha) for assessing the reliability and validity of the research variables shows that the Cronbach's alpha coefficient for all variables in this study is close to or above 0.70. Therefore, the variables in this study have acceptable accuracy and validity for descriptive and inferential statistical analysis. To evaluate the assumption of normal distribution of the research variables, the kurtosis and skewness indices were used. To improve the normality status of the distribution of each variable and its subscales,

univariate outliers were identified and corrected using the box plot table. It should be noted that multivariate outliers were also identified and removed using the Mahalanobis distance in bivariate relationships between variables. The table below shows the skewness and kurtosis indices of each variable and its subscales. As Table 1 shows, all variables and their subscales are in the range of +2 to -2. Therefore, they follow the assumption of normal distribution of the research data. Table 2 shows the correlation between the variables and their subscales.

**Table 2**

*The results of Pearson correlation tests*

Variable	1	2	3	4	5	6	7	8	9
1. Spiritual Intelligence (SI)	1								
2. SI – Critical thinking	83.0**	1							
3. SI – Personal meaning	75.0**	50.0**	1						
4. SI - Transcendental consciousness	86.0**	65.0**	62.0**	1					
5. SI – Extending awareness	73.0**	47.0**	44.0**	57.0**	1				
6. Depression	-17.0**	-03.0	-37.0**	-10.0*	-6.0	1			
7. Corona Anxiety	-05.0	01.0	-14.0**	-4.0	-4.0	20.0**	1		
8. CA – Psychological	-04.0	02.0	-11.0*	-2.0	-6.0	20.0**	.088**	1	
9. CA – Somatic	-03.0	02.0	-11.0*	-4.0	01.0	22.0**	55.0**	50.0**	1

\*p<0.05; \*\*p<0.01

In the following, two indices of tolerance (TOL) and variance inflation factor (VIP) were used to examine the absence of collinearity between the predictor variables in the structural equation model to investigate other assumptions of the research model. The results for both intelligence and depression are reported as 0.97 for TOL and 1.031 for VIP. As shown in Tables 4-9, the tolerance coefficient for all predictor variables is greater than 0.10, and the variance inflation factor for all predictor variables is less than 10. Therefore, there is no collinearity between the predictor variables. To examine the assumption of independence of errors (residuals), the Durbin-Watson statistic was used, and the result was 1.69. Since the obtained number is between the range of 1.5 to 2.5, the predictor variables are independent of errors.

In the present research measurement model, the assumption is that the current variables of intelligence and coronavirus anxiety are significantly explained by their own components under the title of indicator variables. The measurement and structural models of the research were fitted using AMOS24 software. The results of the model fit indices show that all the mentioned model fit indices for the research measurement model are in the desirable range ( $\chi^2/df=2.046$ , GFI=0.987, AGFI=0.967, CFI=0.966, and RMSEA=0.049). Also, since four out of the five introduced indices for the fit of the structural model of the research are in the acceptable and desirable range, the fit of the structural model of the research is also confirmed ( $\chi^2/df=3.837$ , GFI=0.962, AGFI=0.911, and RMSEA=0.094). Table 3 shows the factor loadings of each research variable and their significance.

**Table 3**

*The summary of direct and indirect effects*

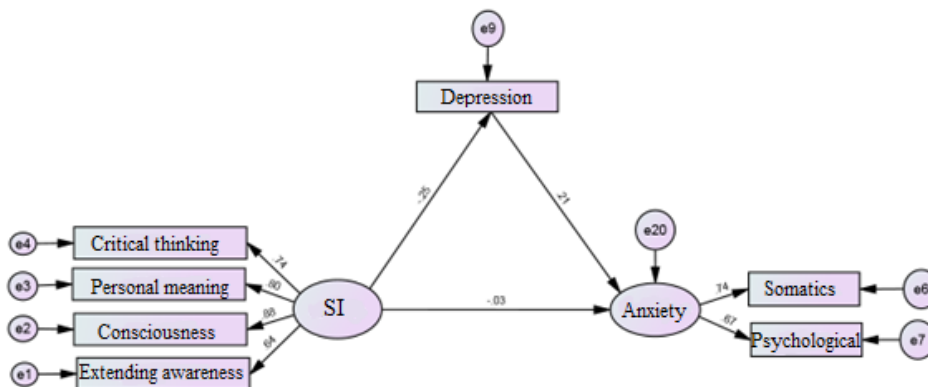
Path		b	$\beta$	S.E	C.R	Sig.
Direct	Spiritual intelligence -> Corona Anxiety	-0.40	-0.028	0.092	-0.428	0.669
	Spiritual Intelligence -> Depression	-0.508	-0.246	0.123	-4.144	0.001
	Depression -> Corona Anxiety	0.148	0.214	0.053	2.809	0.005
Indirect	Spiritual intelligence -> Corona Anxiety	-0.075	-0.053	0.021	-	0.006

Table 3 shows the direct and indirect effects of the research variables as well as the significance of these paths. Accordingly, the significance of the direct effects of spiritual intelligence on depression ( $\beta=0.246$  and  $P=0.001$ ) and depression on COVID-19 anxiety ( $\beta=0.214$  and  $P=0.005$ )

has been confirmed at the 0.05 level of significance. The significance of the indirect effect of spiritual intelligence on COVID-19 anxiety with depression as a mediator ( $\beta=0.075$  and  $P=0.006$ ) has also been confirmed at the 0.05 level of significance.

**Figure 1**

*Final model with direct effects*



**4. Discussion and Conclusion**

The present study was conducted to investigate the relationship between spiritual intelligence and COVID-19 anxiety with depression as a mediator in the form of a structural equation model. The findings of the study showed that spiritual intelligence has an indirect relationship with COVID-19 anxiety with depression as a mediator. Additionally, depression has a direct effect on COVID-19 anxiety. The results of the present study are consistent with the findings of previous studies (Barzilay et al., 2020; Brehl et al., 2021; Kiany & Meshki Majelan, 2019).

Spiritual intelligence, as a factor of deep personal cognition of various levels of awareness and understanding of the soul as the basis for a creative life, leads to the acceptance of responsibilities by humans and makes them creators of their own values and beliefs, which shape their behavior. As a result, spiritual intelligence enables

individuals to see various issues from different perspectives and recognize their connections with personal values and beliefs. This leads to better understanding and greater acceptance of various problems, including disorders such as depression and psychological damage caused by various crises such as anxiety due to COVID-19 (Giannone & Kaplin, 2020; Planchuelo-Gómez et al., 2020). Spiritual intelligence indirectly also effectively combats and reduces symptoms of depression and anxiety caused by COVID-19 (Höltge et al., 2018; Van Den Heuvel et al., 2020). Spiritual intelligence allows individuals to integrate spiritual capacities with real-world issues. Individuals with high spiritual intelligence can use their spiritual abilities and capacities to make decisions and think about various issues and work towards solving various problems and coping with difficulties and problems such as depression caused by failures and losses and anxiety caused by the spread of the coronavirus (Ajele et al., 2021).



Spiritual intelligence, as a set of compatible mental abilities, whose basis and foundation are the transcendent and super-material aspects of reality, especially aspects related to extended states of consciousness, personal meaning-making, transcendence, and the existential nature of the individual, plays a role in facilitating abstract reasoning, problem-solving, coping with life's problems and difficulties, and even psychological problems such as depression and psychological damage caused by various crises. Therefore, spiritual intelligence, as a psychological construct, has the ability to cope with depression and anxiety caused by COVID-19 (Mohammadipour et al., 2021). By creating the capacity to confront pain and problems, drawing inspiration from meanings and values, high self-awareness, inner guidance, self-control, the ability to create opportunities from life's difficulties, and high flexibility, spiritual intelligence directly and indirectly helps to cope with and improve depression and anxiety caused by COVID-19 (Zohar & Marshall, 2000).

## 5. Limitations and Suggestions

One of the limitations of the present study is that most of the data was collected virtually and online due to the widespread prevalence of the coronavirus and the risks associated with direct face-to-face contact with participants.

## References

- Ajele, W. K., Oladejo, T. A., Akanni, A. A., & Babalola, O. B. (2021). Spiritual intelligence, mindfulness, emotional dysregulation, depression relationship with mental well-being among persons with diabetes during COVID-19 pandemic. *Journal of Diabetes & Metabolic Disorders*, 20, 1705-1714. <https://doi.org/10.1007/s40200-021-00927-8>
- Alipour, A., Ghadami, A., Alipour, Z., & Abdollahzadeh, H. (2020). Preliminary validation of the Corona Disease Anxiety Scale (CDAS) in the Iranian sample. *Health Psychology*, 8(32), 163-175. <https://doi.org/10.30473/hpj.2020.52023.4756>
- American Psychiatric Association, A. (2022). *Diagnostic and statistical manual of mental disorders: DSM-5-TR*. Washington, DC: American psychiatric association. <https://doi.org/10.1176/appi.books.9780890425787>
- Antony, M. M., Bieling, P. J., Cox, B. J., Enns, M. W., & Swinson, R. P. (1998). Psychometric properties of the 42-item and 21-item versions of the Depression Anxiety Stress Scales in clinical groups and a community sample. *Psychological assessment*, 10(2), 176. <https://doi.org/10.1037/1040-3590.10.2.176>
- Barzilay, R., Moore, T. M., Greenberg, D. M., DiDomenico, G. E., Brown, L. A., White, L. K., Gur, R. C., & Gur, R. E. (2020). Resilience, COVID-19-related stress, anxiety and depression during the pandemic in a large population enriched for healthcare providers. *Translational psychiatry*, 10(1), 291. <https://doi.org/10.1038/s41398-020-00982-4>
- Batra, K., Singh, T. P., Sharma, M., Batra, R., & Schvaneveldt, N. (2020). Investigating the psychological impact of COVID-19 among healthcare workers: a meta-analysis. *International journal of environmental research and public health*, 17(23), 9096. <https://doi.org/10.3390/ijerph17239096>
- Brehl, A.-K., Schene, A., Kohn, N., & Fernández, G. (2021). Maladaptive emotion regulation strategies in a vulnerable population predict increased anxiety during the Covid-19 pandemic: A pseudo-prospective study. *Journal of Affective Disorders Reports*, 4, 100113. <https://doi.org/10.1016/j.jadr.2021.100113>
- de Diego-Cordero, R., Ávila-Mantilla, A., Vega-Escañó, J., Lucchetti, G., & Badanta, B. (2022). The role of spirituality and religiosity in healthcare during the COVID-19 pandemic: An integrative review of the scientific literature. *Journal of religion and health*, 61(3), 2168-2197. <https://doi.org/10.1007/s10943-022-01549-x>
- Gao, W., Ping, S., & Liu, X. (2020). Gender differences in depression, anxiety, and stress among college students: a longitudinal study from China. *Journal of affective disorders*, 263, 292-300. <https://doi.org/10.1016/j.jad.2019.11.121>
- Giannone, D. A., & Kaplin, D. (2020). How does spiritual intelligence relate to mental health in a western sample? *Journal of Humanistic Psychology*, 60(3), 400-417. <https://doi.org/10.1177/0022167817741041>

As a result, the study sample was selected from a non-clinical population, and the generalization of the results to clinical populations is limited. Future research can use clinical populations as their study sample and utilize efficacy studies in this area to determine the causal relationship between the variables of this study at the intervention level. At the prevention level, relevant educational programs on spirituality and meaning-making can be implemented universally in various school levels through curricular or extracurricular activities to provide students and even university students with the necessary knowledge to cope with psychological distress.

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## Declaration of Interest

The authors of this article declared no conflict of interest.

## Ethics principles

In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were observed.

- Guan, W.-j., Ni, Z.-y., Hu, Y., Liang, W.-h., Ou, C.-q., He, J.-x., Liu, L., Shan, H., Lei, C.-l., & Hui, D. S. (2020). Clinical characteristics of coronavirus disease 2019 in China. *New England Journal of Medicine*, 382(18), 1708-1720. <https://doi.org/10.1056/NEJMoa2002032>
- Höltge, J., McGee, S. L., Maercker, A., & Thoma, M. V. (2018). Childhood adversities and thriving skills: Sample case of older Swiss former indentured child laborers. *The American Journal of Geriatric Psychiatry*, 26(8), 886-895. <https://doi.org/10.1016/j.jagp.2018.02.002>
- Kaur, D., Sambasivan, M., & Kumar, N. (2015). Impact of emotional intelligence and spiritual intelligence on the caring behavior of nurses: a dimension-level exploratory study among public hospitals in Malaysia. *Applied Nursing Research*, 28(4), 293-298. <https://doi.org/10.1016/j.apnr.2015.01.006>
- Kiany, G., & Meshki Majelan, m. (2019). The relationship between mental health, religious status and spiritual intelligence. *Rooyesh-e-Ravanshenasi Journal(RRJ)*, 8(2), 55-62. <http://frooyesh.ir/article-1-1006-en.html>
- King, D. (2010). Personal meaning production as a component of spiritual intelligence. *International Journal of Existential Psychology and Psychotherapy*, 3(1). <https://www.meaning.ca/web/wp-content/uploads/2019/10/147-13-509-1-10-20171212.pdf>
- King, D. B. (2009). *Rethinking claims of spiritual intelligence: A definition, model, and measure* <https://library-archives.canada.ca/eng/services/services-libraries/theses/Pages/item.aspx?idNumber=682256364>
- Leung, C. H. (2022). Understanding spiritual health, depression, anxiety, and stress among tertiary students under the impact of COVID-19 in Hong Kong. *Asia Pacific Journal of Education*, 1-14. <https://doi.org/10.1080/02188791.2022.2114425>
- Mohammadipour, M., Afzood, A., Zolfaghari, S., & Salmabadi, M. (2021). The Role of Spiritual Intelligence and Distress Tolerance on Coronavirus Anxiety in Students. *Health, Spirituality & Medical Ethics Journal*, 8(2). <https://philpapers.org/rec/MOHTRO-7>
- Parattukudi, A., Maxwell, H., Dubois, S., & Bédard, M. (2022). Women's spiritual intelligence is associated with fewer depression symptoms: Exploratory results from a Canadian sample. *Journal of religion and health*, 61(1), 433-442. <https://doi.org/10.1007/s10943-021-01412-5>
- Planchuelo-Gómez, Á., Odriozola-González, P., Irurtia, M. J., & de Luis-García, R. (2020). Longitudinal evaluation of the psychological impact of the COVID-19 crisis in Spain. *Journal of affective disorders*, 277, 842-849. <https://doi.org/10.1016/j.jad.2020.09.018>
- Roy, P. K., Saya, G. K., Ulaganeethi, R., Jayaram, S., & Kumar, S. S. (2021). Prevalence and association of depressive symptoms with spiritual intelligence among older adults: A community-based study in rural Puducherry, South India. *Asian Journal of Psychiatry*, 55, 102510. <https://doi.org/10.1016/j.ajp.2020.102510>
- Sadock, B. J. (2015). *Kaplan & Sadock's synopsis of psychiatry: behavioral sciences/clinical psychiatry* (Vol. 2015). Wolters Kluwer Philadelphia, PA. <https://www.psychiatrist.com/read-pdf/11671/>
- Servidio, R., Bartolo, M. G., Palermi, A. L., & Costabile, A. (2021). Fear of COVID-19, depression, anxiety, and their association with Internet addiction disorder in a sample of Italian students. *Journal of Affective Disorders Reports*, 4, 100097. <https://doi.org/10.1016/j.jadr.2021.100097>
- Shao, R., He, P., Ling, B., Tan, L., Xu, L., Hou, Y., Kong, L., & Yang, Y. (2020). Prevalence of depression and anxiety and correlations between depression, anxiety, family functioning, social support and coping styles among Chinese medical students. *BMC psychology*, 8(1), 1-19. <https://doi.org/10.1186/s40359-020-00402-8>
- Shigemura, J., Ursano, R. J., Morganstein, J. C., Kurosawa, M., & Benedek, D. M. (2020). Public responses to the novel 2019 coronavirus (2019-nCoV) in Japan: Mental health consequences and target populations. *Psychiatry and clinical neurosciences*, 74(4), 281. <https://doi.org/10.1111/pcn.12988>
- Sohrabian, T., & Mirdrikvand, F. (2017). A Comparative Analysis of the Relationship of the Spiritual Intelligence Factors with Anxiety and Depression among High School Students Based on Their Field of Study. *Ravanshenasi Va Din*, 10(2), 97-. <https://www.magiran.com/paper/1705100>
- Van Den Heuvel, M. W., Stikkelbroek, Y. A., Boddien, D. H., & Van Baar, A. L. (2020). Coping with stressful life events: Cognitive emotion regulation profiles and depressive symptoms in adolescents. *Development and Psychopathology*, 32(3), 985-995. <https://doi.org/10.1017/S0954579419000920>
- Zangrillo, A., Beretta, L., Silvani, P., Colombo, S., Scandroglio, A. M., Dell'Acqua, A., Fominskiy, E., Landoni, G., Monti, G., & Azzolini, M. L. (2020). Fast reshaping of intensive care unit facilities in a large metropolitan hospital in Milan, Italy: facing the COVID-19 pandemic emergency. *Critical care and resuscitation*, 22(2), 91-94. <https://doi.org/10.51893/2020.2.pov1>
- Zohar, D., & Marshall, I. (2000). SQ-Spiritual Intelligence, the ultimate intelligence. <https://alisonmorgan.co.uk/Books/Zohar%202000.pdf>