# **Original Research**

# Investigating The Role Of Spiritual Intelligence In Predicting Students' Academic Resilience Through The Mediating Variable Of Self-Regulation

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#### **Abstract**

**Background:** This research was conducted with the aim of investigating the relationship between academic resilience based on spiritual intelligence and the mediation of academic self-regulation in students.

**Method:** The present research method is applied in terms of purpose and correlation type. The statistical population of this research was the students of Qom University, 128 of them responded to questionnaires of academic resilience (ARI), academic self-regulation, King's spiritual intelligence using Barbara's thumb method and multi-stage cluster sampling method. Data analysis was done using SPSS-22 and AMOS-24 statistical software through Pearson correlation test.

**Results:** The statistical results showed that the mean scores of spiritual intelligence have a positive and significant relationship with academic resilience and the scores of spiritual intelligence have a positive and significant relationship with academic self-regulation. Based on the results of this research, it is possible to understand the effect of spiritual intelligence and academic self-regulation on increasing the academic resilience of students.

**Conclusion:** Therefore, parents, educational centers and even medical centers should plan for the aforementioned variables from the early stages of the formation of these characteristics in the personality of individuals and during the period of life and education, students should focus on these components and provide appropriate solutions to increase academic resilience.

Keywords: Academic resilience, Spiritual intelligence, Academic self-regulation

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# Introduction

Today, unlike the past, the learning ability of each person is not only dependent on the level of intelligence and talents, but in addition to the inherent factors of intelligence and talent, there are also non-intrinsic factors such as selfregulation learning strategies (or so-called cognitive and metacognitive strategies) and the level of a person's spirituality are considered effective in learning (1). Spiritual intelligence connects and integrates various aspects of a person's inner mental and spiritual consciousness and life with external life and work and gives a person a kind of awareness about the whole world in a general way. Cindy Wiggleworth believes that spiritual intelligence is the ability to act with compassion and wisdom while maintaining inner and outer peace, regardless of events. People with spiritual intelligence have the ability to be fair and compassionate judging. while Spiritual intelligence enables us to see things as they are. This intelligence is the same intelligence that has guided the famous and popular leaders of the world. Having this intelligence, spiritual leaders can withstand the greatest pressures (2). Because academic self-regulation leads to learning through metacognition (thinking about one's thinking), strategic action (planning, monitoring and evaluating personal progress against a standard) and motivation. The degree of academic selfregulation in the student's learning is the result of the intensity of the influence of external factors, internalized factors, or completely internal factors on the individual. The mastery of self-motivated people in the learning situation reduces their anxiety and fear of failure, and this effort and commitment, along with not worrying about failure, makes the learner resilient.

Resilience is generally considered a "positive adaptation" after a stressful or adverse situation. When a person is bombarded with daily stress, it disrupts their sense of inner and outer balance, creating challenges as well as opportunities. However, the common stresses of everyday life can have positive effects that increase resilience.

It is still unclear what the correct level of stress is for each individual. Some people can handle higher amounts of stress than others. According to Germain and Gitterman (1996) (1), stress is experienced in the life course of a person during difficult life transitions, including developmental and social changes, traumatic life events, including grief and loss; and environmental pressures. Resilience is the integrated adaptation of physical, mental and spiritual aspects in a set of "good or bad" conditions, a coherent sense of self that is able to maintain normative developmental tasks that occur at different stages of life (3).

The University of Rochester Children's Institute explains that "resilience research focuses on the study of people who engage in life with hope and humor in the face of devastating losses." It is important to note that resilience does not only mean overcoming a highly stressful situation, but also coming out of said situation with "competent performance". Resilience allows a person to overcome difficulties as a stronger and more resourceful person. (4) stated that when an event is appraised as comprehensible (predictable), manageable (controllable), and somehow meaningful (explainable), a resilient response is more likely (4).

Resilience emphasizes emotional management training, social adaptation skills, prevention of inappropriate emotions, and situation correction. All the mentioned factors have an effect on the self-regulation of individuals (5). Academic selfregulation is one of the areas of self-regulation and has the closest alignment with educational goals. In general, it refers to learning that is guided by about one's metacognition (thinking thinking), strategic action (planning, monitoring and evaluating personal progress against a standard), and motivation to learn. A selfregulated learner "monitors, directs, and regulates actions toward the goals of acquiring information, developing expertise, and self-improvement." Specifically, self-regulated learners are aware of their academic strengths and weaknesses and

develop a set of strategies that they use appropriately to deal with the daily challenges of academic tasks. These learners hold increasingly strong beliefs about intelligence (contrary to existing or fixed views of intelligence) and attribute their success or failure to factors (e.g., effort expended on a task, effective use of strategies) within their control (6). Ultimately, self-regulated learners take on challenging tasks, practice their learning, develop understanding of subject matter, and strive for academic success. In part, these characteristics may help explain why self-regulated learners typically exhibit a high sense of self-efficacy. In the educational psychology literature, researchers have linked these characteristics to success in school and beyond. Self-regulated learners are successful because they control their learning environment. They exercise this control by directing and regulating their actions toward their learning goals. Self-regulated learning should be used in three different stages of learning. The first stage is during initial learning, the second stage is when they solve the problem they encounter during learning, and the third stage is when they try to teach others (7).

(8) observed comparable student performance between instructor-led and self-regulated learning environments. In a subsequent study, selfregulated learning was shown to enable accelerated learning while maintaining long-term retention rates of students' self-regulation (8). (9) pointed out the importance of internal locus of control tendencies on successful academic performance, which is also consistent with selfregulated learning. (9) recognized and appreciated extrinsic factors, including the benefits of working with a good teacher, while encouraging hard work, self-regulation, skill building, and a positive attitude to perform better in academic situations. To increase positive attitude and academic performance, expert learners should be created. Expert learners develop self-regulated learning strategies. One of these strategies is the ability to develop and ask questions and use these questions

to expand previous knowledge. This technique allows learners to test their actual understanding of knowledge and make corrections in content areas that have misunderstandings. When learners engage in questioning, it forces them to participate more actively in their learning. It also allows them to analyze and determine their own level of understanding. This active engagement allows the learner to organize concepts into existing schemas. Through the use of questions, learners can match and then assimilate their new knowledge to the existing schema. This process allows the learner to solve new problems and when the existing schema does not work on the new problem, the learner must reassess and evaluate their level of understanding (9).

During the last two decades, education specialists have conducted numerous researches regarding the factors affecting academic progress and have identified several factors such as academic talent, cognitive factors such as spiritual intelligence, academic self-efficacy, self-regulation strategies, creativity and classroom structure, Academic motivation, learner ability, teacher training and learner motivation have been achieved (10). Among these factors, educational and personal factors with a cognitive and social nature have the greatest impact on academic achievement (11). There is a positive and meaningful relationship between spiritual intelligence and self-regulation in the cognitive dimension and between spiritual intelligence and metacognitive dimension (10). Academic resilience is one of the dimensions of resilience in the educational environment. Students who have academic resilience have a higher probability of success despite social, cultural and economic hardships. (12) introduces academic resilience as the ability of students to effectively deal with obstacles, tension, pressure and threatening factors in general. Students with academic resilience are those who keep high achievement motivation and maintain their optimal performance in spite of stressful environmental events and conditions that put them in a position of poor academic performance and even drop out (12). Research shows that academic procrastination decreases with increasing resilience, and resilience training is effective in reducing academic burnout, academic apathy and academic inefficiency (12).

Resilience is best understood as a process. However, it is often mistakenly assumed that this is a characteristic of a person. Most researches now show that resilience is the result of people's ability to interact with their environments and processes that promote well-being and, in fact, abilities such as self-regulation or protect them from the severe impact of risk factors (4). Active/executive self-regulation is regulated by the person and is intentional, conscious, voluntary, and strategic. A person is aware and diligent in using self-regulation strategies. Under this SRL resource, learning occurs best in the normal state of performance. Dynamic self-regulation is also known as non-intentional learning because it is regulated by internal subsystems other than "central management". The learner is not consciously aware that he is learning because it occurs "outside the direct influence of intentional internal control" (13). Self-regulation is an interesting discovery module that is described as "dual-functional" because it is built from both active and dynamic models of self-regulation. In this model, learning takes place best in the creative performance mode and is neither completely unconscious. person-centered nor combination of both (14). On the other hand, spiritual intelligence is one of the nine intelligences, such as human emotional intelligence, which is of great importance and necessity. People who have this intelligence have much more ability than other people. In fact, spiritual intelligence connects a person's inner spirit to the external environment and is very important in this sense. By using this intelligence, people are realistic and see everything as it is. People with self-awareness, comprehensiveness, independent, resistant to difficulties, spontaneous, and also people who do not run away from events and try to make the best decision, and also people who have the ability to express their love and choose happiness for life are considered to be people with high spiritual intelligence. When something happens, these people review it first and with insight and trust, instead of control, they try to move forward with humility. The review of existing researches shows that few researches have been done in Iran regarding these variables. Therefore, the main question of the current research is whether academic resilience based on spiritual intelligence with the mediation of academic self-regulation effective in students?

To answer the above question, we must first review the empirical literature related to the research, for this purpose, we consider related domestic and foreign researches that examine the variables of the research. Among them: Nouri Moghadam, et al. (2021) (5) conducted a study on the relationship between spiritual intelligence and resilience with the anxiety of corona disease in students. The results of the data analysis showed that there is a significant negative correlation between emotional resilience and anxiety of the corona virus at the level of 99% (P>0.01) and this variable can be a good predictor of the anxiety of the corona virus ( $\beta$ =- 0.19); Nevertheless, it is possible to reduce the anxiety caused by the corona disease in students by examining effective strategies to increase emotional resilience. Omidvar et al. (2021) (10) did a research on the relationship between spiritual intelligence, selfregulation and academic performance of students. The results of data analysis showed that there is a positive and meaningful relationship between spiritual intelligence and self-regulation, between spiritual intelligence and cognitive dimension, between spiritual intelligence and metacognitive dimension. but there was no significant relationship between spiritual intelligence and academic performance. Ataei et al. (2021) (3) conducted a research on the relationship between self-regulation and academic resilience through the mediation of autonomous motivation. The results showed that self-regulation has a direct and significant effect on resilience, meaning that

increasing self-regulation in learners can improve their resilience. In their study, they tested the relationship between resilience variables and spiritual intelligence. They showed that the variable of spiritual intelligence can eventually change under the change of the resilience variable. According to the results of the research, this change can be in the same direction or not in the same direction. When the variable level of resilience in the organization is in the same direction as spiritual intelligence, it can be expected that by increasing their level, the variable level of spiritual intelligence will also improve, and by decreasing their level, the variable level of spiritual intelligence will decrease. They pointed out that spiritual intelligence is influenced by other variables in an organization. When the variable level of positivity in the organization changes, then the variable level of spiritual intelligence also changes. Also, the variable of positivity exerts its effect on the variable of spiritual intelligence based on alignment or non-alignment. When the results of the study show that the variable of positivity has an alignment relationship with the variable of spiritual intelligence, then it can be said that this change causes positive changes in the level of spiritual intelligence. They argued that the change in the variable level of life expectancy can affect the change in the level of spiritual intelligence. In other words, when the level of the life expectancy variable improves, it is expected that the spiritual intelligence variable will also change. If the relationship between the variable of life expectancy and the variable of spiritual intelligence is consistent, it can be expected that the level of the variable of spiritual intelligence will improve with the improvement of the level of the variable presented in the research.

Katrika et al. (2022) (15) investigated the effect of df of improving spiritual IQ and emotional IQ on self-regulation in the covid-19 pandemic in Jakarta, Indonesia. The results of the research showed that spiritual intelligence has a positive

effect on self-regulation during the Covid-19 pandemic.

Singh (2022) (16) addressed a research titled the mediating effect of resilience on intelligence, spirituality and psychological well-being. Linear regression analysis showed that resilience significantly predicts teachers' spiritual intelligence and psychological well-being. This suggests that teachers who were resilient reported higher levels of spiritual intelligence and psychological well-being.

Pillai et al. (2022) (9) addressed a research entitled Positive affect and resilience: Examining the role of self-efficacy and self-regulation. The results of the research showed that although the relationship between positive affect and resilience was mediated by self-efficacy and self-regulation (individually and serially), positive affect had a positive relationship with resilience independent of three indirect effects.

Based on the research literature and in order to address the research objectives, the researcher formulates the research hypotheses as follows and examines them further.

Main hypothesis: Academic resilience can be predicted based on spiritual intelligence with the mediation of academic self-regulation in students. Sub-Hypotheses:

- 1- There is a relationship between academic resilience and spiritual intelligence in students.
- 2- There is a relationship between academic self-regulation and spiritual intelligence in students.
- 3- There is a relationship between academic selfregulation and resilience in students.

## Methods

The current research is descriptive-analytical in nature. In terms of purpose, it is practical and in terms of the method of collecting information, it is of the field research type.

# Statistical Population, Sample and Sampling Method:

The statistical population in this research was all male and female students of Azad University of Qom who were studying in the academic year of 2001-2001. In order to determine the sample size

in the present study, Barbara's rule of thumb and Kline (1998) was used; According to this rule, at least 10 to 14 subjects are needed for each calculated parameter. Considering that the number of subscales is 11 parameters, at least 110 and at most 154 students were selected from the university faculties through a multi-stage random method. 4 faculties and 40 students were randomly selected and finally 128 people answered the questionnaires.

The data collection tools in this research include: three academic resilience questionnaires (ARI) was developed by Samuels in 2004 and its suitability was confirmed in two studies. Then, with the development of the academic resilience scale, the study was published in 2009 with the cooperation of Wu. The original version of this questionnaire includes 40 questions. In Iran, this questionnaire was standardized by Soltaninejad et al. (2013) (3). In the Iranian norm, the number of questions in this questionnaire has been reduced to Boufard's questions. self-regulation questionnaire is a pencil and paper type and has 14 questions designed by Boufard et al. In this test, 5 options were considered for each question, including: I completely agree, I agree, I have no opinion, I disagree, and I completely disagree, and they have points from 1 to 5 respectively. The scoring of questions 5, 13 and 14 is opposite to the rest of the questions. And King's spiritual intelligence questionnaire was designed by Rezaei in 2013 (5). The questionnaire has 24 questions and includes 4 dimensions of existential thinking 1 to 7, transcendental awareness 8 to 13, expansion of the state of consciousness 14 to 18, production of personal meaning 19 to 24, questionnaire questions based on a five-choice Likert scale (very little to very much) designed. Cronbach's alpha test was used to calculate the reliability of the research tools, and the numbers were 0.788, 0.906, and 0.840 respectively, which shows the high reliability of the research tools.

#### **Results**

In this section, each of the research hypotheses was analyzed with the help of structural equations,

but before entering this discussion, we first studied the correlation between the variables through the Pearson correlation coefficient. As can be seen in Table 1, the relationship between all three variables of academic resilience, spiritual intelligence and academic self-regulation has been confirmed at a significant level of 0.000. It can be seen that the highest correlation was related to academic self-regulation variables and spiritual intelligence (0.604) and the lowest correlation was related to spiritual intelligence and academic resilience (0.417).

It was mentioned before that in this research we are looking to investigate the direct and indirect effects of spiritual intelligence variables on academic resilience through the academic selfregulation variable. To achieve this goal, the path analysis method was used and the variable of spiritual intelligence was considered as an independent variable, the variable of academic self-regulation as a mediating variable and the variable of academic resilience as a dependent variable. In order to trust the results obtained from the model, the goodness of fit indices of the model were first examined. In this research, in order to check the proposed model, suitability indices were used. Among the various goodness of fit indices, chi-square index (CMIN), chi-square ratio to degrees of freedom (CMIN/df), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), comparative goodness-of-fit index (CFI), Incremental goodness of fit (IFI) and root mean square error of approximation (RMSEA) were reported. In Table No. 2, the results of the suitability of the proposed research model were presented. It can be seen that the desired indicators are within the standard range and the goodness of fit of the model is confirmed and it can be said that the model has a good fit with the data.

The analysis results of the proposed model are presented in Figure 1.

# Inferential analysis of hypothesis 1

There is a relationship between spiritual intelligence and academic resilience in students.

The results related to the significance of the path of spiritual intelligence to academic resilience are reported in Table 3.

The results in the above table show that the significance level for the path of spiritual intelligence to academic resilience is 0.21, which is more than 0.05. Therefore, it can be said that the relevant path coefficient is not statistically significant. In fact, hypothesis 1 has not been confirmed and spiritual intelligence does not have a significant effect directly on students' academic resilience.

# Inferential analysis of hypothesis 2

There is a relationship between spiritual intelligence and academic self-regulation in students.

The results related to the significance of the path of spiritual intelligence to academic selfregulation are reported in Table 4.

The results in the above table show that the significance level for the path of spiritual intelligence to academic self-regulation is 0.00, which is less than 0.05. Therefore, it can be said that the relevant path coefficient is statistically significant. In fact, hypothesis 1 has been confirmed and spiritual intelligence has a significant effect on students' academic self-regulation. It can be seen that the coefficient of the standard path of spiritual intelligence to academic self-regulation is 0.54, which indicates a direct effect. In fact, assuming that other variables are constant, if spiritual intelligence increases by one unit, then academic self-regulation will increase by 0.54 standard deviation.

# Inferential analysis of hypothesis 3

There is a relationship between academic selfregulation and academic resilience in students.

The results related to the significance of the path of academic self-regulation to academic resilience are reported in Table 5.

The results in the above table show that the level of significance for the path of academic self-regulation to academic resilience is 0.00, which is less than 0.05. Therefore, it can be said that the relevant path coefficient is statistically significant.

In fact, hypothesis 1 has been confirmed and academic self-regulation has a significant effect on students' academic resilience. It can be seen that the standard path coefficient of academic self-regulation to academic resilience is 0.51, which indicates a direct effect. In fact, assuming that other variables are constant, if academic self-regulation increases by one unit, then academic resilience will increase by 0.51 standard deviation.

Inferential analysis of the main hypothesis

There is a causal relationship between academic resilience and spiritual intelligence with the mediation of academic self-regulation.

Investigating the indirect relationships of the variables through the macro bootstrap method proposed by Preacher and Hayes and its results are reported in Table 6.

The contents of Table 6 show that the lower limit of the confidence interval for the relationship between spiritual intelligence and the mediation of academic self-regulation is 0.031 and its upper limit is 0.188, both of which are positive numbers and zero is not included in this interval, so it can be said that the indirect hypothesis is valid. It has been confirmed and the causal relationship between spiritual intelligence and academic resilience with the mediation of students' academic self-regulation is statistically significant.

#### Discussion

The main purpose of the present study was to investigate the relationship between spiritual intelligence and academic resilience with the mediation of academic self-regulation. In fact, this research sought to investigate the causal relationship between spiritual intelligence and academic resilience through the mediation of academic self-regulation. This section examines the results obtained in the research. In this regard, all research hypotheses were confirmed. In the following, each hypothesis is explained. Then, in order to apply this research, suggestions are presented.

Discussing the Relationship between Academic Self-Regulation and Spiritual Intelligence

As it was shown, academic self-regulation has a significant relationship with spiritual intelligence. This result is in agreement with the research results of Nouri Moghadam et al. (2021) (5), Omidvar et al. (2021) (10), Ataei et al. (2021) (3) is aligned. In explaining the finding that spiritual intelligence has increased students' academic selfregulation, it can be said that the successful study and performance of students depends to a large extent on the fact that students consider themselves efficient and capable in performing numerous academic and learning tasks. The feeling of academic self-efficacy in students originates from a series of sources, and according to Bandura (1977), social persuasion is one of these sources. It seems that the relationship between family and children is connected and close to some extent. Because in the family system, children follow their parents' values and imitate them in doing their work. One of the values and things that are of interest to families in life is giving importance to spirituality and enriching the spiritual dimension of life, and every child who considers this principle and makes it his guide in many aspects of his life, He receives the attention and encouragement of his parents and the people around him, and the feeling of empowerment and self-efficacy is cultivated in him. Therefore, spiritual intelligence and factors related to religion in students are more important in terms of personality traits.

Because usually people with higher spiritual intelligence are more observant, non-judgmental, and non-reactive, which is combined with awareness. In fact, due to their spiritual intelligence, these people free themselves from automatic behavior patterns, control their states and use the information arising from these states to control their emotions. As a result, their selfregulation increases. Therefore, students with higher spiritual intelligence can better overcome problems and issues related to learning and education.

Discussion Regarding the Relationship between Resilience and Academic Self-Academic Regulation

As shown, academic resilience has a significant relationship with academic self-regulation. This result is in agreement with the research results of (Omidar et al. 2022) (9) is aligned. Empirical evidence shows that learners with high academic self-regulation beliefs due to the use of adaptive documents, even after facing failure experiences, since they are less exposed to damage caused by negative emotional experiences, have little tendency to use some behavioral patterns such as self-evaluations. They do not show negativity and negative self-talks, and on the contrary, they are more characterized by characteristics such as overvaluing education, participation in academic activities, and satisfaction with academic assignments. On the other hand, Lovett et al. (2018) (8), emphasized that among learners who suffer from a lack of academic self-regulation, since the use of causal documents of poor performance is also clearly prevalent, after facing challenging Experiencing situations more negative emotions causes the ground to be used as much as possible for uncompromising behavioral patterns such as negative self-talk, negative selfevaluations, feelings of personal inadequacy and suspicion towards educational environments. Therefore, the more students have self-regulation beliefs, the better they can cope with problems and tasks, and this leads to more academic resilience. Discussing the Relationship between Spiritual

Intelligence and Academic Resilience

As the results of Tables 4-7 showed, spiritual intelligence has a significant relationship with academic resilience. This result is in agreement with the research results of Omidar et al. (2022) (9) is aligned. Based on the theory of Borman et al. (2015) (1), when learners face ambiguity or problems while doing their activities, they need attention, reflection and thinking, and these challenges form the stable truth of their lives.

#### **Conclusion**

People with higher spiritual intelligence show more self-resilience to solve these challenges, more attention, thought, reflection and hope are seen in solving them, and they probably adopt better and healthier solutions, which these factors cause The increase in positive attitude towards problems and education and ultimately educational resilience in them. In other words, problems can lead to impairment of functional memory abilities, loss of hope, doubt in solving problems, and decrease in trust in God. Students who experience stress and mental tension for long periods of time are less than students who has not experienced this level of stress and tension, has the ability to solve problems, think, perceive and remember. Therefore, the inability to solve problems has a negative effect on the performance of students, it causes a decrease in academic resilience, and it can be effective in reducing positive affect towards the course and the learning environment, and it can lead academic resilience to the negative side. According to the results of this research, it is suggested to the teachers to support people who have low spiritual intelligence and academic self-regulation for various reasons in order to prevent the reduction of students' academic resilience. Identify people who are disappointed and pessimistic about the learning process and raise their hopes for their academic results. Because these factors, according to the investigations of this research, can be one of the important factors in the poor academic performance of students and even not continuing their studies. Considering that the variable of academic self-regulation and optimistic attitudes towards learning increases energy and positive emotions, such as happiness and enjoyment of learning, and ultimately increases academic resilience, it is suggested to pay serious attention to academic self-regulation and related categories. Because hope and its positive feelings about the ability to perform tasks have a beneficial effect on learning. According to the findings of the research, it should be recommended to the

professors that with their proper support such as proper supervision and more valuing of science and education and raising the level of academic expectations reasonably, they will cause more involvement of students in learning so that they also find the lesson useful, beneficial, and important. And find them interesting and attractive, and the value of learning increases in them and they perform better. Considering the major contribution of spiritual intelligence to students' academic resilience, it is recommended that professors and teachers and even parents try to cultivate this quality in students.

## **Conflict of interest**

The authors declare that they have no conflict of interest.

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Table 1: Pearson correlation coefficient between research variables

|                          |                        | Academic  | spiritual    | Academic self- |
|--------------------------|------------------------|-----------|--------------|----------------|
|                          |                        | endurance | intelligence | regulation     |
|                          | The correlation        | 1         |              |                |
| Academic endurance       | coefficient            |           |              |                |
| Academic endurance       | The significance level | 128       |              |                |
|                          | Number                 | _         |              |                |
| spiritual intelligence   | The correlation        | **0.417   | 1            |                |
|                          | coefficient            | 0.000     |              |                |
|                          | The significance level | 128       | 128          |                |
|                          | Number                 |           |              |                |
|                          | The correlation        | **0.577   | **0.604      | 1              |
| <b>Educational self-</b> | coefficient            | 0.000     | 0.000        |                |
| regulation               | The significance level | 128       | 128          | 128            |
|                          | Number                 |           |              |                |

Table 2: Fit indices of the proposed model

| Indicator  | Amounts |
|--|---------|
| chi square (CMIN)                                | 5.428   |
| Degrees of freedom (df)                          | 1169    |
| Chi-square ratio to degrees of freedom (CMIN/df) | 113.995 |
| goodness of fit index (GFI)                      | 0.758   |
| Adjusted goodness of fit index (AGFI)            | 0.677   |
| Comparative fitness index ((CFI)                 | 0.997   |
| Incremental fitness index (IFI)                  | 0.998   |
| root mean square error of approximation (RMSEA)  | 0.187   |

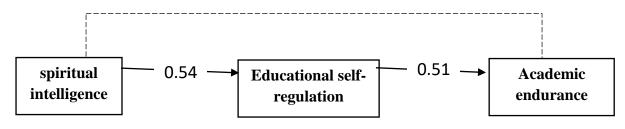


Figure 1: Standard coefficients of the proposed model of the relationship between spiritual intelligence and academic self-regulation with the mediation of academic resilience

| Direction                                  | Non-<br>standard<br>estimate<br>(b) | Standard estimate (β) | The standard error (SE) | Critical<br>ratio<br>(CR) | The significance level (P) | result    |
|--|-------------------------------------|-----------------------|-------------------------|---------------------------|----------------------------|-----------|
| Spiritual intelligence academic resilience | 0.09                                | 0.10                  | 1.03                    | 2.307                     | 0.21                       | rejection |

Table 4: Significance of the path related to hypothesis 2

| Direction                | Non-standard | Standard | The      | Critical | The         | result     |
|--------------------------|--------------|----------|----------|----------|-------------|------------|
|                          | estimate     | estimate | standard | ratio    | significan  |            |
|                          | <b>(b)</b>   | (β)      | error    | (CR)     | ce level    |            |
|                          |              |          | (SE)     |          | <b>(P</b> ) |            |
| spiritual intelligence   |              |          |          |          |             | confirmati |
| <b>Educational self-</b> | 0.93         | 0.54     | 0.15     | 21.3     | 0.00        |            |
| regulation               |              |          |          |          |             | on         |

Table 5: Significance of the path related to hypothesis 3

| Direction   | Non-<br>standard<br>estimate<br>(b) | Standard<br>estimate<br>(b) | The<br>standard<br>error<br>(SE) | Critical<br>ratio<br>(CR) | The significance levels (P) | Result       |
|---|-------------------------------------|-----------------------------|----------------------------------|---------------------------|-----------------------------|--------------|
| Educational self-<br>regulations<br>academic resilience | 0.90                                | 0.51                        | 0.16                             | 53.2                      | 0.00                        | confirmation |

Table 6: Significance of the path related to indirect hypothesis 1

| Direction              | data   | boot  | bias   | standard error | lower limit | upper<br>line |
|------------------------|--------|-------|--------|----------------|-------------|---------------|
| spiritual intelligence | 0.1633 | 0.000 | 0.0002 |                |             |               |
| Self-regulation        |        |       |        | 0.104          | 0.031       | 0.188         |
| Academic resilience    |        |       |        |                |             |               |