



Research Paper

Developing a successful intelligence model based on spiritual intelligence with the mediating role of cognitive emotion regulation

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Abstract

Aim: Successful intelligence is a major intelligence concept which can increase the creativity and problem solving skills of learners. This study aimed to investigate the mediating role of cognitive emotion regulation in the relationship between spiritual intelligence and successful intelligence. The statistical population of this descriptive correlational study consisted of ninth grade boys at the secondary schools in the city of Birjand during the academic year 2020-2021. The sample consisted of 310 participants selected with the random cluster sampling method. A questionnaire was used as the research tool. Data analysis was performed in SPSS-23 and LISREL 8.8 software programs using path analysis. The results showed that spiritual intelligence has a positive and significant effect on the adaptive cognitive emotion regulation strategies and successful intelligence, and a negative and significant effect on the non-adaptive cognitive emotion regulation strategies. Also, the adaptive cognitive emotion regulation strategies have a positive and significant effect and the non-adaptive cognitive emotion regulation strategies had a negative and significant effect on successful intelligence. In addition, the results indicated that cognitive emotion regulation mediates the relationship between the spiritual intelligence and successful intelligence of students.

Keywords: *Cognitive emotion regulation, Spiritual intelligence, Successful intelligence*

Introduction

According to Sternberg, successful intelligence is a consolidated collection of skills required to succeed in life. This is of course defined by individuals in their own social and cultural fabric. People with successful intelligence are successful in life because they know their shortfalls and how to remedy them (Sternberg, 2015). Most experts believe that the adolescence period is the most defining development period for human beings (Kennedy et al., 2018). The process of finding an identity includes many changes such as sexual behavior and extensive changes in social behavior (McCormick & Scherer, 2018). These changes predispose adolescents to problems (Berry et al., 2018) and provide a nursery bed of conflicts between them and their parents (Harris et al., 2018), disrupting individual performance in various aspects of life. Therefore, identifying contributing antecedents and educational interventions to facilitate the process of adapting to changes to realize intelligence and creativity of teenagers is a must. The Ministry of Education must maximize the success of every student in school. The best way to achieve this is to create a vast range of skills by teaching individual intelligence and successful intelligence (Sternberg et al., 2009).

Successful intelligence is a combination of analytical, creative, and practical skills (Arāb- Sheibani & Akhundi, 2016). It appears that the practical and creative skills of learners are not developed in schools, and their analytical skills are not taken to higher cognitive levels appropriately (Dolati et al., 2019). Given the importance of successful intelligence in life, it is essential to identify the contributing antecedents, including the antecedents involved in cognitive emotion regulation (Salavera et al., 2016).

Spiritual intelligence is one with which the individual can take their life to a wider, richer, and more meaningful level (Amram, 2009). Spiritual intelligence provides a strong base for human beings to deal with life's problems and helps the individual reach success (Asadi-Noghani et al., 2005). Research conducted by Namazian et al. (2018), Ashuri et al.

(2013), Tamannaefar (2019), Rita et al. (2019), and Mollamohammadi & Etemad-Ahari(2016) has confirmed the relationship between successful intelligence and spiritual intelligence. However, this relationship has not been confirmed by other studies, including the one conducted by Molazadeh et al. (2014). Considering the conflicting results of certain studies, it is possible that variables mediate between successful intelligence and spiritual intelligence. Research shows that one of these mechanisms could be the mediating role of cognitive emotion regulation (Namazian et al., 2018).

Research shows that teaching cognitive emotion regulation leads to successful performance in education and work (Mohebi & Badri, 2017). Cognitive emotion regulation is a person's way of cognitive processing when faced with stressful events (Sohrabi, 2008). Evidence shows that people with cognitive emotion skills are successful and efficient in life (Issazadegan et al., 2010). The research revealed a relationship between cognitive emotion regulation and spiritual intelligence (Amiri & Partabian, 2015). The results of the research by Mahmoodi et al. (2017) revealed a significant relationship between cognitive emotion regulation and the spiritual approach. Barzehgari et al. (2018) reported a direct relationship between the spiritual approach and adaptive and non-adaptive cognitive emotion regulation strategies. Shek & Zhu (2018) believe that emotion regulation can increase the ability to use spiritual resources to solve problems. Overall, there is much evidence showing that emotion regulation is related to success or failure and modifies the relationship between other psychological variables (Garnefski & Samani, 2011).

In Iran, research on successful intelligence and the effect of spiritual intelligence and cognitive emotion regulation on successful intelligence is still nascent. Aiming to predict the possible existence of a relationship between the said variables, the present study was conducted to investigate the effect of spiritual intelligence on successful intelligence by considering the mediating role of cognitive emotion regulation.

Research hypothesis: The conceptual model of the mediating role of cognitive emotion regulation on the relationship between spiritual intelligence and successful intelligence fits the data.

Method

The statistical population of this fundamental descriptive correlational study consisted of the ninth grade boys from secondary schools in Birjand during the school year 2020-2021. The sample size was 310 participants selected with the random cluster sampling method. Data analysis was performed in SPSS-23 and LISREL 8.8 software programs using path analysis. A questionnaire was used for data collection. The validity of the questionnaires was confirmed through content validity index (CVI), content validity ratio (CVR) and confirmatory factor analysis. Its reliability was obtained by calculating Cronbach's alpha for spiritual intelligence (0.90), cognitive emotion regulation (0.91), and successful intelligence (0.89).

Results

In order to test the “successful intelligence model based on spiritual intelligence with the mediating role of cognitive emotion regulation”, the proposed conceptual model was investigated with the structural equation modeling (SEM) technique. The path coefficients of the hypothesized model are presented in Figure 1.

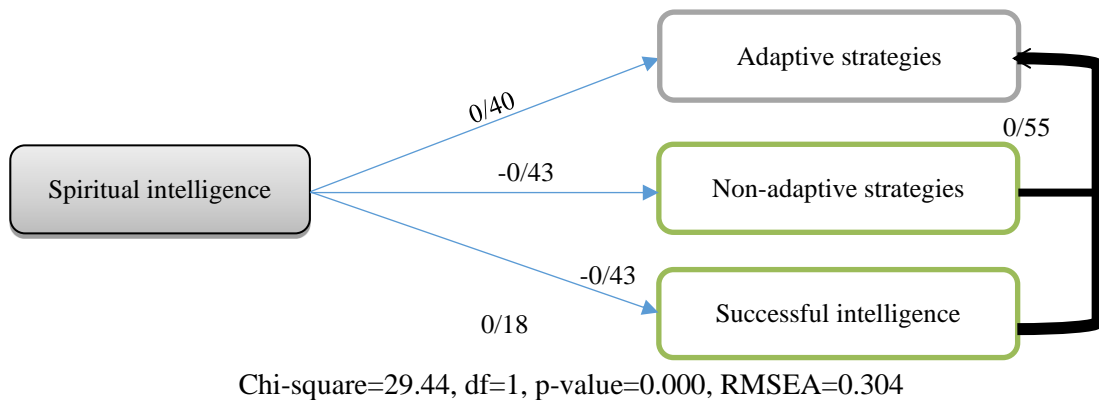


Figure 1. Path coefficients of the hypothetical model for the mediating role of cognitive emotion regulation in the relationship between spiritual intelligence and successful intelligence.

Our data revealed that the direct effect of spiritual intelligence is positive and significant on the adaptive cognitive emotion regulation strategies ($\beta = 0.40$), and negative and significant on the non-adaptive cognitive emotion regulation strategies ($\beta = -0.43$). But the direct effect of spiritual intelligence on successful intelligence ($\beta = 0.18$) is positive and insignificant. Moreover,

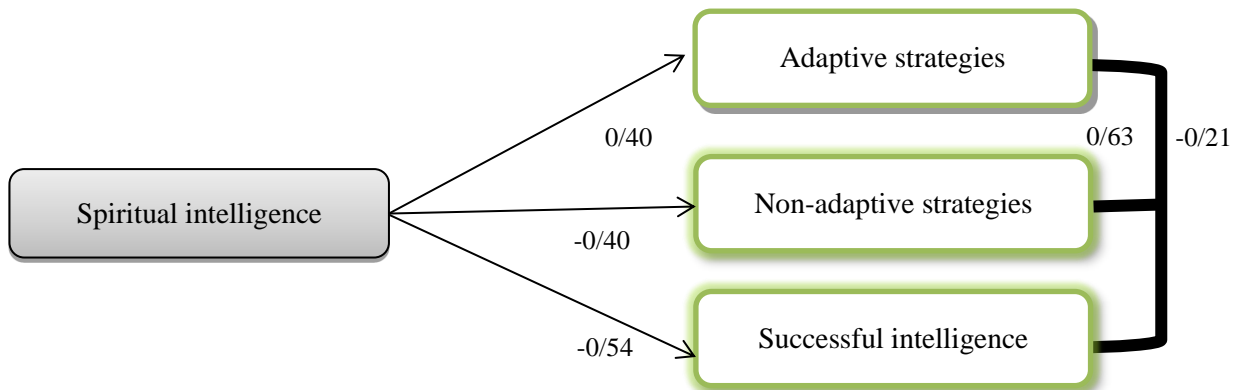
the effect of the adaptive cognitive emotion regulation strategies ($\beta = 0.55$) is positive and significant on successful intelligence and the effect of non-adaptive cognitive emotion regulation strategies ($\beta = -0.43$) is negative and significant. In addition, the indirect effects and total effects of spiritual intelligence on successful intelligence through adaptive and non-adaptive cognitive emotion regulation strategies are positive and significant at respectively

$\beta = 0.41$ and $\beta = 0.59$.

Model goodness of fit

The chi-square test revealed discrepancies between the proposed model and the observed model ($\chi^2_{(1)} = 29.44, p < 0.01$). Therefore, the null hypothesis about data fit was not confirmed. The goodness of fit index (GFI) was 0.95, adjusted GFI (AGFI) was 0.55, comparative fit index (CFI) was 0.93, normed fit index (NFI) was 0.93, incremental fit index (IFI) was 0.93, non-normed fitness index (NNFI) was 0.58, relative fit index (RFI) was 0.57, and the root mean square error of approximation (RMSEA) was 0.304. Clearly, the indices show that the model does not fit the data.

Since the model goodness of fit was not confirmed and that some of the statistical indices of the paths did not reach statistical significance, the model was modified in the last stage based on the modification indicators. The path coefficients of the modified model are presented in Figure 2. The modification reduced the value of χ^2 by 26.13 and, therefore, approached the model fit.



Chi-square=3.31, df=1, p-value=0.07, RMSEA=0.087

Figure 2: Path coefficients of corrected model for the mediating role of cognitive emotional regulation in the relationship between spiritual intelligence and successful intelligence

The output had better fit indices after modification than before modification. Based on the new fit indices, GFI was 0.99, AGFI was 0.95, CFI was 0.99, RFI was 0.95, NFI was 0.99, IFI was 0.99, NNFI was 0.97, and RMSEA was 0.087, indicating acceptable model fit. The findings of the research showed that spiritual intelligence explained 29% of variance in the adaptive cognitive emotion regulation strategies and 34% of variance in the non-adaptive cognitive emotion regulation strategies. In addition, 24% of the observed variance in successful intelligence can be explained by combining the variables of adaptive strategies and non-adaptive strategies.

Discussion and conclusion

The results of the present research showed that cognitive emotion regulation mediates the relationship between spiritual intelligence and successful intelligence. This result is in agreement with the results of Zare & Rastegar (2014), Anvar & et al. (2020), Rita et al. (2019), Schack & Zhu (2018), and Foley & Kelly (2018). The results can be explained as follows: People with a higher spiritual intelligence are more patient when faced with difficult situations and overcome them with a more logical approach. They feel calmer, and this calmness in turn increases their level of successful intelligence. The main limitation of the project was its statistical population (ninth grade boys) which can create limitations in generalizing the results. Given the results, it is recommended that instructors be persuaded to teach spiritual intelligence, cognitive emotion regulation, and successful intelligence.

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