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Comparison of spiritual intelligence, self-control and defense mechanisms in boy and girl students

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Abstract

Introduction: Intelligence is one of the most important individual differences among people. Spiritual intelligence, performance with insight, calmness and kindness with maintaining inner and outer peace. The purpose of this study was to compare spiritual intelligence, self-control and defense mechanisms in boy and girl students.

Materials and Methods: This is a descriptive and comparative study. The statistical society of the present study included all students in the second grade secondary school of Kermanshah in the academic year of 2015-2016. Using a randomized cluster sampling, 360 subjects (180 boys and 180 girls) were selected as sample volume. Questionnaires of spiritual intelligence, self-control questionnaire and defense mechanism were used to collect data. Data analysis was performed using one-way ANOVA and SPSS software.

Results: The results showed that there was a significant difference in spiritual intelligence between the two genders in the spiritual life component. There is also a significant difference between self-control and prohibition of self-control between the two groups. There is a significant difference in defense mechanisms between the two groups in terms of reversal, replication, rejection and displacement ($P < 0.05$).

Conclusion: It seems that there are significant differences between boy and girl students in self-control, spiritual intelligence and defense mechanisms.

Keywords: Defense mechanisms, Self-control, Spiritual intelligence

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Introduction

Intelligence is one of the most important individualized differences among people, and this has been one of human attention for many years (1). Zohar (2) claims that although there are types of intelligence, all types of intelligence can relate to one of the three primary nervous systems in the brain: General Intelligence (IQ), Emotional Intelligence (EQ), and Spiritual Intelligence (SQ). General intelligence involves the capacity for thinking, reasoning, and problem solving (3). Comprehensive theory of emotional intelligence was introduced by Salvey and Mayer in 1990. They stated that individuals with emotional intelligence can control their emotions and others and distinguish between positive and negative outcomes (4). It is said today that IQ and SQ are not responsive to everything and are not really effective, but human beings also need a third factor, which is called spiritual intelligence (SQ) (5).

Generally speaking, the emergence of the spiritual intelligence structure can be seen as the application of spiritual capacities and resources in practical fields. Individuals use spiritual intelligence when they want to use spiritual resources and resources to make critical decisions and to think about existential issues (inevitability of death, freedom and attachment, existential isolation, meaninglessness) or attempt to resolve Daily issues (6).

Spiritual intelligence exceeds the physical and cognitive relationships of the individual with his surroundings and enters the intuitive and transcendental sense of the individual's perspective on his own life (7).

It seems that the talent of this intelligence is gradually evolving and evolving in various qualitative categories of experiential cultural and emotional intelligence through dealing with rich environments that raise spiritual questions. Studies have been done about the

gender effect of spiritual intelligence. For example, Carrick found females' superiority in interpersonal relationships and compromise with males. Smith in their research showed that spiritual intelligence in students is necessary for better adaptation to the environment, and those who have higher spiritual intelligence, are more tolerant of life pressures and have high ability to adapt to the environment (8).

Spiritual intelligence has a close relationship with religion. It should be noted that religion as a broad system consisting of many programs for human guidance, including elements of self-control, places one's control on refusing some behaviors (9).

Self-control or the ability to change their responses to long-term goals and objectives plays a major role in several influential psychosocial health behaviors. Self-control is associated with many desirable outcomes of life, such as having interpersonal relationships (10).

Defensive mechanisms are one of the other psychological variables that play a major role in individual adaptation. Defense mechanisms are self-regulating processes that act to reduce cognitive inconsistencies and minimize sudden changes in both the inner and outer reality by influencing how perceptions of incident events are perceived (11).

Based on the hierarchical classification of the Violent Defense Mechanism, they divided twenty mechanisms into three developed, neglected, and psychologically developed, defensive styles. Accelerated defense mechanisms are adaptive, normal, and effective, but defense growth mechanisms, unhealthy and unpredictable, and non-adaptive, and non-adaptive (12).

Defensive mechanisms of reflection, denial, return and advocacy are non-growth defensive mechanisms and reverse reactions that are part of the neurotic defense

mechanisms that have a negative relationship with self-control, which indicates the type of normal activity of individuals with high self-control. Considering the importance and uses for spiritual intelligence and since spirituality and religion have been one of the inner needs of man, the present research attempts to answer the following question. Is it between spiritual intelligence, self-control and defense mechanisms in females and males there is a difference?

Materials and Methods

In this causal-comparative research, the statistical population includes all boys and girls in the second grade of secondary school of Kermanshah in the academic year of 2016-17.

Considering that the number of community members including students in the second grade of high school in Kermanshah district (1) is 6043; in this study, the sample size was calculated as 360 using the Cochran formula. Sampling method was cluster random. First, clusters were identified including governmental and non-governmental high schools. Out of the high schools in the district of Kermanshah, three girl high schools and three boy high schools were randomly selected then one and one non-state clusters were randomly selected from among the different classes. Three classes were randomly selected from each school.

To considering ethical considerations, a researcher provided about voluntarily and the participants received the needed information about the subject and method of implementation before the starting. The private and personal information of the volunteers was protected and this research had not any financial burden on participants. Also, this research was carried out with the approval of Islamic Azad University of Kermanshah Branch.

The instruments used in this study are spiritual intelligence questionnaire and self-control questionnaire.

Research instrument

A) *Spiritual Intelligence Questionnaire*: It contains 29 questions which responded as completely disagree, disagree, no opinion, agree and completely agree. This scale standardized and in 1387 by Abdollah Zadeh on 280 cases. 200 cases were students of Gorgan Natural Resources University and 80 cases were students of Payam Noor University in Behshahr city. Of these, 184 were female. First, a 30-item questionnaire was prepared by test creators and performed on 30 students. The reliability of the test in the alpha phase was 0.87, in the analysis of the questionnaire, the question-12 was removed and the final questionnaire was adjusted with 29 questions. In the final stage of the questionnaire, 280 subjects were selected and the reliability of the questionnaire was obtained by Abdollah Zadeh and his colleagues by Cronbach's alpha (0.89). Cronbach's alpha coefficient obtained as 0.91 (13).

B) *Self-control Questionnaire*: This questionnaire made by Tangjini (14) to evaluating the self-control of individuals. The main form of the test has 35 terms. Afterwards, Tangjini and his colleagues also submitted a short self-control form they presented. The short form has 13 terms and gives a total score. This test was provided on a 5-point Likert scale (14). In order to standardize the self-control scale, the shortened form was performed on two separate samples. The calculated Cronbach's alpha coefficient was 0.83 and 0.85 in the two groups. The self-control scale consists of two self-controls, self-control or self-control sub-scales. The results of their research indicated that the internal consistency was appropriate (Cronbach's alpha for self-control alpha: 0.86 and

Cronbach's alpha for initial self-control of 0.68). Validity and reliability of this questionnaire were calculated by Mousavi Moghaddam et al. (Cronbach's alpha: 0.87) (15).

C) *Defense Mechanism Questionnaire*: It has 77 items that measures 14 defense mechanisms. This test was conducted by Hosseini as a graduate thesis course led by Abdollah Zadeh on 200 students of Payame Noor University in Behshahr (64% of them were female).

The Cronbach's alpha calculated 0.84. The results showed that the questionnaire had a good level of validity and validity. The test responses on a five-point scale in the Likert spectrum are totally in line with the totally disagreeable (16).

The questionnaire measures 14 defense mechanisms, including retrogression, compensation, replication, introspection, projection, reasoning, reversal, return, displacement, denial, fantasy, magnificence,

and rational transformation. Given that the terms related to each mechanism are dispersed in the questionnaire, the phrases related to each mechanism are presented separately, which, after answering, obtains their scores according to the definitions of each defense mechanism. The number of phrases related to each mechanism is divided, so the mean of each mechanism is obtained (17).

Data were analyzed using descriptive and inferential statistics using SPSS-21 software. One-way analysis of variance analysis was used in inferential statistics to compare the mean of variables between the two sex groups.

Results

In this research 360 students were entered. The scores related to spiritual intelligence were presented in Table 1.

Table 1. Mean and standard deviation of spiritual intelligence components by gender

Boys		Girls		Variables	
Standard deviation	Mean	Standard deviation	Mean		
4.34	16.11	6.76	18.13	Understanding and communicating	Spiritual intelligence
7.38	19.71	4.85	21.10	Spiritual life	

Based on the findings, the mean score of self-control component in boys and girls were 27.95 and 28.11, respectively. The

mean of elementary self-control component in boys and girls were 26 and 26.16, respectively (Table 2).

Table 2. The mean and standard deviation of self-control and its subscales

Boys		Girls		Variables	
Standard deviation	Mean	Standard deviation	Mean		
4.73	28.11	3.58	27.95	Preventive self-control	Self-control
4.84	26.18	5.36	26	Elementary self-control	
5.16	24.18	7.42	24.6	Unclassified Items	

According to the results obtained, the mean defense mechanisms in boys and Levin's test was used to examine the homogeneity of variances (assumption of

girls were 180.88 ± 10.1 and 116.67 ± 11.3 , respectively.

variance analysis). The results showed that there is a homogeneity of variance for

spiritual life component and self-control variable, but for variables of defense mechanisms of retrograde components, replication and reason. There is

homogeneity between displacement and homogeneity, and in other components there is no homogeneity between variances (Table 3).

Table 3. Homogeneity of variables

Significance level	2df	1df	F	Variable	
0.067	359	1	21.3	Spiritual life	spiritual intelligence
0.094	359	1	2.6	Preventive self-control	Self -control
0.06	359	1	3.4	Classified self-control	
0.51	359	1	0.42	Retrograde	Defense mechanism
0.46	359	1	0.52	Replication	
0.14	359	1	2.15	Rejection	
0.18	359	1	2.17	Displacement	

In examining the hypothesis, there was a significant difference in spiritual intelligence among males and females. The results of one-way analysis of variance showed that in the subscale of

spiritual life, the significance level of the test was less than 0.05, which means that between the two groups has a significant difference in terms of spiritual life (Table 4).

Table 4. The results of comparison of mean spiritual life in two genders

Significance level	f	Average squares	df	Sum of squares		
0.001	18	21.6	1	61/69	Intergroup	Spiritual life
		3.42	359	746/8	Within group	

There is a significant difference between self-control and prohibition and self-control among boys and girls. One-way ANOVA test showed that the significance level of the test was less than 0.05 (Table 5).

Table 5. Results of comparison between self-control subscales in two genders

Significance level	f	Average squares	df	Sum of squares		
0.001	13.27	281.8	1	281.8	Intergroup	Preventive self-control
		10.3	359	2264.3	Within group	
0.001	14.8	228	1	228	Intergroup	Classified self-control
		15.4	359	3357.3	Within group	

There was a significant difference in the defense mechanisms subscales in two groups of girls and boys in the level of homogeneity of variance tests for retrospective subscales, replication, rejection and displacement of more than 0.05 and

variables. The results of one-way ANOVA showed that the significance level of the test was less than 0.05, which means that there is significant difference between the two groups, in term of reversal, replication, rejection and displacement (Table 6).

Table 6. Results of comparison between defense mechanisms

Significance level	f	Average squares	df	Sum of squares		
0.001	15.9	218.8	1	218	Intergroup	Repression
		13.6	359	2984.6	Within group	
0.001	12.2	204.2	1	204.2	Intergroup	Replication
		16.7	359	3648.4	Within	

				group		
0.001	33.17	331.3	1	331.3	Intergroup	Rejection
		359	359	2177.3	Within group	
				group		
0.001	8.6	96.89	1	96.89	Intergroup	Displacement
		14.1	359	376.09	Within group	

Discussion

The purpose of this study was to compare the spiritual intelligence, self-control and defense mechanisms in boys and girls. The findings of the one-way analysis of variance showed that there is a significant difference in spiritual intelligence between boys and girl students in the spiritual life component. In explaining this finding it can be stated that spirituality as one of the dimensions of humanity includes consciousness and self-knowledge. Bilotta believes that spirituality is also going beyond us in everyday life and being integrated with someone other than ourselves, this awareness may lead to an experience that goes beyond ourselves. Since each type of intelligence grows to a different degree, so one person may grow a lot in one person, but other types of multiple intelligences have not grown much. When ethical issues are remained unsolved, it prevents spiritual growth. Different research has shown that religion and spirituality have a positive effect on the health of the body and the body. Religiosity is also correlated with the reduction of suicidal ideation, impunity, reduction of crime, and so on (18,19). Therefore, people with high spiritual intelligence have a capacity for excellence and have a high desire for consciousness. They have the capacity to devote part of their daily activities to spiritual and spiritual practices, and to demonstrate an environment such as forgiveness, gratitude and etc. (20). People with a high spiritual intelligence in their lives find meaning for most of what's going on around them, and they realize that there is nothing meaningless in this universe

and that all things in the world are derived from a special and supreme authority.

There is also a significant difference between the two groups of students in terms of self-control and classifying.

On the other hand, self-control is one of the skills of thinking that helps students learn their emotions and behaviors in order to make good decisions, as well as helping to reduce impulsive and effective coping with disappointment. Self-control is therefore a vital component of social welfare for students which provide opportunities for proper decisions and control of feelings, frustrations and reactions. This intellectual skill prevents decisions and actions that are not appropriate in dealing with situations. Self-control as an executive function often refers to how to manage feelings and behavior in individuals. Therefore, in determining the difference in self-control among females and males, it can be stated that inhibition of the response to pre-operative thinking capacity and the ability to withstand situations that are not needed and reject something different from that of males and females. Also, self-control in social relationships and the display of appropriate behavior in different and difficult situations and situations may also vary between boys and girls.

Another finding obtained from this study showed that there is a significant difference between two groups of students in terms of retrospective, replication, reasoning and displacement.

Concerning defense mechanisms, it can also be argued that defense mechanisms that are responsible for protecting a person in

confronting different forms of anxiety may, in terms of actuation, be normal or abnormal, efficient or ineffective. Andrews et al., on the basis of the hierarchical classification of the City of Warring on defense mechanisms, divided 20 mechanisms into three defensive styles (growth, neurotic, and unrecognized growth) (21). Developed defense mechanisms are considered to be normal and effective as adaptive exposure modes, while neurotic and non-growth defensive mechanisms are inappropriate and ineffective modes of exposure. The girls and boys can be either normal or ineffective differences can be due to the fact that females can use more conventional defense mechanisms than in males in difficult situations, which is the difference between them.

The results are consistent with the findings of Saheb and Kakaberaei (22). They showed that spiritual intelligence and self-control are significantly different between males and females. Also, spiritual intelligence and self-control can affect the psychological health in both genders. Research has not been found in the research on the gender comparisons of the variables, but the findings of Mousavi Moghadam et al. are overlapping with these findings. Mousavi Moghaddam et al. showed that

there was a significant positive correlation between spiritual intelligence and self-control. There was a significant positive correlation between spiritual intelligence with internal mechanism and rational justification, but there was no significant relationship between spiritual intelligence with the mechanism of return, displacement, denial, fantasy, reverberation and conversion. This research, like other studies, has limitations such as using a questionnaire to examine and not use more reliable methods of clinical assessment, such as interview. It is suggested that under controlled conditions, the causal relationship between the variables of this research in the form of experimental design should be addressed so that if the existence of a causal relationship between them is proved, then applied sciences can be applied in the field of increasing self-control, spiritual intelligence and defense mechanisms used by students.

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