

The Role of Locus of Control in High School Students' Depression

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Abstract

Background: The main objective of the present research was to discuss the relationship between locus of control and the rate of depression among high school students who resided in Qazvin, Iran.

Materials and Methods: Random cluster sampling method was to select 300 students from the Western RoodbarAlmot region, 150 of whom were females and the remainder were males. Locus of control was evaluated by Rotter's Locus of Control Questionnaire. Students' depression was evaluated by Bech's depression questionnaire. Data analyses were performed by using SPSS software through calculating Pierson's correlation coefficient and the independent t-test.

Results: Results showed a correlation between external locus of control and depression. There appeared to be a higher relationship between females' internal locus of control and depression, which was not seen for males. This relation was statistically significant. Regression results showed that locus of control might predict the rate of depression.

Conclusion: Females' locus of control and their rate of depression showed the highest percent of prediction. It was suggested that additional studies consider this issue in different educational grades, at the national and regional levels.

Keywords: Depression, Locus of control, Students.

Introduction

There are differences of opinion with regards to social-learning theories that perceive situations as reinforcing factors. Some people believe that reinforcements hinge highly on their own behaviors whereas others believe that reinforcements are controlled by external forces. The issue of

reinforcements is an essential aspect of Rotter's social-learning theory which known as the external-internal locus of control. Locus of control is defined as having a sense of control over behavioral events, occurrences and outcomes. This locus of control is comprised of two dimensions, internal and external (Rotter, 1990). A person with internal locus of control feels in control and responsible for all of his experiences in life and behavior outcomes. One who feels that his life experiences and behavior outcomes are controlled by external factors is said to have external locus of control (Levenson, 1981; Rotter, 1990)

The type of locus of control affects peoples' ability to adapt themselves to cope with hardships and difficulties (Leontopoulou, 2006). Therefore, as a personality trait, locus of control is a popular research issue which has been widely studied. According to some researchers, individuals with internal locus of control and a sense of control in their lives have more satisfaction (Moore, 2007). Studies demonstrate the locus of control has significant relationship with creativity of high school students (Rashidi & Aray, 1387) and educational achievement of university student (BagherzadehULadari, Sadeghi, Haghshenas, Mousavi, & Cherati³, 2010; YasmiNejhad, Dabir, & Golmohammadiyan, 1389).

Other studies have reported a sustainable positive relationship between external locus of control and neurotic personalities of anxiety, aggression, depression, shyness, impulsiveness and vulnerability (Hatami, Mohammadi, Mohammadi, & Mohammadi, 2011). In these students locus of control has an interactive effect on their self-confidence, institutional adaptability and educational development. Depression includes the presence of a morbid mental state with disenchantment, despair and fatigue; in most cases it comprises some anxiety (Kaplan & Sadock, 1988; Mohammadian et al., 2011). For this reason, depression is known as one of the world's most crucial issues. Depression in teenagers and children consists of a set of symptoms which can be seen. According to Nair et al (2004), depression may be part of the developing stages in teenagers which stems from growing out of a secure childhood, to step and grow into the process of being unconnected and self-sufficient.

Recently, psychologists' attitudes on depression have differed with regards to its etiology, roots and behavioral disorders. Based on new findings, depression in children, in most cases, is the result of attachment insecurity and the child parents' relationships during the early years of childhood (Jahanbakhsh, Shooleh, Bahadori, Molavi, & Jamshidi, 2011). Jahanbakhsh (2011) have reported a positive, significant correlation between attachment problems and the rate of depression in females. A study conducted in Taiwan on secondary school students' self-esteem and depression showed that making a student appear as a victim in front of the other students or committing acts of violence in front of other students was a sign of depression. However the teachers' ill-treatment of students did not show a significant relationship with students' depression and/or self-esteem (Chen & Wei, 2011). Chen and Wei (2011), in the very same research showed that the effect of being a victim on depression was stronger in subgroups that had received less support against their contemporaries than those with more support. The findings showed that depression was the major outcome of school violence in Taiwan and that the effect of victimizing a student by his classmates could be neutralized by positive assistance from his contemporaries. Continued reports of escalation in teenagers' suicide rates has intensified the concern regarding adolescent's depression (Baramkouhi, 2009). An investigation carried out in the early 1980s has demonstrated that numerous children experience a set of high depression states which cannot be attributed to additional factors, becoming less active, having a negative self-image, social isolation and suicidal thoughts (Baramkouhi, 2009). A research conducted in Trinidad and Tobago has studied teenage depression in 1845 students and determined that 14% of all students suffered from depression. The highest age for depression was 16 years, which comprised approximately 15.9% of students; people addicted to alcohol were 1.8% more likely to experience depression compared to non-alcoholics (Maharajh, Ali, & Konings, 2006).

According to research there is a significant relationship between external locus of control, depression and chronic headache. However other factors such as parents' level of skills and their upbringing style should be considered (Heath, Saliba, Mahmassani, Major, & Khoury, 2008). On the other hand, internal locus of control is associated with a decreased rate of depression and chronic headache (Heath et al., 2008). Lane and Francis (2003) have observed that external locus of control

makes women vulnerable to depression and anxiety. Cohen and colleagues (2008) studied the level of depression and rate of anxiety in children affected by Tourette's syndrome. According to their results, a high level of depression and anxiety in these children was related to a high external locus of control, although their upbringing must also be considered. Kakavand (1381) surveyed the relationship between locus of control (external and internal) to soldiers' general health. This study concluded that there was a significant, inverse relationship between internal locus of control and physical symptoms, anxiety and insomnia, social malfunction, depression and general health symptom scale. However, the relationship with external locus of control was only direct.

In general, the rate of depression among adolescents is increasing (Baramkouhi, 2009). Further, Depression among children and teenagers is not transitory, but rather serves as an indicator of its intensity and continuity with increasing age. If the causes of depression are not addressed, subsequent problems will be inevitable (Baramkouhi, 2009). In a study conducted on high school students, approximately 14% of the total participants reported they were depressed according to the self-evaluation; females possessed a higher level of depression than males. In this research there was no considerable difference in depression based on ethnicity (Galaif, Chou, Sussman, & Dent, 1998). People in control of their daily affairs who efficiently managed their problems were less likely to experience depression. This manner of confrontation and management of life events might indicate locus of control. Research should thoroughly emphasize the scientific aspect of locus of control in treating teenagers' depression and their problems. In other words, depression might originate from external locus of control, in that the affected person might believe that he has no control over the events in his life or it could result from internal locus of control as the person connects every event and happening to himself. Numerous studies have researched the relationship between depression and locus of control (Abolghasemi, Abbasi, Narimani, & Ghamari, 1388; Coyne & Thompson, 2011; Heath et al., 2008; Rashidi & Aray, 1387). However, conducting studies with geographic variation or divided by age group can examine previous findings. Therefore, in this research the main objective was to examine the type of locus of control related to the level of high school students' depression. Gender consideration was one of the emphasized suppositions of the present research as the existence of gender differences is reported in many research (See: Kalantarkousheh, 2012).

2. Materials and Methods

Research Methodology

The present research method, correlation regression, was based on an examination of the relationship between external and internal locus of control and rate of depression.

Population and Sampling

The study population included all high school male and female students who were residents of Qazvin, Iran during the educational year 2012-2013. It was used random cluster sampling of the regions of Qazvin, which resulted in the inclusion of 300 students (150 females, 150 males). Participants completed Rotter's external-internal Locus of Control Scale and Beck's Depression Questionnaire.

Locus of Control Scale

The external-internal Locus of Control Scale was initially prepared by Rotter (1966) to evaluate peoples' generalized expectations from their external-internal locus of control. This scale consists of 29 statements for which each statement has two expressions. Those completing the test should select one of the two expressions. The validity and reliability of this scale has been the subject of numerous research studies. The average reliability of this scale was reported to be greater than 0.70% (Biyabangard, 1370).

Beck Depression Scale

This research used the Beck Depression Scale to evaluate the rate of depression among participants. The Beck Depression Scale was introduced by Beck, Mendelson, Mock, and Erbaugh in 1961, and published in 1978 (Beck, Rush, Shaw, & Emery, 1987). This questionnaire has undergone numerous psychometric evaluations since it was introduced in 1961.

Results

Descriptive Data Analysis

Table 1 shows that the rate of depression among student participants ranged from low to high with an average depression score of 18/40. The average score for depression among females was 20/38 and for males, it was 16/43. The average of locus of control for females was 8/91; for males it was 8/97.

The results of data analysis showed the amount of skewness for the Beck Depression Scale to be 0.367; for the Locus of Control Scale it was 0.332. The amount of kurtosis for the Depression Scale was 0.250 and 0.383 for the Locus of Control Scale.

Table 1: Descriptive Statistics

Variable	Group	Number	Minimum	Maximum	M±SD	Alpha
Depression	Total	300	3	42	18.40±7.26	0.72
Locus of control	Total	300	1	21	8.94±3.14	
Depression	Girls	150	5	42	20.38±8.31	0.74
Depression	Boys	150	3	34	16.43±7	
Locus of control	Girls	150	1	21	8.913±3.49	
Locus of control	Boys	150	2	17	8.97±2.77	
Internal control	Girls	70	1	8	6±1.81	
Internal locus	Boys	68	2	8	6.50±1.40	
External locus	Girls	80	9	21	11.51±2.41	
External locus	Boys	83	8	17	10.936±1.97	

Inferential Statistics

Table 2: Independent t-test for Locus of Control and Depression

Variable	Sig (1-tailed)	t	M SD	Group
Internal locus of control	1.831	0.69	6 1.81	Girls (n=70)
			6.50 1.40	Boys (n=67)
External locus of control	0.78	-1.77	11.51 2.41	Girls (n=79)
			10.90 1.97	Boys (n=83)
Depression	0.000*	4/43 -	20.38 8.31	Girls (n=150)
			16.46 6.98	Boys (n=150)

*Significance: p<0.05

According to Table 2 the t-test results regarding first hypotheses indicated that the internal locus of control for females and males did not significantly differ. The difference between external

locus of control for females and males was not statistically significant. Nevertheless, there was a difference in the rate of depression in females and males. Therefore, the hypothesis "the rate of depression in females and males is different" was accepted.

Correlation Matrix between Locus of Control and Depression

Results from the correlation test between the internal locus of control and depression showed the possibility of a relationship between internal locus of control and depression. The correlation test results showed a relationship between the females' external locus of control and depression, but the rate of this relation was low. Statistically, no significant relationship existed between males' external locus of control and depression. The hypothesis, "There is a relationship between external locus of control with the level of depression in males" was rejected.

There was a significant relation between females' internal locus of control and depression. According to the results, the relation between males' internal locus of control and depression was not statistically significant. Hence the hypothesis "There is a significant relation between internal locus of control and depression in males" was not approved.

Table 6: Results of Multiple Regression Analysis for the Total Group and by Gender

Group	R²	F	P
Girls' internal locus of control	0.57	4.10	.47
Girls' external locus of control	0.21	1.67	.47
Boys' internal locus of control	0.5	.341	.56
Boys' external locus of control	0.3	.273	.60

According to the results of regression analysis, males' internal locus of control was predictive of depression in .5% of cases. Males' internal locus of control anticipated depression whose level was not high. This level for females was as high as 5.7%, therefore internal locus of control among females indicated depression.

Males' external locus of control, on the other hand, could only predict depression by 3%, which indicated that males' external locus of control predicted depression. Females' external locus of control predicted depression by 2.1%.

Discussion and Conclusion

This research examined the role of locus of control in high school students' depression in order to determine the rate of locus of control as well as the role of the type of locus of control (external–internal) in depression.

Internal locus of control among males and females was the same. There was no significant difference observed between males and females in terms of the type of internal locus of control. The average locus of control for males was 8.91 and for females it was 8.97 which supported the study by Fadaei and colleagues (2011). In the current study, females experienced considerably more depression than males which differed from the results obtained by Fadaei and colleagues (2011). However, these results were consistent with the results obtained in other investigations (Baramkouhi, 2009; Galaif et al., 1998; Hatami et al., 2011; Jahanbakhsh et al., 2011; Lane & Francis, 2003).

In general, regardless of participants' gender, the relationship of locus of control rate was low and not statistically significant. These results was not consistent with studies by Kakavand (1381). (Cohen et al., 2008; Lane & Francis, 2003) though the types and statistical population differed in these studies.

It was observed no significant relationship between internal locus of control and depression. The correlation between males' internal locus of control and depression was not statistically significant which supported the results by Hatami et al (2011) and Moore (2007). Females' internal locus of

control showed a significant relationship with depression, which did not confirm results from the above mentioned studies.

Based on the results of the current study, it can be concluded that depression is a major problem during adolescence which affect students' performances in the academic setting as well as socially and with regards to family.

The results showed that external locus of control affected depression and students who had internal locus of control experienced less acute episodes of depression.

One approach for improving internal locus of control is to nurture personality features that correspond to personalities of people who have internal locus of control. For example, those with internal locus of control are more responsible, more persistent in pursuing their goals, and they place skills before luck compared with individuals with external locus of control. By improving these personality characteristics, we can improve internal locus of control and subsequently reduce students' depression.

It is recommended that in order to weaken external locus of control, students should refrain from irresponsible behaviors, discussing luck, and blaming others. Hence, these behaviors should not be rewarded; people should be made aware of their unpleasant outcomes. This approach leads to increasing internal locus of control while decreasing external locus of control.

Also, it is suggested that less external reinforcements be used when educating students as this causes external motivation. Instead, we should pave the way for internal reinforcements in order to create internal motivation. If the student has no external excuses for doing his activities, he attempts to use internal motivations and values, thereby weakening external locus of control and improving internal locus of control. This possibly leads to a decrease in depression.

We recommend this issue should be addressed in future research at different educational grades and at the regional and national levels. Limitations to this research were other factors that might have affected students' depression such as the presence of family problems, economical, educational, and training factors, as well as difficulties during growth and environmental conditions such as students who did not live with their families, which were not controlled.

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