Effect of Reality Therapy on Achievement Motivation and Problem-Solving Skills in Students

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ABSTRACT – One of the most effective ways to motivate individuals is to enhance their mental health, particularly among adolescents and young people in the community. The aim of the present research was to investigate the influence of reality therapy on achievement motivation and problem solving skills among students. This study was a quasi-experimental one with pretest, posttest and control group. Statistical population involved all female students of Shiraz high schools from among which 30 students were selected using multi-stage cluster sampling and they were placed in two groups randomly and then, they were exposed to reality treatment for two months (10 sessions that each lasted for 1 hour). Research tools involved Hermen's achievement motivation questionnaire and Heppner's problem solving skills questionnaire that were utilized for both groups in pre-test and post-test stages. To analyze the data obtained from this study, the statistical method of analysis of covariance was used. The results of the analysis of MANOVA covariance showed that reality therapy increases student's achievement motivation and problem-solving skills. The results showed that reality therapy has a high positive influence on achievement motivation and problem solving skills among students.

KEY WORDS: Reality therapy, achievement motivation, problem solving skills, student

Introduction

Today, one of the major topics in psychology that has attracted the attention of many researchers and psychologists is motive or generally motivation. Motivational structure is an important factor that affects social changes and development. Motivation is the desire to work or move towards a specific behavior (Graham 2004). Achievement motivation is the base of reaching success and achieving goals in our lives (Lieberman and Remedios, 2007). Murray has defined motivation as: "Working hard to achieve results, manipulating and organizing things, people and ideas, overcoming obstacles, achieving a high standard, and competing with others and surpassing them." (Schultz, 1998). Students who fail in school assignments face various stressors. Problems of failure and getting low marks and being humiliated by others or being observed by others, are some typical instances of stressors. This, in turn, can have various functional and behavioral outcomes for students (Jabali, 1384). In advanced educational systems, being aware of human motivation is one of the important applications of this theory. Teachers in educational settings, using the awareness of students' motivation, can predict behavior, and consequently, control it. The teacher knows the reason behind his students' behavior and can treat them appropriately. The fact that a student studies enthusiastically while another one is not like that, depends on their motivation and one of the most significant motives which influences human behavior is achievement motivation (Bagheri, 1385). This motive can motivate students to study more. Research has shown that achievement motivation can facilitate learning. The other variable which has been investigated in this research is problem solving skills among students. Robertson (2001) says: solving a problem in present situation or the situation in which the problem exists, starts based on the problem's situation and your prior knowledge i.e. you should move towards the solution and as you reach it, you are at the target of that problem. (Morgan, 2000), People treat the problem as a conflict or difference between the new situation and another situation that they want to create. In other words, people are in search of solving their problems and try to find another solution to each problem. Generally, problem is an individual's cognitive-behavioral and innovative process by which an individual wants to determine, discover or invent effective and adaptive strategies

for coping with everyday problems (Dorzila, 1992). One of the treatment approaches which can be applied in students' achievement motivation and problem solving is reality treatment that is based on choice theory. In this theory, it is believed that all our actions are behaviors, and almost all of our behaviors are selected. Glaser believes that behavior includes four components of performance, thinking, feeling and physiology and we have direct control over the two components of performance and thinking and indirect control over feeling and physiology. In a research conducted on students by Astsven in 2008, it was found out that reality therapy is a suitable treatment approach which can increase their achievement motivation and problem-solving skills. In another study done by Spiket (2011), it was claimed that reality therapy is a useful treatment method that is effective in motivating students' progress. In another study (Aswan, 2007), it was shown that reality therapy has a significant role in achievement and problem solving abilities. Similarly, another research done by Tang in 2009 put an emphasis on the influence of this approach on students' mental health and problem solving abilities. Since few studies have focused on student's problem solving and achievement motivation, this study aimed to investigate the effect of reality therapy on student's problem solving and achievement motivation.

Method
This study was a quasi-experimental research including a pretest and posttest with experimental and control group. The statistical population of this study involved 25328 high school female students of Shiraz in 2013-2012. Using a multistage cluster sampling from among four education boroughs of Shiraz, borough 2 was selected. From among the high schools of this borough, one high school was selected randomly and from among the classes of that high school, one class was finally selected and 30 interested and qualified students (based on the research inclusion and exclusion criteria) participated in this study in experimental and control groups. Inclusion and exclusion criteria involved: subjects should not have any physical or neurological diseases. Subjects should not be on medication or psychotherapy to treat psychological disorders.

Measuring Tools
Hermen' Achievement Motivation Questionnaire: This questionnaire consists of 29 multiple-choice questions. Some questions are positive and some are negative. The questionnaire has 4 subscales: 1. Long-term resistance: this scale measures individual's long-term resistance for doing incomplete assignments. 2. Perseverance and job selection: This scale measures an individual's perseverance at doing assignments. 3. Prospective: Indicates prospective and high level of an individual' ambition. 4. Diligence: Indicates a high level of an individual's effort in doing assignments. The correlation coefficient of the two questionnaires has been estimated by progressive behavior that indicates the high validity of the test (88/0 = r). To estimate the reliability of the questionnaires, Cronbach's alpha and test-retest reliability were employed (which indicated 82/0 and 85/0 respectively) (Hamon, 2007). Heppner's Problem solving Inventory (PSI): Problem-solving questionnaire based on rotation factor analysis has 3 separate subscales: (1) confidence in solving problems (PSC) with 11 words which evaluates self-confidence in the field of problem solving. 2. Tendency style - avoidance (AA) with 16 words that measures avoidance or preference of subjects in various activities of problem solving which show if they prefer to solve the problem or avoid it. 3. Self-Control (PC) with 5 words that indicates the level of control over one's emotions and behavior during problem solving. It indicated a relatively high internal consistency with alpha values between 72% and 85% among subscales. The test validity showed that the instrument measures the constructs related to personality variables that are remarkably control centers. Test-retest reliability of the questionnaire within two weeks was in the range of 83% to 89%, which indicates that the scale of problem-solving ability is a reliable measurement instrument. Cronbach's alpha obtained in Khosravi's study (1377) was 86% and in Bazl's study (1383), it was 66%. (Peterson, 1982; quoted by Kazemi, 1391). Data from this study, using descriptive statistics such as mean and standard deviation were described and then using statistical analysis of covariance, differences between control and experimental groups were studied; all stages of data analysis were carried out by SPSS-16 software.

Results
As it can be seen in table (1), in pre-test stage, there is not a noticeable difference between the means of achievement motivation. In experimental group, the mean was 61.60 and standard deviation was 6.42 and the control group had a mean of 60.68 and standard deviation of 6.75, but in post-test stage, the experimental group had a mean of 80.40 and standard deviation of 3.08 which showed a noticeable difference compared to control group with a mean of 61.35 and standard deviation of 5.48, in other words, reality therapy has been able to enhance achievement motivation among students. In variables of problem-solving skills, the mean of problem solving skills for experimental group at pretest stage was 81.40 and its standard deviation was 9.88 and for control group, the mean was 80.20 and standard

deviation was 9.17 that did not show a significant difference. But in post-test stage, experimental group with a mean of 110.86 and standard deviation of 7.75 and the control group with a mean of 84.40 and standard deviation of 8.35, show a considerable difference i.e. reality therapy has been able to improve students' problem solving skills.

Table 1: Descriptive data and statistical indicators of achievement motivation and problem solving in students' pre-test and post-test

sessions	group	Achievement Motivation		Achievement Motivation		number
		mean	Standard deviation	mean	Standard deviation	
Pre test	trial	61.60	6.42	40.81	9.88	**15**
	witness	6086	75.6	8020	17.9	**15**
Post test	Trial	40.80	08.3	110.86	75.7	**15**
	witness	53.61	48.5	40.84	53.8	**15**

In order to investigate the effect of each group on the research variables, analysis of covariance was used and its results have been presented in table (2).

Table 2: the results of the analysis of covariance for achievement motivation and problem solving post-test

sources	Dependent variable	Total sum of squares	d.f.	Average of squares	F	Level of significance	Eta square	Power of test
Pretest of solving problem	motivation	36.712	1	36.712	3.772	.065	.125	**.459**
	problem solving	860.408	1	860.408	10.574	.003	.289	**.879**
Pretest of motivation	motivation	272.710	1	272.710	27.649	.000	.515	**.999**
	Problem solving	43.467	1	43.467	.534	.471	.020	**.108**
group	motivation	152.082	1	152.082	15.419	.001	.372	**.965**
	Problem solving	472.872	1	472.872	5.811	.023	.183	**.641**
fault	motivation	256.448	26	9.863				
	Problem solving	2115.580	26	81.368				
all	motivation	133430.000	30					
	Problem solving	351393.000	30					

As it can be seen in table (2), the difference between two groups in terms of achievement [001/P<0 ، 15.41) =26، 1 (F[motivation is significant at post-test stage. And also, the difference between the two groups for problem solving skill is significant at post-test stage i.e. [P<0.05]

Discussion and Conclusion
Frustration and lack of motivation for making progress can cause behavioral, mental and compatibility disorders (Bagheri, 1385). However, due to the psychological problems of children and their impact on the quality of education, the aim of this study was to identify new ways to solve them. Considering the effectiveness of teaching choice theory in different situations and its positive effects on educational, social and mental fields and taking the results of prior research into consideration, the goal of the present research was to increase its related knowledge and awareness, especially in order to help the adolescent to adapt themselves better in different conditions, internalize educational motivation, solving problems associated with adolescence and improve the level of achievement motivation using this strategy. The results also indicated that reality therapy can significantly increase achievement motivation among students. Many researchers also have confirmed the effect of reality therapy and choice theory on high school adolescents as a suitable approach to teach them social and communicative skills and reduce their emotional and sensational problems. Therefore, the results of this research are compatible with some other previous studies such as (Astsevn, 2009), (Stjepan 2010), (Uson, 2007), (Ward, 2006), (Ward, 2005) which have demonstrated the efficacy of using choice theory in schools. As it can be seen, these researchers, who have utilized reality treatment in improving adolescents' behavior, have reached this conclusion that reality therapy is a suitable approach for teaching social and communicative skills to adolescents and reduce emotional and sensational problems among them. Given this fact that, adolescents, who are the ages that require to gain sufficient knowledge of their environment in various individual and social fields, and follow a purposeful life via planning, teaching

reality therapy can provide adolescents with self-efficacy, overcoming problems, improving self-confidence, ability to plan and behave purposefully or change the attempted goals that are compatible with problems (Glaser, 2012).

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