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# Comparison of the Effectiveness of Creativity Therapy Training and Group Counseling Based on Choice Theory on Students' Motivation Improving

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## Abstract

**Background:** According to findings educational psychologist's motivation has important effect upon student's achievement and performance. Therapists and psychologists have tried to study the methods of motivation improving in students. The present study compares the effectiveness of creativity therapy training and group counseling based on the choice theory on motivation improving in students.

**Methods:** The participants of this study included all students referring to the counseling center of Payam Noor University, Sari center, in the academic year of 2016-2017. The convenience sampling method was used for the selection of all the subjects. The sample consisted of 45 individuals who were randomly divided into 3 experimental and control groups (15 individuals per group). In pre-test, the motivation improving questionnaire was administered for all groups. The experimental groups received the training of creativity therapy and group counseling based on the theory of choice in 8 (90 minutes) sessions for 2 months. The control group did not receive training during this period. After completing the training, post-test was obtained in 3 groups. Data were analyzed using covariance analysis by the SPSS-16.

**Results:** The results showed that there is a significant difference between the effectiveness of creativity therapy training and group counseling based on choice theory in promoting students motivation ( $P < 0.05$ ). Also, group counseling based on choice theory had more effect upon students motivation improving than creativity therapy ( $P = 0.001$ ).

**Conclusion:** Creativity therapy training and group counseling based on choice theory may be effective in improving motivation in students.

**Keywords:** Creativity therapy; Choice theory; Motivation; Students.

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## Introduction

According to findings educational psychologists, motivation has important effect upon student's achievement and performance.<sup>1,2</sup> Therapists and psychologists have tried to study the methods of motivation improving in students. Because many persons especially young persons may become depressed, incompatible and without motivation in encountering with life problems such as illness, education problems and worry about future.<sup>3,4</sup> Motivation is a multidimensional structure in different theories. According to Sadati Firozabadi, internal motivation is one of creativity items and is told creativity hidden item.<sup>5</sup> According to researchers, creativity is one of effective variable upon student's motivation. Students with high creativity try more, show more interest, curiosity and have more motivation.<sup>6,7</sup>

Creativity therapy is known as a new therapy for psychological health. Creativity is the ability to create main and compatible opinions, it can result to have more challenge and high self-confidence and motivation.<sup>9</sup> In creativity therapy, cognition (thoughts, believes and attitudes), verbal models, motivational style, personal attribute and even the kind of movements and non-verbal reactions. Fit life needs to new aims and paths. It is necessary to explore oriented aims and paths because world without orientation is not significant (emphasis upon creating motivation in behavior).<sup>9</sup> The aim of creativity therapy is to prevent cognitive, verbal, motivational, personal and behavioral damages. Instruction of creativity therapy motivational item result in general dynamism in persons.<sup>8</sup> According to research findings, creativity therapy may have significant effect

upon internal motivation improving and educational performance in students.<sup>10,11</sup>

Glasser therapy procedure refers to behavior changing in the field of motivation.<sup>12,13</sup> According to choice theory, we have not born as white board that environmental world may be effective upon us but five basic needs such as physiological need, belongingness, power or achievement, freedom or independence and entertainment that excite us.<sup>14,15</sup> According to Stevenson and colleagues choice theory concepts instruction may result in student's motivation improving.<sup>16</sup> According to Masoudi and colleagues<sup>17</sup> and Chen and colleagues<sup>18</sup> reality therapy has positive and significant effect upon achievement motivation and problems-solving skills in students. Reality therapy is fit method to overcome upon being without motivation because it emphasizes that we select our behaviors and are responsible our action, feeling and thought.<sup>19</sup>

According to stated subjects, the aim of the present study is comparison of the effectiveness of creativity therapy training and group counseling based on choice theory on students motivation improving. Therefore, the present study tries to answer to the following hypothesis:

1. The effectiveness of creativity therapy training and group counseling based on choice theory on students' motivation improving are different.
2. Creativity therapy training upon students' motivation improving is effective.
3. Group counseling based on choice theory upon students' motivation improving is effective.

## Methods

The present research is a semi-experimental study with pre-test & post-test with a control group. The participants of this study included all students referring to the counseling center of Payam Noor University, Sari center, in the academic year of 2016-2017. The convenience sampling method was used for the selection of all subjects. The sample consisted of 45 individuals who were randomly divided into 3 experimental and control groups (15 individuals per group). The inclusion criteria to the study included: education in Sari Payam Noor University, physical & mental ability to participate in research, informed satisfaction to participate in research and exclusion criteria included no satisfaction to continue answer questionnaire and if they chose to withdraw from the study, because participating in research about one term in 2016-2017, answering to questionnaire and post-test questions and participating at sessions continually that resulted in participants decreasing. First, all students referring to the counseling center were identified and then necessary explanations about the research such as being secret were presented and the students were entered the study after obtaining informed consent. In pre-test motivation improving was performed in the 3 groups. The experimental groups received group counseling

based on the theory of choice (Table 1) and the training of creativity therapy (Table 2) in 8 (90 minutes) sessions for 2 months. The control group did not receive training during this period. After completing the training, post-test was obtained in 3 groups. Data were analyzed using covariance analysis by the SPSS-16. All subjects received main information about the research and both groups were given the written informed consent. Also, all subjects voluntarily participated to the study.

Harter Educational Motivation Standard Scale includes 33 items and its aim to study educational motivation among students. This instrument is reformed from of Harter scale (1980-1981). This scale measures educational motivation by two-orientation questions including internal and external motivation. Each question of Harter scale shows just one of the reasons of internal and external motivation. Scoring of this questionnaire is based on Likert scale (never, 1; little, 2; average, 3; much, 4; very much, 5).<sup>20</sup> Harter calculated subscales reliability coefficient by Richardson-20 formula between 0.54-0.84, retest coefficients between 0.48-0.63 and in the other sample during 5 months between 0.58-0.76,<sup>20</sup> Bahrani also confirmed mentioned scale reliability.<sup>21</sup>

To execute this study, the participants of this study included all students referring to the counseling center of Payam Noor University, Sari center. After necessary coordination's and obtaining subjects satisfaction and emphasis upon being secret, researcher executed educations motivation questionnaire (pretest), then 45 individuals were selected by convenience sampling method who were randomly divided in to 3 experimental and control groups (15 individuals per group). The experimental groups received the training of creativity therapy and group counseling based on the theory of choice in 8 (90 minutes) sessions for 2 months. The control group did not receive training during this period. After completing the training, post-test was obtained in 3 groups. Data were analyzed using covariance analysis by the SPSS-16.

## Results

According to Table 3, most samples aged between 26 and 30 and the age of 36-40 aged (with 13.34 frequency percentage) had the least frequency. Also 57.78 and 42.22% of the subjects were females and males respectively. Table 3 shows the sampling distribution based on age and sexuality.

The mean and standard deviation of the participant's scores in motivation improving for considered groups have been presented in Table 4. Apparently, the mean and standard deviation of the motivation improving for the experimental group (creativity therapy), experimental group (group counseling therapy based on choice theory and control group at pretest stage were  $45.33 \pm 4.82$ ,  $43.13 \pm 6.68$  and  $47.40 \pm 7.13$ , respectively. Their values at post-test stage for the mentioned groups were

**Table 1.** Group Counseling Based on Choice Theory Training Sessions

Session	Session Subject
Session 1	Becoming familiar group members with each other, introducing group counseling principles, explaining about choice theory concepts, introducing basic needs to subjects, becoming familiar with needs rate extremity and drawing needs profile
Session 2	Identifying difference rate of students needs profile, becoming familiar with behavior car (thought, action, feeling and physiology) and more cognition each member from himself/herself.
Session 3	Becoming familiar with reality therapy concept and creating responsibility feeling to satisfy basic needs
Session 4	Instruction reality therapy techniques, becoming familiar with external control concept and its destructive role in hearty relationships and replacing of internal control instead external control
Session 5	Becoming familiar with the talk over way about uncoordinated needs, cognition of aims & values and cognition of basic needs (physiological need, authority need, amusement need, freedom need, attachment feeling and identity
Session 6	Instruction of quality world concept, stating the importance of student's satisfaction from it and the way of planning for problem-solving based on present time.
Session 7	Becoming familiar with conflict concept and conflict relation with quality world and basic needs and instruction of some techniques to increase happiness
Session 8	Receiving feedback from previous sessions

**Table 2.** Creativity therapy training sessions

Session	Subject	Aim
Session 1	Introduction communicating	Introducing, becoming familiar with instructor, learning concept, kinds of memory and its structure, amnesia reasons, stating clinical model of creativity therapy, distributions & aims.
Session 2	Instruction of creating metacognitive components	Fluency and flexibility were instructed from metacognitive component. We want that persons may use mental dynamism to change at quantity, diversity and novelty of mental products level.
Session 3	Instruction of creating metacognitive components	Instruction of second step (mental design, thought reforming, understanding and problem- solving)
Session 4	Instruction of creativity metacognitive components	It was instructed third step (making decision).
Session 5	Language components of creativity	Language components of creativity therapy including (reforming and word perceptual expanding, semantic extending and verbal relationships) were introduced
Session 6	Motivational components	Creativity therapy motivational components including motivational orientation and assiduity
Session 7	Personality components	Creativity therapy personality components including self-confidence, adventure and risk
Session 8	Body language components	Creativity therapy body language components including motor behaviors and body language

87.22 ± 21.82, 107.66 ± 10.03 and 49.33 ± 6.94. The other related results have been presented in Table 4.

It is necessary to regard its most important pre-assumptions including data normality assumption. According to the results, the distribution of motivation improving is normal ( $P < 0.860$ ). The other pre-assumption was variances equality pre-assumption that was calculated more than 0.05 for all dimensions

**Table 3.** Frequency Distribution and Frequency Percentage of Sample Based on Age and Sexuality

Variable	Level	No.	%
Age	20-25 aged	13	28.89
	26-30 aged	15	33.33
	31-35 aged	11	24.94
	36-40 aged	6	13.34
Gender	Female	26	57.78
	Male	19	42.22
	Sum	45	100

( $P > 0.05$ ). This shows that variances equality pre-assumption is confirmed ( $P > 0.05$ ).

As can be seen in Table 5, there is a significant difference between the effectiveness of two experimental groups' i.e. creativity therapy and group counseling based on choice theory in motivation improving ( $P = 0.004$ ). In other words, the effectiveness of creativity therapy and group counseling based on choice theory upon motivation improving are significant. Based on means of Table 4, group counseling based on choice theory upon motivation improving score increasing was more effective than creativity therapy.

As can be seen in Table 6, there is a significant difference between creativity therapy group and control group in motivation improving score. In other words, creativity therapy showed significant effectiveness upon motivation improving score ( $P = 0.001$ ).

As can be seen in Table 7, there is a significant difference between group counseling based on choice theory and

**Table 4.** Motivation Improving Score Mean & Standard Deviation for Research Groups at Pre-test and Post-test

Variable	Test	Experimental Group (Creativity Therapy)		Experimental Group (Group Counseling Therapy Based on Choice Theory)		Control Group	
		Mean	SD	Mean	SD	Mean	SD
Educational motivation	Pre-test	45.33	4.82	43.13	6.68	47.40	7.13
	Post-test	87.66	21.82	107.66	10.03	49.33	6.94

**Table 5.** Difference of 2 Experimental Groups Including Creativity Therapy and Group Counseling Based on Choice Theory in Motivation Improving by Covariance Analysis Test

Variable	Source	Sum Squares	df	Mean Squares	F	P	Eta Coefficient
Educational motivation	Pre-test	36.35	1	26.35	0.088	0.769	0.003
	Group membership	2996.51	1	2996.51	10.04	0.004	0.271
	Error	8054.30	27	298.30	-	-	-
	Total	159135	30	-	-	-	-

**Table 6.** Covariance Analysis of Motivation Improving Score at Post-test Stage (Creativity Therapy and Control Group)

Variable	Source	Sum Squares	df	Mean Squares	F	P	Eta Coefficient
Educational motivation	Pre-test	577.62	1	577.62	2.30	0.141	0.079
	Group membership	11568.032	1	11568.032	46.14	0.001	0.631
	Error	6769.04	27	250.70	-	-	-
	Total	159135	30	-	-	-	-

**Table 7.** Covariance Analysis of Motivation Improving Score at Post-test Stage (Group Counseling Based on Choice Theory and Control Group)

Variable	Source	Sum Squares	df	Mean Squares	F	P	Eta Coefficient
Educational motivation	Pre-test	397.52	1	397.52	6.36	0.018	0.191
	Group membership	45042.41	1	25042.41	400.76	0.001	0.937
	Error	1687.14	27	62.48	-	-	-
	Total	212473	30	-	-	-	-

control group in motivation improving score. According to results, group counseling based on choice theory has led to increase motivation improving significantly ( $P=0.001$ ).

## Discussion

The aim of the present research was the effectiveness comparison of creativity therapy and group counseling based on choice theory upon motivation improving among the students. According to results, there is a significant difference between two experimental groups' i.e. creativity therapy and group counseling based on choice theory in motivation improving score. We can conclude that group counseling based on choice theory upon motivation improving was more effective than creativity therapy. Group counseling based on choice theory resulted in increase motivation in students. Glasser reality therapy procedure concentrates upon behavior change in motivation.<sup>13</sup> Reality therapy helps to control person's behavior and choices. Reality therapy is based on control theory and assumes that individuals are responsible for their actions, behaviors and feelings.<sup>22</sup> The main element of choice theory indicates that learner choose, regulate and control his/her environment. The important part of this therapy states that client's

motivation may change unpleasant situations. According to reality therapy, person becomes agitated to change when (1) they conclude that their present behavior is not suitable and effective (2) they become sure that can choose some behaviors to obtain aims. The purpose of reality therapy is promoting responsibility acceptance and creating successful identity. Person should identify his/her behavior and feels responsible for it.<sup>23</sup> This procedure tries to identify short-term and long-term aims, defines clearly and evaluates fit ways to obtain aims and then choose the best way.<sup>24</sup> Group reality therapy increases person's motivation.<sup>25</sup>

According to Glasser theory, person's behavior motivation is internal and is related to her/his impulses<sup>26</sup> persons can change their behavior after creating significant and effective internal evaluation of their control or choice system.<sup>27</sup> The other results of this research showed that there is a significant effectiveness from creativity therapy upon educational motivation score increasing. In creativity therapy, is regarded cognition (thoughts, believes and attitudes) and also verbal models, motivational style, personality features and even non-verbal reactions. New aims and paths are necessary to have better behavior & life. The aims and paths should be oriented: world without orientation isn't significant.

The fact of creativity therapy is to promote mind and personality for better reaction.<sup>8</sup> The motivational item of creativity therapy results in a general dynamism and is fit to do mind activities.

### Conclusion

The results of the present study indicates that group counseling based on choice theory and creativity therapy resulted in an increase in educational motivation score. We can conclude that group counseling based on choice theory had more effectiveness than creativity therapy in students motivation increasing.

### Conflict of Interest Disclosures

None declared.

### Ethical Statement

The current research was approved by the local ethics committee of Islamic Azad University Sari branch.

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