

## THE EFFECTIVENESS OF GROUP COGNITIVE THERAPY, BASED ON MIND –CONSCIOUSNESS ON INCOMPATIBLE SCHEMAS AND RELAPSE TO DRUG USE IN DRUG-DEPENDENT PERSONS

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### Abstract

*This study is a quasi- experimental method using pre-test and post-test with control group and experimental group. In this project, the subjects were randomly selected and with the same method were assigned in two groups. Before the implementation of the independent variable, the selected subjects, in both groups, completed a questionnaire long-term schema by young, and after 8 meetings per a week, a 90 minutes meeting was held for experimental group with group cognitive therapy based-on mind-consciousness. The findings of the research showed that this model has been effective in prevention of the relapse to drug use in addicts. In other words, the rate of relapse in people who received the training in comparison with the control group significantly declined. At the end of the treatment there was a difference between the scores before and after treatment in incompatible schemas in control and experimental group.*

**Keywords:** *Group Cognitive Therapy based on the Mind –Consciousness Incompatible Schemas, Decline of Drug use, Drug -Dependence*

### 1- Introduction

Addiction is a kind of recurrent mental illness that in spite of all complications an addict consumes it with no volition. Whether the addiction should be considered a disease or a crime, there are different views.

As the primary incompatible schemas is composed of patterns, memories, emotions and physical sensations, and on the other hand, mind-consciousness focusing on the present, target, without prejudice, and in particular focus on the thoughts and feelings at each moment, hence training of mind-consciousness can be effective on incompatible schemas of individual

In other side, the existence of incompatible schema in some addicts is one of the most important factors of recurrence. In cognitive approach; there is a conceptual schema to examine how we think, understand and process the information, and how was call. Schema is a general cognition about a specific topic which organizes and determines direction of perception. Schema, in psychotic as well as addicts can be incompatible and causes problems that this research has accomplished by identifying the prime incompatible schema in addicts, with the aim of examining

the effectiveness of group cognitive therapy based on mind-Consciousness on incompatible schema in addicts.

## 2- Research Statement

One of the discussed topics in psychology, what called the science of behavior study and mental processes [1]. Discussion is mental pathology. Mental pathology investigates the causes of mental disorders and important processes in the development of psychopathic [2]. In mental pathology, a variety of disorders is discussed and studied. One of the discussed topics in mental pathology is addiction and drug dependency [3].

Addiction is the obligatory requirements to the use of drugs, habit-forming, and an irresistible demand on behavior. Two important features of addiction include: suffer and rising need for more consumption in order to obtain the same effect and to prevent the unpleasant disuse symptoms [3]. Addiction is a kind of recurrent mental illness that in spite of all complications, an addict consumes it with no volition. Whether the addiction should be considered a disease or a crime, there are different views.

Drug-dependence is a habit, abuse and addiction to a chemical material. The life of drug-dependent person, mainly, because of the resulting psychological ante, rotates on a need to specific effect of one or more chemical drug on his character or State of consciousness. So the term includes not only drug addiction (which focus on physiological dependence) but also abuse (which desire for using drugs apparently is not relevant to physiological dependence) (American Psychiatric Association, 2000).

There are various treatments for drug addiction. There are a number of specialist treatments to two broad categories of mental-health treatment and pharmaceutical division. Medication in the treatment of drug addiction for renouncing their use prescribed medication that they sometimes undesired side effects and addictive. Because of ongoing safety and efficacy, usually non-drug therapies are used.

For the treatment of addiction can be used psychotherapy combined with drug therapy. Psychotherapy as a form of cognitive-behavioral therapy or insight therapy or other forms of professional efforts follows common goals and prevents the relapse of the addiction [4].

Addiction psychotherapy will be successful when authorities have integrated activities to help addicts, solve their problems and create a better life for them in the various fields, particular in social relations (in terms of professional) [4].

The duty of the therapist is to help the patient to decode the mark. Maybe it seems that the addict is surrounded with stimulus. For example, any show or mention of the drug in the television, radio, or magazines, it may be sufficient to stimulate him. The addict is actually a "schema-driven", it means that his reaction is made by the inner cognitive which are called the schemas. Containing a secret formula, or recognizing that Link to the semantic position. Thus, however, the schema that contains "drug use is necessary for my happiness" is priority when the person faces with a proper position.

The therapeutic application of this modifier model is giving the person's belief system more importance, not asking him to avoid high risk situations When encounters them. Because some situations (such as internal moods) are avoidable and other positions (such as encountering situations related to medication) may be unavoidable [5] the best results are changing the beliefs which made the positions high risk.

A hypothetical mechanism for change therapeutic is to coordinate the person's belief system more close with reality. Since, beliefs are incompatible (for example, I need to take medication to do my activity) either needs to improve or replaces with more compatible opinions (or both). Incompatible schemas are part of incompatible beliefs with the reality, that exists in some people who are dependent on the drug and these schemas are one of the factors in the consumption and relapse to drug use.

The primary incompatible schemas are divided to five areas that include cuts/rejection, autonomy/disrupted performance, disrupted restrictions directed and vigilant. The addicts whom their schema is in cut/rejection cannot have satisfactory and safe attachment with others. Such people believe that their need to stability, security, affection, love and belonging will not be fulfilled, especially four of the first schema, often have the most damage.

The addicts whom schema is distrust/misbehavior, believe that others, with the slightest opportunity, graft them and the addicts with emotional deprivation, do not expect to be satisfied their desire for emotional relations with others. The addicts with the defect schema feel that they are bad, flawed, and humble or unnecessarily people and if they face with others, undoubtedly, they will be rejected. This schema is usually with a sense of shame towards the perceived failings. The addicts with a social isolation schema feel they are different from others and are a patch in community [6].

However, the process of changing is more than simple revision of ideas. The therapist and the patient require to work together to improve the control system of the patient. Learning methods such as delaying gratification and confronting techniques as forecasting and stress reduction as well as awareness of the mind can be helpful procedures.

The economic damage caused by addiction includes the reduction of the productive force and rising consumers, costs imposed on police, court time and judicial resources, the cost of keeping drug offenders and the cost of drug treatment in hospitals and rearing centers that this is the only part of the damage caused by drug addiction.

Also, in terms of social-cultural, addiction causes the weakness of the adherence to moral and religious principles and leads to types of crimes, such as robbery, violence, prostitution, rape and murder, increased unemployment and false jobs and poverty. Addiction has symptoms such as weight loss and malnutrition, digestive disorders, liver and kidney disease, chronic respiratory disease, impotence, sleep disorders, cardiovascular disorders, and psychiatric disorders such as depression and anxiety problems. The addicts family are also not secured. Lacks of self-control in critical situations not only create a desire to use drugs but also drug addicts who have failed to leave, much to be seen. In this study, the effectiveness of group cognitive therapy based on mind-consciousness on relapse rate and incompatible schemas were investigated in drug-dependent individuals.

### **3- Research Methodology**

In this study, the quasi-experimental method with pre-test - post-test and control groups were used. In this design, subjects were randomly selected and assigned to two groups to be the same way. Before implementation the independent variables, selected subjects in both groups are measured by pre-test. In this study, the statistical community, including all persons dependent -drugs who referred to treatment centers in Yazd and these people have been methadone maintenance treatment for at least 6 months. After the researcher explained the statement about the kind of research of this community, 30 were randomly selected as sample and randomly assigned to an experimental group and a control group. Semi-structured clinical interview based on criteria that guide the diagnosis of psychiatric disorders based on the MA in Clinical Psychology offered the proposed diagnosis of drug dependence.

1 - Morphine urine test, which was performed monthly to evaluate recurrence rates of drug use.

2 - Schematic Yang Long Form which measures 15 early incompatible schema and the reliability and validity is approved by the Ahi in Iran, 1385.

This study was performed in a way that from the target community, a sample size of 30 subjects was selected, and these people were divided into two groups of experimental and control, then both groups completed the Young questionnaire titled as post-test, Then, the control group received 8 sessions of 2 hours training in the mind-Consciousness training, again, both groups

completed the post-test Young questionnaire titled post-test to examine the effect of group cognitive therapy mind – Consciousness on drug use relapse and incompatible schemas in drug-dependent individuals.

#### 4- Research Assumptions

- 1- Group cognitive therapy, based on mind- Consciousness is effective in reducing drug use relapse in addicts.
- 2- Group cognitive therapy, based on mind- Consciousness is effective on incompatible schemas in drug-dependent individuals with a cuts/rejection field.
- 3- Group cognitive therapy, based on mind- Consciousness is effective on incompatible schemas in drug-dependent individuals with a autonomy/disrupted performance field.
- 4- Group cognitive therapy, based on mind- Consciousness is effective on incompatible schemas in drug-dependent individuals with a disrupted restrictions field.
- 5- Group cognitive therapy, based on mind- Consciousness is effective on incompatible schemas in drug-dependent individuals with a directed field.
- 6- Group cognitive therapy ,based on mind- Consciousness is effective on incompatible schemas and inhibition in drug-dependent individuals with an extra vigilant field

#### 5- Research findings

##### *The first hypothesis*

*Group cognitive therapy, based on mind- Consciousness is effective in reducing drug use relapse in drug-dependent individuals.*

To examine the effect of training on reducing drug use relapse, the test of white straw was used so that the first pre- test was compared in both groups and the result showed that the drug use relapse was equal in both groups .Then the result of post- test was studied and difference in drug use relapse was found. This is one of the non-parametric tests to compare between the two independent groups and for quality and non-normal data.

*Table 1-comparison of the drug use relapse in pre-test in control and experimental group*

Variables	Groups	Average rating	Number	Z	U	Meaningful test
Drug use relapse	Control group	15	15	-0.37	105	<b>0.77</b>
	Group test	15	15			

According to Mann – Whitney U Test significant table was equal to.77 (greater than  $\alpha=0.05$ ). So there was no significant difference in the rate of drug use relapse between two groups.

*Table 2-comparison of the drug use relapse in post-test in control and experimental group*

Variables	Groups	Number	Average rating	Z	U	Meaningful test
Drug relapse	Control group	15	19	-2.60	60	<b>0.02</b>
	Group test	15	12			

According to Mann – Whitney U Test significant table was equal to .02 (smaller than  $\alpha=0.05$ ). So there was significant difference in the rate of drug use relapse between the control and experimental group in post-test and by comparison with the average of ranks, relapse rate in control group was equal to 19th and this was more than the average of experimental group which was equal to 12.

**Table 3-scores of incompatible schema following cut/rejection in two groups**

Groups	Status		
	Statistical indicators	Pre test	Post test
Control group	Average	164.93	164.13
	standard error of the mean	9.26	9.124
	SD	35.88	35.33
	variance	1287.35	1248.99
Experimental Group	Average	162.00	100.87
	standard error of the mean	10.37	3.33
	SD	40.14	12.91
	variance	1615.55	166.96
Collection	Average	163.47	132.50
	standard error of the mean	6.48	7.56
	SD	37.46	41.45
	variance	1403.63	1718.46

As the data in table 3 showed the average of pre-test in control group was 164.93 and in experimental group is 162.00. The Average of post-test in control group was 164.13 and in experimental group was 100.87.

**Second hypothesis**

*Group cognitive therapy, based on mind- Consciousness is effective on incompatible schemas in drug-dependent individuals with a cut/rejection field.*

**Table 4- Covariance analysis for comparing the averages of the incompatible schema following cut/rejection in post-test in control group and experimental group**

Source changes	Sum of squares	Degrees of freedom	AVG square	F	Chi ETA	Statistical indices	Significant
Before test	12663.60	1	12663.60	48.80	0.639	1	<b>0.001</b>
Between a group	28441.07	1	28441.07	107.37	0.799	1	<b>0.001</b>
Error	7151.86	27	264.88	-	-	-	-
Total	576523.00	30			-	-	-

According to table 4- the significant test for the incompatible schema in cuts/rejection field and changes between groups was equal to p ( $\alpha = 0.01$ ). So the difference between the control group and experimental group at the level of one percent was significant t and the second hypothesis was accepted.

**Third hypothesis**

*Group cognitive therapy, based on mind- Consciousness is effective on incompatible schemas in drug-dependent individuals with autonomy/disrupted performance field.*

*Table 5-analysis of variance for comparing the average of the incompatible schema following the autonomy/disrupted performance in post- test in control and experimental group*

<b>The incompatible schema scores in post-test following autonomy/disrupted performance</b>	<b>Sum of squares</b>	<b>Degrees of freedom</b>	<b>AVG square</b>	<b>F</b>	<b>Chi ETA</b>	<b>Statistical indices</b>	<b>Significant</b>
Post-test	4289.67	1	4289.67	49.34	0.646	1	<b>0.001</b>
Between a group	8775.20	1	8775.20	100.95	0.789	1	<b>0.001</b>
Error	2346.99	27	86.92	-	-	-	-
Total	243709.00	30			-	-	-

According to table-5 significant test for incompatible schemas following autonomy/performance and the changes between groups is equal to.001 ( fewer than  $\alpha = 0.01$ ). So the difference between the control group and the experimental group at the level of one percent was significant and the third hypothesis was accepted.

#### **Fourth hypothesis**

*Group cognitive therapy, based on mind- Consciousness is effective on incompatible schemas in drug-dependent individuals with a disrupted restrictions field.*

*Table 6-analysis of variance for comparing the average of the incompatible schema following the disrupted restrictions in post- test in control and experimental group*

<b>Source changes</b>	<b>Sum of squares</b>	<b>Degrees of freedom</b>	<b>AVG square</b>	<b>F</b>	<b>Chi ETA</b>	<b>Statistical indices</b>	<b>Significant</b>
Post-test	2740.98	1	2740.98	97.79	0.784	1	<b>0.001</b>
Between a group	4587.99	1	4587.99	163.69	0.858	1	<b>0.001</b>
Error	756.74	27	28.02	-	-	-	-
Total	86881.00	30			-	-	-

According to table- 6- significant test for the incompatible schema following the disrupted restrictions in post- test in control and experimental group was equal To .0001 (fewer than  $\alpha = 0.01$ ). So the difference between the control group and experimental group at the level of one percent is significant and the forth hypothesis was accepted.

#### **Fifth hypothesis**

*Group cognitive therapy, based on mind- Consciousness is effective on incompatible schemas in drug-dependent individuals with a directed field.*

*Table 7-analysis of variance for comparing the average of the incompatible schema following the directed field in post- test in control and experimental group*

<b>Source changes</b>	<b>Sum of squares</b>	<b>Degrees of freedom</b>	<b>AVG square</b>	<b>F</b>	<b>Chi ETA</b>	<b>Statistical indices</b>	<b>Significant</b>
Post-test	2095.49	1	2095.49	56.50	0.677	1	<b>0.001</b>
Between a group	7035.76	1	7035.76	189.71	0.875	1	<b>0.001</b>
Error	1001.31	27	37.08	-	-	-	-
Total	119387.00	30			-	-	-

According to table 7- a significant test the incompatible schema following the directed field in post- test in control and experimental group was equal to .001 (fewer than  $\alpha = 0.01$ ). So the difference between the control group and experimental group at the level of one percent is significant, and the fifth hypothesis was accepted.

### **Sixth hypothesis**

*Group cognitive therapy, based on mind- Consciousness is effective on incompatible schemas following extra vigilant and inhibition field in drug-dependent individuals.*

*Table 8--analysis of variance for comparing the average of the incompatible schema following the extra vigilant and inhibition field in post- test in control and experimental group*

Source changes	Sum of squares	Degrees of freedom	AVG square	F	Chi ETA	Statistical indices	Significant
Post-test	349275.49	1	3492.75	53.80	0.666	1	<b>0.001</b>
Between a group	9955.95	1	9955.95	153.38	0.850	1	<b>0.001</b>
Error	1752.58	27	64.91	-	-	-	
Total	125351.00	30			-	-	-

According to table 8-the significant test for the comparing the average of the incompatible schema following the extra vigilant and inhibition field in post- test in control and experimental was equal to .001p (fewer than  $\alpha = 0.01$ ). So the difference between the control group and experimental group at the level of one percent is significant, and the sixth hypothesis was accepted.

## **6- Discussion and Conclusions**

This study aims to evaluate the effectiveness of group cognitive therapy, based on mind-Consciousness on incompatible schemas and drug use relapse in drug-dependent people. The findings of the research showed that training this model in prevention of the return of the people to opiate dough as been effective. In other word the rate of relapse in people who received this training decreased in comparison with the control group.

In explaining these findings, it can be said that the purpose of the prevention of relapse, based on the mind- Consciousness is development of knowledge and acceptance of ideas, emotions and attentions through exercising the mind awareness, compared to methadone treatment, only increases the effectiveness and prevent drug return effective. In this study, the cognitive therapy, based on mind- Consciousness has managed to effectively shape the efficacy of treatment for dependence on opiates to increase and improve the mental health status of patients.

This research showed that psychological intervention can be part of the treatment, as well as the mind- Consciousness as one of the main methods of acceptance-based approaches makes the patient rather than challenge and abstain from disturbing thoughts and feelings caused by cracks or application materials to relieve them, with the establishment of a different communication style without response and with a new information processing, accepts uncomfortable thoughts and feelings without judging and evaluating and in this way they cope them with desensitization.

As the primary incompatible schemas is composed of patterns, memories, emotions and physical sensations, and on the other hand, mind-consciousness focusing on the present, target, without prejudice, and in particular focus on the thoughts and feelings at each moment, hence training of mind-consciousness can be effective on incompatible schemas of individual. In this study, the schema of domain cuts /rejection domain had the most rates and mind- consciousness had also the most effect on this schema. The schema of disturbed domain had the least rate and training of this method had also the least effect on this schema.

## 7- References

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