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The Effect of Subjective Simulation Therapy on Self-awareness and Achievement Motivation in Stuttering People

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Abstract: *The purpose of the present study was to investigate the effect of the method of treatment based on the simulation of mind on self-awareness and progressive motivation in stuttering people. The present study is semi-experimental and will be used by pre-test and post-test design and the test and control group. This design is similar to quasi-experimental and case studies including in-depth study of subjects in different situations as the current study aims to test the model of mental simulation model of Dr. Taghizadeh on the self-awareness and achievement motivation in stuttering people. The statistical population of this study was People with tongue tie from 20 to 35 years old referred to the Tavanmandsazan Clinic in the winter of 2018. In order to collect data, Hermen's achievement motivation and self-awareness questionnaires were used. In order to the effectiveness of training courses, multivariate analysis of covariance was used. For descriptive part, frequency and percentage of frequency, mean and standard deviation were used. Data were analyzed using SPSS-21 software. Based on the results, the method of therapy based on the simulation of mind on self-awareness is significant in stuttering people. Also, the therapeutic method based on the simulation of mind on progressive motivation in stuttering people is significant (Sig <0.05).*

Keywords: *Simulation of mind, Self-awareness, Achievement Motivation, Stuttering people*

INTRODUCTION

One of the most common and most comprehensive ways of communicating in humans is through speech. Speech both in the learning stages and in the stages of implementation has many complications and is therefore subject to many disorders (Emond et al., 2014). Stutter refers to a specific speech disorder in which the flow of speech involves subconsciously with compulsory obstruction. The mouth or larynx is disrupted by repeating or prolonging the sounds of the syllables or by pause or delaying in the creation of vowels. Stutter is a speech-related disorder characterized by frequent repetitions and long sounds and syllables that significantly disturb the health of the word (Kaplan and Sadukh, quoted from Pour Afkari, 2013). Stutter is a communication disorder that stops the speech flow. These pauses can be seen in the form of repetitive sounds, single-syllable words, drawn sounds, locks and tongues in speech or speech spoken flow. Over time, a person experiences various emotions such as disappointment, frustration and fear that these feelings, along with early symptoms, reduce the social participation of the individual in various social situations. Stutter experts said that stutter is not only the spoken interruptions (Perry, 2014). People with stutter have different

attitudes and negative experiences of speech and predict the occurrence of stutter, as well as having a relatively turbulent mood and stereotypical behaviors, being unsafe introverts, stress and tensions and relatively negative feelings. These factors are indirectly associated with speech disorders. Stuttering people experience abnormalities in their speeches which result in emotional, cognitive, and inappropriate behavior caused by such disorders.

Problem statement

Many current therapies for teens and adults stuttering, focus on learning how to minimize stuttering when they speak, such as speaking slower, adjusting breathing, or gradually improving the response progression from single syllable in to other words, and more complex sentences; many therapies also help stuttering anxiety in certain situations (Taqizadeh, 2016).

Signs of stuttering can be significantly different throughout a person's day. In general, speaking between people or talking to a phone may strangle one person's stuttering, while singing, reading or speaking may temporarily reduce stuttering. Stuttering is sometimes spoken of as maunder and in the broader language of non- fluency speech ; this indicates that stuttering, except in cases of physical, physiological and neurological violations, is a matter related to the functioning of the mind and the psyche (Taqizadeh, 2016).

Stuttering is a completely mental and psychological problem if the body is not damaged, such as an accident, a physical illness and damage to speech organs. Stuttering does not have a genetic or heritable root, but also an environmental and mental. Stutter is treatable, and if people have intelligence, belief, and hearing, then they will be treated and will not return. Because severity is linked to emotions such as embarrassment, frustration and fear of negative social assessment, and the anxiety of stutterers are higher among ordinary people in social situations.

Since severity is linked to emotions such as embarrassment, frustration and fear of negative social assessment, the anxiety of stutterers is higher among ordinary people in social situations.

Stutter is not a physical and mechanical problem, it is related to the functioning of mind and psyche, and this approach is quite the opposite of what is being said today by speech therapists and neurologists and psychiatrists (Taqizadeh 2015).

Mental simulation is another treatment that has been used by Taghizadeh to treat stuttering in Iran. Mental simulation is the imitation representation of a set of events (Taylor and Schneider 1998; quoted by Shir khodaie, 2017). This representation may include past events. Also, mental simulation may be related to construction, hypothetical stories with various imaginations or a mixture of hypothetical and real events (Taylor and Schneider, 1998; according to shir Khoda'ie, 2017).

The knowledge of the simulation of mind is a combination of various sciences, including social sciences, philosophy of mind's computer and psychology. In digital and smart systems such as mobile devices, tablets, laptops and computers, there are three main factors in these systems: Electricity, hardware and software. Man consists of three basic structures: the soul, the body and the mind. The soul is like an electrical current in a system that generates the main energy for life and activity. Our body and brain are hardware that receive commands from the software and carries out our vital behaviors and activities, and our mind is the software that transmits our demands to the hardware, and the dominant things of the mind starts. The mind that built software is the interface between the soul and the body and sends human orders to the brain in the form of electromagnetic waves; the gray cells of the brain translate these waves and transform into the date bits or the same neural messages, and these messages are transmitted to the related organs and create our behaviors and movements. The mind of the human interface and its body is like software and user is hardware. Just as in smart systems and computers, the software sector is managed by the operating system, such as Windows, Android, Linux, and Macintosh and so on. The human mind, which is completely software-driven, is managed by the operating system called the operating system of the mind, and this operating system manages software that is the main source of all human behaviors. If we can change our software, we can transform our entire lives. To conduct change in the software, one needs to be familiar with the operating

system language and software. With the help of the language of mind, you can recognize the mind and have access to the software of the mind. The language of mind is the natural language of communication between mind and brain. This language can be linked to mind and brain. We defined the data for the study of behaviors and, after case studies, we found a language common to the human brain and mind. A language which was similar to C # on a computer. By this language, one can analyze the behavior and compile the program of mind into a line, and observe the steps performed in the mind and reach some unknown minds. Mental simulation makes the events look real (Hert and Termman, 1985; quoted from the Shir khodaie). One of the major causes of the realization of events following the simulation of the mind is that the simulation is consistent with reality and therefore will be effective in predicting the future (Taqizadeh, 2017). Knowledge of mental simulation is the knowledge for accessing the invisible information of the human mind. Simulation of the mind means the simulation of the invisible information of the mind and its transformation into physical and material information and observation by modern knowledge, through which one can access mind information and quickly make any changes in that (Taqizadeh, 2017). The concept of self-perception involves one's knowledge of personal characteristics and abilities, as well as thought of it. Its perception consists of the self-thematic and the subject itself and the thinker. It is a theory that justifies itself and predicts the future and is valued in terms of its credibility and usefulness. Self-structure consists of organizing the elements and the organization is dynamic and also, varies by time. The self-system is an accessible concept that individuals use to describe themselves. A concept of self that is being continuously redeveloped. Self is an information processor with the ability to interpolate and output data. Self is a psychological structure that through a person's experiences, is shaped, attributed, organized, and continued (Austrlo, quoted).

Self as the central core of the personality, is an organized form or form of perception of self that can be a matter of consciousness; then it consists of elements such as individual perceptions of its characteristics and talents, perceptions and inferences of which one derives in relation to others and the environment value qualities that are perceived by experiences and objects, and ideals that have positive and negative aspects and are understood in the same way (Roatson, 1986; quoted by Mohammad Zadeh H, 1981).

Hornay (1950), in self division of needs, suggests the need for success, which is the basis of the Achievement Motivation, and leads to a person based on which, has a healthy personality.

Taghizzadeh, Yarallahi and Bahrami (2017) showed that treatment based on the simulation model of the mind was effective on stress reduction ($P < 0.01$) and cognitive flexibility ($P < 0.05$) in stuttering subjects. Using the simulation model of the mind can effectively treat stuttering and its associated problems in adults through the empowerment of the minds of the individual.

Devis and et al (2007) reported that the anxiety level of stuttering children and adolescents is higher in comparison with those who have improved their stuttering and children and adolescents without stuttering. Blood et al. (2007) suggested that stuttering children have higher levels of anxiety than normal people.

Salehzadeh Kloor (2014), in his dissertation entitled The Effect of Process, Commodities and Component Simulation of mind on Students' Academic Performance and Memory Improvement, showed that the implementation of subjective Simulation of mind of combinations and materials for improving academic performance and memory enhancement of students has a significant positive effect. The mental process simulation did not have a significant effect on academic performance or learning memory. The method of mental simulation of products has the greatest impact on academic performance and the combination of process simulation and products have the greatest impact on the memory of students.

According to the above, stuttering is an extremely complex psycho-motor phenomenon that manifests itself in the natural course of speech and is characterized by confusion during verbal expression (repetitions, pausing and involuntary drawing). When such an occurrence occurs during the speech, the individual reacts to be able to escape from the word in question and sometimes displays behaviors to prevent the occurrence of such an event. After a while, one experiences various emotions such as failure, frustration, fatigue and fear. These

feelings are added to the initial symptoms and cause the individual's social participation in situations to decline (Guitar and McQuelli, 2010).

The prevalence of stuttering is estimated to be around 1% in the population. In another estimation, the stuttering rate is 3% and among the twins (in particular the identical twins) is much higher and about 5%. Other sources also report that about 5 percent of all stuttering children will have this disorder until their adulthood (Mehralian and, Shafie 2003). Also, about 70 to 80 percent of these cases recover without certain formal treatments, and 20 percent of them become stutterers (Mehralian and Shafie, 2003). Stuttering in boys is more than girls, and this is compared to 3 or 4 years old boy versus one girl. Usually, in families with one or more stuttering members, it is more likely to occur again. People stuttering may start talking later. This phenomenon appears in the age range of 3 to 9 years. Starting to speak after 10 years of age is rare, except for the brain damage that has happened after a natural course of speech (Naimi, 1998; quoted from Amiri, 2009).

Research has shown that stuttering children have a lot of distraction (Anderson et al., 2003, Amberkets, Ibn, Van Douk, 2000). Similarly, stutter children had little ability to focus on something. Stuttering studies related to the adults show that stutterers have little ability to focus and pay attention when dealing with responsibility at the same time (2006, Bosschardt, Ballmer and Daniel, 2002). According to the mentioned articles, the aim of this study is to answer the question that how effective is treatment based on mental simulation in the self-awareness and achievement motivation in people with stuttering?

Research Method

The present study is a type of experimental study and has used pretest-posttest design and the experimental and control group. This design is similar to quasi-experimental and case studies including in-depth studies of subjects under different circumstances. After identifying stuttering samples, subjects' behavior was evaluated for a month and each one twice before the intervention, and base line is determined. After measuring the subject's behavior with a pre-test, two sessions of the protocol will be provided to the subject and the subjects will be trained and followed up on these successive sessions; then the subjects will be re-evaluated immediately and along with after a month, the control group will be re-evaluated for effectiveness in order to determine the impact of the treatment protocol among the group being trained and the group that has not been trained.

The statistical population of this study was stuttering people referred to the “Tavanmandsazan Clinic" in the winter of 2017. A sample size of 15 people was selected for each of the experimental and control groups. The sampling method is "simple random sampling" method. In this way, about 30 stutterers who referred to the “Tavanmandsazan Clinic" were randomly selected and assigned in two groups: control and experiment.

In order to collect the data, Hermann's achievement motivation questionnaire and self-awareness questionnaire of Newostrum and Davis model were used.

Hermann's Achievement Motivation Questionnaire is one of the most common pencil and paper questionnaires to evaluate the need for progress. Hermanns (1977) built this questionnaire on the basis of theoretical and empirical knowledge and reviewing the background about the need for progress.

The first questionnaire had 29 items, based on the ten characteristics that distinguished high- progressive motivation individuals from those with low achievement motivation individuals as follows. Hermanns selected 9 features of the low- achievement motivation individuals derived from previous research as the basis for selecting questions for the selection of questionnaires, rather than the characteristics of those with a high degree of motivation. Hermann (1970) used the validity of content validity, which formed the basis of previous research on the achievement motivation, and he also calculated the correlation coefficient of each question with progressive behaviors. The coefficients of the questionnaire, respectively, range from 0.30 to 0.57. In addition, in a study by Hermann, there is a correlation coefficient between this questionnaire and the subject matter test (TAT). In 1970, Hermann used Cronbach's alpha test to calculate the reliability of the test for

academic achievement motivation. The calculated reliability coefficient for the questionnaire was 0.84. Using the test re-test method, the main questionnaire was returned to the trainees after three weeks. The obtained reliability coefficient was 0.84. In the present study, the validity of the test was confirmed by the supervisors and consultants and its reliability in this study was obtained by using Cronbach's alpha method of 90.90 which is acceptable and shows that the questions are significantly correlated with the test, internally.

Self-awareness questionnaire for the New Westminster and Davis model; this questionnaire contains (11) items. Due to the appropriate theoretical foundation of the questionnaire, the confirmation of experts with subject specialty has the required content validity. To evaluate the effectiveness of mental-based simulation therapy on the self-awareness and achievement motivation of people with stuttering in the test group, with the control of the effect of pre-test, multivariate analysis of covariance (Mancova) was used. For descriptive part, frequency and percentage of frequency, average and standard deviation were used. Data were analyzed using SPSS-21 software.

Findings

The most frequent in the control group is the age group of 20 to 30 years, and in the experimental group, 20-25 years and 25-30 years old, they are of the same proportions.

Table 1: Frequency and percentage of age variables in both experimental and control groups

Groups	Age	Frequency	percentage of frequency
Control	20-25 years	6	40
	25-30 years	5	33.4
	25-30 years	4	26.6
	Total	15	100
experiment	20-25 years	6	40
	25-30 years	6	40
	25-30 years	3	20
	Total	15	100

Table 2: Frequency of distribution of education variables in both experimental and control groups

Groups	Education	Frequency	percentage of frequency
Control	Diploma	7	46.7
	Associate's Degree	5	33.3
	Bachelor	3	10
	Total	15	100
experiment	Diploma	7	46.8
	Associate's Degree	4	26.6
	Bachelor	4	26.6
	Total	30	100

Table 3: Mean of self-awareness and achievement motivation in pre-test, post-test and follow-up

Variable	stage	Frequency Control- experiment	standard deviation Control- experiment
Self-esteem and welcome feedback from others	pre-test	20.40-22.30	6.23-3.74
	post-test	23.53-30.09	5.05-3.37
	follow-up	- -29.35	- -41.5
Awareness of their values, cognitive style, tendency to	pre-test	23.80-25.40	2.15-6.61
	post-test	22.60-34.97	6.42-4.45

change and tendency to personal interactions	follow-up	- -35.574	- - 5.16
Achievement Motivation	pre-test post-test follow-up	55.10-53.80 55.10-53.80 54.21-68.60	6.01-6.84 6.01-6.48 6.06-7.16

Table 3 shows the frequency, mean, and standard deviation of self-awareness variables and its achievement motivation in both the control and experimental groups in both pre-test and post-test. As can be seen, the test group's grades in the post-test have increased with respect to the pre-test, and the stability of the results is observed in follow-up.

By pre-test control, the significant levels of all tests indicate that there is a significant difference between the experimental and control groups in relation to one of the dependent variables (F = 520 and F = -0.001), and the results of Table 4 showed a significant difference between the experimental group and the control group in terms of self-awareness; in other words, at (P <0.001), the statistical power was 0.17, indicating that 17% of changes in this variable has been resulted from treatment based on the simulation of the mind; therefore, according to other results obtained from the first hypothesis, the results showed that the therapeutic method simulation of mind improves self-awareness in people with stuttering.

Table 4: Results of one-way covariance analysis in Mancoa text on average self-awareness scores

Variables	sum of squares	Degrees of freedom	sum of squares	F	significant	Impact rate	Statistical power
Self-esteem and welcome…	3015.22	1	3015.22	79.02	0.001	0.17	1
Self-esteem and welcome…	402.58	1	402.58	139.87	0.001	0.16	1

Table 5: Results of covariance of self-awareness scores in the follow-up stage

Variables	sum of squares	Degrees of freedom	sum of squares	F	significant	Impact rate	Statistical power
Self-esteem and welcome…	3542.14	1	3542.14	138.02	0.002	0.14	1
Self-esteem and welcome…	1236.18	1	1236.18	96.87	0.001	0.13	1

Table 5 shows the results of covariance analysis for comparing the self-awareness scores of the control and experimental groups in the follow-up stage. Considering the significance of the value of F, which is equal to 138.02 and 87/96, the assumption is zero and the assumption of the research is confirmed. Accordingly, it can be concluded that the method of therapy based on the simulation of the mind on self- awareness in stutterers is significant.

In the following of the results related to the variable of achievement motivation, the result of Table 6 shows that the difference between the education and control group in the variable of achievement motivation is significant (Sig <0.05).

Table 6: Estimation of average of achievement motivation in the groups

95% confidence interval upper limit- Bottom limit	Standard deviation	Average	Group
64.341-56.512	6.01	68.60	Therapy based on the simulation of the mind
63.488-50.659	6.34	54.21	Control

Table7. Comparison of bilateral average of achievement motivation in groups

Dependent variable post-test compatibility 95% confidence interval upper limit- Bottom limit		Sig	Standard deviation	Average difference (I-J)	Group (J)	Group (I)
2.652	1.470	0.11	1.504	3.561*	control	simulation of the mind
-1.470	-2.652	0.11	1.504	-3.561*	simulation of the mind	control

Therefore, based on the results obtained, it can be concluded that the method of therapy based on the simulation of the mind improves the achievement motivation in people with stuttering.

Table 8. Results of covariance analysis of achievement motivation scores in the follow up stage

Source of change	Sum of squares	Degrees of freedom	Sum of squares	F value	Significance level	Effect size
pre-test	86.37	1	86.37	486.2	139.0	49.0
Group	197.252	1	197.257	56.16	01.0	
Error	91.258	17	23.15			

In Table 8, the results of the covariance analysis test are shown to compare the achievement motivation of the control and experimental groups in the follow-up stage. Considering the significance, the value of F is 16.66, the zero hypothesis is rejected and the hypothesis of the research is confirmed. Based on this, it can be concluded that the therapeutic method based on the simulation of the mind on the achievement motivation in people with stuttering is significant.

Conclusion

The results showed that the method of treatment based on simulation of mind on self-awareness and achievement motivation in stutterers is significant; So far, there has been few studies on the effectiveness of mental simulation on the characteristics of individuals, but limited studies such as Tagighzadeh et al. (2017) and Clour (2014) have investigated the efficacy of this therapeutic approach, which is in line with the results of the current study. Taghizadeh, Yarollahi and Bahrami (2017) showed that treatment based on the simulation model of the mind has been effective in reducing stress and increasing the cognitive flexibility of people with stuttering. Salehzadeh-Clour (2014) also stated that the implementation of mental simulation methods of products and the combination has a significant positive effect on improving academic performance and memory of students.

Luke et al. (2008) showed that the activation of right hemisphere regions in speech-related areas during the simulation process improves in comparison with the usual speaking function in the stutter group. In these circumstances, the conversation among stutterers went on without any problem.

Learning based on simulation is defined as the reproduction of some facets of reality, for better understanding, manipulation, or prediction of real behavior. In fact, simulation is a method of engaging with an artificial or subsidiary experience that creates conditions which reflect the incidence in real-life activity without dangerous consequences (Davis and Grant, 2007). In another definition, it is simulated to imitate or simulate a real system, so that we can search for it, experiment with it, and before the implementation, realize it in the real world. Simulation-based learning has the potential to engage in behaviors in real-life arenas. In this way, the environment can be retrieved, while allowing for the assessment of skills such as communication and professionalism that is difficult to evaluate with other methods. In this way, with a false idol, the effects of using a simulator in a real situation can be restored to certain conditions. In simulation,

real-world elements are streamlined and applicable to the classroom and training environment. In other words, it tries to approach the elements so close to the actual situation and to be similar in that the learned concepts and created solutions can be transmitted to the real world (Joyce et al., 2010).

One of the goals of simulating the mind can be to overcome the fear and anxiety of stutterers. Davis and et al (2007) reported that the anxiety level of stuttering children and adolescents is higher in comparison with those who have improved their stuttering and stuttering children and adolescents. Blood et al. (2007) suggest that stuttering children have higher levels of anxiety than normal people. They also found that there was a positive relationship between the confidence of these children and their level of anxiety. They also found that there was a positive relationship between the confidence of these children and their level of anxiety. Stuttering children are more at the risk of experiencing aggressive behaviors than without stuttering children.

In a study conducted by Hough (2010) on a modified version of MIT without a knock-on effect on a 69-year-old man who suffered from aphasia chronic bronchospasm for 4 years, the results showed that the subject previously had experienced MIT with little success. He had a problem with the element of knocking and opposite packaged modifications with fixed function affected his motivation. A collection of automatic and self-generated terms was created and the two sets of movables were performed in two consecutive sessions through a multi-base line design (which was designed according to the type of term and had a constant criterion with a precision of 75%). All the package of stimuli was performed in two consecutive sessions. Stimulus generalization was presented at the last weekly meeting. The subject was present at weekly meetings 3 hours for 8 weeks. Follow up two weeks after treatment with all stimuli. A set of standardized tests and social validation tests were performed before and after the treatment. During the four-week course, in the treatment program, 75 percent precision was achieved in the automated term which was maintained through a maintenance phase and two sessions.

Meredith, G. & Achterbosch, L (2015) state that the use of the virtual world and video games for the treatment of communication disorders offers new ways. In their research, they used a video-based simulation platform Scenari Aid in accordance with stuttering criteria. The purpose of this study was to understand how much stuttering people who use Scenari Aid can control their anxiety. In total, 37 replies were collected and analyzed using descriptive statistics. The results of this study were very encouraging in terms of the perceived effects of a simple simulation system and, in general, the majority of people with stuttering can offer. The encouraging results from respondents' understanding of talent and satisfaction showed that they could improve their level of satisfaction and self-esteem using this simple system, and this system would reduce their anxiety.

In explaining these findings, stuttering is a relatively common speech disorder that is widely observed in the community and accounts for about one percent of the population. This disorder occurs when, in the natural course of speech, abnormal and sudden abnormal endings are caused by repetition, stretching, and the insertion of sounds and words, and the occlusion of the mouth, and sometimes accompanied by related behaviors.

Speech is a complex process with steps that, like all behaviors, have a clear algorithm. Speech function which is taken place based on external stimulus algorithm and internal stimuli, cognitive system and mind, processing and interpreting information, sending to neural and brain systems, sending speech signals to speech organs, audio production and treatment, ending one stage, or starting the spelling of the spoken word. The coordination of different parts of the body for speech is needed and this coordination is done by the mind. The mind is developing with the understanding of new vocabulary, and this evolution in the brain is associated with neural growth and development; the creation of new synapses and the production of new neurons in the brain, and ultimately these developments can lead to changes in genes. For several years, synapse connections were thought to be relatively constant in the adult mammalian brain, and changes in the aging brain are mainly due to the death and cellular degradation. The study of "neurotic exercise or brain

exercise" is a term used to describe the ability of the brain to reorganize or modify its relationships through experience (Taqizadeh, 2015). The findings of the empirical studies indicated that many types of brain rest function (such as the ability to transform dendrites the creation of new synaptic bonds) due to the experience of enriched environments are maintained throughout the adulthood (Colb, Gibb and Robinson, 2003; quoted from Taghizadeh, 2015). The main motor function for some stutterers is delayed or somewhat abnormal. Observation of speech planning problems in some people with stuttering indicated that in stuttering, a higher level of cognitive skills can be found. Although stuttering children are not commonly associated with other language and speech disorders, it seems that the history of a wide range of speech and tongue disorders in stuttering families appears to be higher than the average of the community. Stuttering is probably caused by a set of genetic and environmental variables that interact with each other (Kaplan & Saduk et al., 2017).

In the treatment of mental simulation by stimulating of the mind, it is possible to identify the nature and mechanism of the mind correctly and appropriate. Stuttering is a disorder in the rhythm and mechanism of mental speech, as well as a disorder in the coordination of the mind, and by simulating the mind and planning the language of the mind, designing and conducting an educational program to find a way to treat stuttering is possible; therefore, the mental simulation of a modern therapeutic program for stuttering can be considered. Knowledge is the simulation of the mind of knowledge to access human mind information. Mental simulation means simulating the information of the mind and converting it into physical and material information and observing it. With this new knowledge, you can have access to the mind information and make the most of the changes in mind quickly. Few have access to the information of the mind and the real nature of the mind and has entered this immaterial domain. Therefore, all efforts and courses to treat mind and mental problems, stuttering, increased intelligence, memory and creativity, achievement in academic achievement, more wealth and sales, the law of attraction, the achievement of high confidence and so on failed to fully affect and it will bring the audience to its demands and has more motivational and encouraging aspect. In mental simulation, it is attempting to recognize the language of the mind and to some extent, enter the unknown world of mind. Based on the simulation model of the mind, the mind must begin to control and make changes in the brain and body, where it constructs commands and directs to the brain, and the brain generates movements and behaviors by transmitting the neural signals to the organs. To make changes in mind, we need to use the programming language of the mind, and it is possible to make the desired changes, like the computer, with the coding and writing of a program. The programming language of mind has many similarities to the object-oriented language in the computer. Discovering the programming language of mind can help us design and build different mental programs. In normal mode, one needs to practice so much, or better, to create a mental plan to achieve the original program, and since these happen in the automated part of the mind, the person does not have the full access to the program and cannot understand it comprehensively, so it is very difficult to find and fix the defects of his program and this is usually impossible.

Dr. Boom believes that stuttering people, both children and adults, are usually introverted, lacking in self-esteem and suffer from the feeling of incompetency (Amiri, 2009). The term stress or tension from the Latin word strikger means hugging, squeezing, or re-compressing. Compression or under pressure leads to strangulation and creates a feeling of helplessness and anxiety that involves heart and soul .

The common language is the mind of humans, through which one can directly connect with the mind. This language is similar to the programming language on the computer. By using the language of the mind, one can reach the information and thoughts of the individual and observe the function of the mind and write to the mind of the program. This language is made by human mind instructions and its code format is visual and audio. The programming language of mind is the interface between mind and brain and can transmit orders and commands to the brain and understand how it works and how the brain works. The human mind has a software nature which has a structured language. One way to change and communicate with the mind is through the same language. (Taqizadeh, 2015). What Chomsky uses as a natural language learning system in a metaphor and does not specify a specific area in the brain in which concepts are deployed, is innate

learning system formed in the mind, not in the brain or the nervous system.(Taghizadeh, 2017). Speech is a complex process with steps that, like all behaviors, have a clear algorithm. Speech function is based on external stimulus algorithm and internal stimuli, cognitive system and mind, processing and interpretation of information, sending to nervous and brain systems, sending speech signals to speech organs, sound production and treatment, end of a stage or the beginning of quotation spoken words. The coordination of different parts of the body for speech is needed and this coordination is done by the mind. The mind is evolving with the understanding of new vocabulary, and this evolution in the brain is associated with neuronal growth and development, and new synapses and the production of new neurons in the brain develop; and ultimately, these improvements can lead to changes in genes. For several years, synapse connections were thought to be relatively stable in the adult mammalian brain, and changes in the aging brain are mainly due to death and cellular degradation. The study of "neurotic exercise or brain exercise" is a term used to describe a brain's ability to reorganize or modify its relationships through experience (Taqizadeh, 2017). The findings from empirical research suggest that many types of brain exercise, such as the ability to transform dendrites and form new synaptic bonds, are protected by the experience of enriched environments throughout the adult age. Neuropsychology, the birth and growth of new neurons, occurs in parts of the brains of many animals and humans until adulthood. Particularly, parts of the hippocampal gyrus jagged (which are involved in learning and memory) and parts of the pre-brain structure attached to the olfactory bulb (the sensory mechanism of the brain for odor) are produced by cells that are characterized by the tuberculosis. These cells can be decomposed into neurons, glands, or even capillaries, that is, at least one part of the brain that is vital for learning, the hippocampus, can produce neurons and support cells - possibly in all lifetime of the organism (ibid). According to the model of the simulation model of the stuttering of the language, the program and the false mental instructions of the individual cause changes in the function of the brain, and the individual, instead of using the larynx and its correct control, induce force into other parts (such as throat muscles, facial muscles, lips, Jaw, etc.). Now, it has to be done to remove forces and control from other parts and only focus on the larynx (Bahrami 2017). Simulation of mind by stimulating the mind and language of the mind is possible to identify the nature and mechanism of the mind correctly. Stuttering is a disorder in the rhythm and mechanism of mental speech, as well as a disorder in the harmony of mind, and by simulation of mind and language planning, the mind is to design and conduct a medical education program and find a way to treat stuttering. After a decade of Taqizadeh and Bigdeli (2016) scientific, experimental, theoretical and educational studies, they have achieved results that can be globally designed and implemented. Therefore, by changing the individual's mental plan in a natural way, we turn the individual's speech into a normal state. After executing the correct spoken program, the client easily speaks like ordinary people, and states that his physical pressures have been thoroughly resolved. The current research is also focused on the simulation model of mind; using the language of the mind, the existing mental program is studied and its drawbacks are obtained and by designing a new program and transferring it to the individual in a short time, you can create a complex behavior in person to complete the desired move. According to the model of the simulation model of the mind about stuttering, the program and the false mental instructions of the individual cause changes in the functioning of the brain and the individual; instead of using the larynx and its correct control, they induce forces into other parts (such as throat muscles, facial muscles, lips, jaw, etc.). Now what should be done is to remove the forces and control of other parts and only to focus on the larynx; therefore, by transforming the individual's mental plan into a natural way, we turn the speech style into a natural and normal state. After executing the correct speech program, the client easily speaks like ordinary people, and states that his physical pressures have been thoroughly resolved.

From the viewpoint of Dr. Taghizadeh (2014), stuttering is a completely mental and psychological problem if the body is not damaged by an accident, a physical illness and damage to speech organs. Stuttering does not have a genetic or heritable root, but has an environmental and mental origin. Stutter is treatable, and if people have intelligence, belief, and hearing, then they will be treated and it will not return. Stuttering is not

physical; it is related to the functioning of the mind and the mental state of mind, and their approach is quite the opposite of what is being said today by speech therapists and neurologists and psychiatrists.
It should be known that stuttering is a brain organizing disorder. Studies done on normal people and those with brain damage show that the left hemisphere is dominant. In right-handed and left-handed people, the dominant hemisphere is for the speech of the left hemisphere. In people with stuttering, the hemisphere becomes more active and interferes with the function of the left hemisphere. In people with stuttering, the right hemisphere becomes more active and interferes with the function of the left hemisphere. Many stutterers are left-handed and their parents forced them to write with the right hand, and the interference between the two hemispheres has been created. When the two hemispheres interfere with the work, stuttering is created, and there is no other dominant hemisphere, and the side effects of the brain do not occur. Neurologists have concluded that people with stuttering and autism and Ddyslexia are delayed in the embryo of their left hemisphere and grow less and the child has to use the right hemisphere, and this disorder is due to the high levels of testosterone in the fetus which is more in male kids. Using the right hemisphere for speech causes damage and speech impairment.
Finally, it is recommended that clinics and hospitals be used in order to improve their self-awareness and achievement motivation in mental stutterers, and provide results to the programmer and psychotherapists in order to identify the strengths and weaknesses of this method and to improve the strengths of this program to promote this protocol. Of course, it should be noted that this research is carried out only on people aged 20 to 35 years and its generalization to other statistical groups should be carried out with caution and in the future to study the effect of the simulation model of mind on other stutter-related behaviors language and even other human behaviors and abilities.

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