International Journal of Innovation and Research in Educational Sciences
Volume 5, Issue 2, ISSN (Online) : 2349–5219

Reactive / Autogenous Obsessions, Thought Control Strategies, and Unacceptable Thoughts: Obsessive-Compulsive Disorder's Predictors in Students

Soheila Hoseinpur Said, Dr. Abbas Abolghasemi
Corresponding author email id: artapply.ir@gmail.com

Date of publication (dd/mm/yyyy): 19/03/2018

***Abstract* — The aim of this research was to determine the role of autogenous / reactive obsessions, thought control strategies and unacceptable thought in predicting signs obsessive – compulsive disorder in university students. The statistical society of this research was all students studying in medical university of Ardabil in 92-93 academic year. The statistical sample of this research were 203 students with signs of obsessive-compulsive disorder that were chosen randomly through students according the questionnaire of Symond et al. obsessive-compulsive inventory. For collect the information required used of Symond et al. obsessive-compulsive, Purdon & clark obsessive interferences inventory revised, Wells & Davis thought control inventory and Bond et al. acceptance and practice inventory. To analyze the information used of Pearson correlation coefficient and multiple regression analysis. The findings of this research showed that reactive obsessions (r = ./18), autogenous obsessions (r = ./21), thought control strategies (r=./36) and unacceptable thought (r = ./24) have positive relationships with signs of obsessive-compulsive disorder (p<./05) and based on the results of multiple regression analysis variables of autogenous/ reactive obsessions, thought control strategies and unacceptable thought can predict related changes of signs of obsessive-compulsive disorder.**

***Keywords* — Autogenous Obsession, Reactive Obaeaaions, Thought control strategies, Unacceptable thought, Obsessive-Compulsive disorder**

I. THEORETICAL FOUNDATIONS

Intellectual-practical obsessive disorder is a complex neuro-psychiatric syndrome whose main features are unwanted, repetitive and intrusive behaviors and also repetitive and annoying faithful behaviors (obsessive disorder) that are in carried-out order to avoid anxiety or thwart obsessive thoughts. According to the fifth edition of the diagnostic statistical report of mental disorders (DSM-5), one of the criteria of intellectual-practical obsessive disorders is repetitive thoughts and behaviors and the feature of being intemperate which causes disorder in life. In people with intellectual-practical obsessive disorder or OCD, these types of thoughts and actions repeat too much and make disorder in normal and everyday life. OCD has two important and sometimes independent elements: obsession and compulsion. Obsession is a thought, phantasm, or unwanted and frequent urge that the individual finds painful and uncontrollable. Obsessive thoughts also take the form of damaging or hurting themselves or an important person in life. Compulsion is a repetitive and persistent physical behavior or mental act that the individual feels that s/he has to do in order to eliminate anxiety caused by obsessive thoughts or prevent negative consequences. This may take the form of repetitive and persistent actions, like checking the doors and windows, or repeated and permanent washing to prevent infection and contamination. Intellectual-practical obsessive disorders along with those anxious thoughts are created for different reasons that can include injury, damage, sexual experiences, family structure and relationship and more.

Previous investigations examined intellectual-practical obsessive disorder; findings show that the prevalence of intellectual-practical obsessive disorder is almost 1/6% to 3/5% during life.

Obsession from one perspective is divided into two types, autogenous obsession and reactive obsession. Reactive obsession is related to bad real thoughts, doubt or concern that may be perceived as an obsession and have negative results. Reactive obsession includes thoughts, concerns, or doubts about contamination, faults, accidents, asymmetry, or irregularity. They are understood fairly real and they may be right and specify obvious actions with the aim of changing the annoying situation into a safe and desirable state. Autogenous obsession is much worse and less realistic thoughts, pictures or shocks which are more likely to be perceived as a threat to the individual. Autogenous obsession includes sexual aggression, blasphemy with thoughts, repulsive pictures or shocks. They are understood in an inconsistent way and they are unacceptable and lead to changing or controlling the individual's thoughts. Moreover, they are specified without clear motivations or with some symbolic motivations or they are related with thoughts from a distance.

According to metacognitive model, activating inefficient thoughts lead to negative assessment of pensive thoughts as a threat sign. This assessment in its place exacerbates negative emotions that are mainly anxious and thus the person refers to thought control strategies in order to reduce their anxious and control their cognitive system. Velz and Davis classified strategies which people use to confront their disturbing thoughts into five parts: 1. Pay attention (I do thing that is enjoyable), 2. Punishment (I get angry because of this thought), 3. Concern (I pay attention to my concerns), 4. Re-evaluation (I analyze this thought logically), 5. Social control (I ask my friend whether they have this thought). In the context of using thought control strategies, the results show that people with OCD use punishment, concern, re-evaluation, and social control more than healthy people; but healthy people use the strategy of 'paying attention' more. Also the results show that suppressing and inhibiting unpleasant thoughts cause to raise and rebound the restrained thought, so it is not a constructive strategy in long term. During the study of unwanted self-conscious thoughts, it was seen

that some patients with this disorder believe that their unacceptable and unpleasant thoughts can have impact on events of outer world as a main feature of OCD. For this reason, Rachman points out that uncertainty in remembering events is a feature of obsessive observations. In his new cognitive theory about mandatory checkout, Rachman describes lack of confidence in memory as a main feature of continuing mandatory checkout. Thus, the person's beliefs about their memory abilities by creating a faulty cycle in which initial doubts about their actions and recalling these acts lead to repeated behaviors and loss of confidence in their memory that creates the continuation of intellectual-practical obsessive disorder. Investigations on autogenous and reactive obsessions and thought control strategies and uncontrollable thoughts show that autogenous and reactive obsessions as two subgroups of intellectual-practical obsessive disorder have positive and significant relation with the signs of intellectual-practical obsessive disorder and reactive obsession is understood fairly real and it is less acceptable, while autogenous obsession is more unreal and unacceptable. Further, people with reactive obsession sometimes for the negative consequences associated with their obsession feel threat and danger that shows the concept of potential damage to them or others. In contrast, people with autogenous obsession feel danger with their mental interveners, and also the result show that there is a communication model between autogenous obsession and reactive obsession with recognition and correlated symptoms (like obsessive beliefs). Also according to DSM-5, there is no need for the person to have both intellectual and reactive obsessions to overtake intellectual-practical obsessive disorder, and the presence of one of them is sufficient. The results about relation between thought control strategies and obsession symptoms show that there is a positive relation between the overall score of thought control and obsessive symptoms in the non-clinical communication. Also among thought control strategies, punishment, concern, paying attention, and re-evaluation there was a positive significant correlation with obsessive symptoms. Due to the results among the thought control subscales, punishment has the strongest positive correlation with check symptoms and slowness and obsessive hesitation. Concern strategy has a positive significant relation with check, slowness, and hesitation. Investigations show that irrational beliefs can cause intellectual-practical obsessive disorder and many studies point out a positive significant relation between OCD symptoms and integration of thoughts. They consider it a powerful predictor of OCD symptoms. Studies show that there is a positive significant relation between integration of thoughts and its subscales with obsessive symptoms.

The existence of a healthy community in terms of mental health is dependent on the health of the smaller parts of that community, including types of communities, families, and groups in that company. Among these, students as a large and important part of society have a great importance. The presence of healthy students with high level of mental health can have a significant effect on mental health of other people, groups, families and generally the society. Obsessive-compulsive disorderobsessive-compulsive disorder disorder is the fourth most common psychiatric disorder in the world and the mean age of the onset of this disorder is about twenty years. Cognitive factors are very effective in onset, survival and durability of this disorder and can overtake students who make up a large part of society. Obsession classification to autogenous and reactive obsession is a new classification and due to this matter, little research has been done on them in Iran. These two types of obsessions have differences in the field of the originator, impact trend on behavior, and control strategies. Knowing these differences and their impact on predicting the obsessive-compulsive disorderobsessive-compulsive disorder disorder in students can be a hope for effective treatments of this disorder in the future.

II. Method

Research design: this research is sectional and the type is of a correlation study that has been carried out in order to determine the role of autogenous and reactive obsessions, thought control strategies, and unacceptable thoughts in predicting the symptoms of obsessive-compulsive disorderobsessive-compulsive disorder disorder in the students. In this research, autogenous and reactive obsessions, thought control strategies, and unacceptable thoughts are considered as predictor variables and obsessive-compulsive disorderobsessive-compulsive disorder disorder is considered as criterion variables.

Subjects: statistical sample of this research is all of the students of Ardabil University of Medical Sciences with a population of 1585 students in the academic year of 2013-2014. The sample of this research was 203 students with the symptoms of obsessive-compulsive disorderobsessive-compulsive disorder disorder that were chosen based on the score of Symond et al. obsessive-compulsive disorderobsessive-compulsive disorders questionnaire (2000). Considering that in a correlation research the suitable sample is 30, because of checking 4 variables, the suitable sample was 120. But to increase the external creditably of the research, 203 students were chosen with the mean age of 21/07 and standard deviation of 2/5.

III. Means

Obsessive-compulsive disorderObsessive-compulsive disorder questionnaire: obsessive-compulsive disorderobsessive-compulsive disorder questionnaire (Symond et al. 2000) is a self-monitoring measurement in 42 items about obsession symptoms (like washing, controlling, doubting, ordering, obsessive thoughts, hoarding, and neutralizing). This questionnaire's items with a 5-degree Likert scale (4-0) measures the frequency of signs and severity of related anxiety. Foa et al. showed that people with OCD in obsessive-compulsive disorderobsessive-compulsive disorder questionnaire were significantly higher in terms of anxiety and frequency of total scores than people with pervasive social phobia, post-

traumatic stress disorder, and the normal group. The internal consistency coefficient of this questionnaire was in the range of 0/86 to 0/95 and the reliability coefficient of retest was in the range of 0/84 to 0/90. This questionnaire with other self-monitoring means of the obsessive-compulsive disorderobsessive-compulsive disorder's signs had a highly 0/65 to 0/81 correlation (convergent credentials). Strong psychometric features of obsessive-compulsive disorderobsessive-compulsive disorder's questionnaire have been proved in the sample of the students. This questionnaire is used in the prevalence assessment of obsessive-compulsive disorderobsessive-compulsive disorder disorder. Hudson, Ruchman (16) and Sticket (17) reported a reliability of 0.89 by retest method, and Dadfar (18) obtained a reliability coefficient of 0.84 and, through Yale-Brown Obsessive Compulsive Scale, a convergent validity of 0.87.

Autogenous and reactive obsession scale: revised questionnaire for obsessive interventions (RO2) part 1 is a self-monitoring questionnaire with 52 items that measures interventive thoughts in a 7-part scale (0-6). This tool was chosen due to its strong psychometric features as well as records in order to measure autogenous and reactive obsessions. English version of this tool has enough creditably and reliability. In this research, the Cronbach's alpha coefficients of this scale measured 0/81.

Thought control strategies scale: thought control strategies' questionnaire was built by Velz and Davis for examining the individual's differences in order to use thought control strategies and relation between strategies and emotional vulnerability. This questionnaire has five subscales which include: distraction, social control, concern, punishment, and re-evaluation. Thought control questionnaire is applicable for non-sick people, patients with depression or post-traumatic stress. Trend to use concern and punishment as control strategies or pathological concern has a positive relation. The other subscales of thought control scale (distraction, social control, and re-evaluation) showed a significant relation to above variables; but in Velz and Davis experiment, vulnerability was reported as a negative correlation with stress. Velz and Davis came to the conclusion that using concern and punishment to control unwanted thoughts is related to preparation for emotional problems. It is likely that the other subscales (for example social control, re-evaluation, and distraction) do not show a significant correlation with anxiety, but under some conditions there is a positive relation with mental health indicators. Thought control questionnaire has 30 items which subjects responded to any item with a 4-degree scale (never, sometimes, often, and always). These responses are graded in order of 1, 2, 3, and 4 respectively. The 5, 8, and 12 items are graded reversely. Cronbach's alpha coefficients of thought control questionnaire were reported 0/77. This coefficient was reported as follows: distraction 0/72, social control 0/79, concern 0/71, and punishment 0/64. And also the retest reliability coefficient of this questionnaire was 0/72 after five weeks. The retest reliability coefficient was reported as follows: distraction 0/68, social control 0/83, concern 0/76, punishment 0/67, and re-evaluation 0/83. To check the validity of this questionnaire, trait anxiety, Eysenck's neuroticism, and concerned Penn state experiment were used. Some of these questionnaire's subscales had a significant correlation with the above experiments. Differential validity of thought control questionnaire has been shown in studies comparing patient and symptomatic groups. In Iran Goudarzi and Torkanburi Esmail considered the Cronbach's alpha coefficient 0/81 for the whole questionnaire and reported it for the other subscales as follows: paying attention 0/79, social control 0/70, concern 0/70, punishment 0/76, and re-evaluation 0/70.

Unacceptable thoughts scale: the practicable tool is the latest version of acceptance and practice questionnaire. This questionnaire includes 12 questions and is graded on a 7-degree Likert scale. This questionnaire measures acceptance, experimental avoidance, and lack of mental flexibility. Its average of Cronbach's alpha coefficient is 0/84 (0/78-0/88) for clinical and non-clinical groups and its 3 and 12 months' revision validity is 0/81 and 0/78, respectively. In addition, this questionnaire showed a significant correlation with Beck depression, Beck anxiety, anxiety, stress, depression, and general health questionnaire. In Iran Imane Abbasi, et al. used exploratory factor analysis in the main component way in order to obtain structural validity. The Cronbach's alpha coefficient was measured 0/86 and after examining the experiment, they identified that the experiment has enough validity and reliability.

IV. FINDING

The demographic findings of this study show that 42/4% of the case study students were males and 67/6% of them were females; 65/5% of the case study students were undergraduate and 34/5% were studying for master's degree; 88/2% of them were single and 6/9% of them were married; 24/1% of them were the first child and 5/5% of them were the fourth child or higher in their birth order. Chart 1 shows the average and standard deviation of the research variables. As can be seen, the mean total score of the case study of obsessive-compulsive disorderobsessive-compulsive disorder is 69/35 with a standard deviation of 27/81, the mean of reactive obsession is 37/95 with a standard deviation of 6/23, the mean of autogenous obsessions is 33/50 with a standard deviation of 7/31, the mean of total score of thought control strategies is 64/71 with a standard deviation of 8/45, the mean of unacceptable thoughts is 31/99 with a standard deviation of 64/71.

Pearson correlation analysis was used in order to investigate the relation between autogenous and reactive obsession, thought control strategies, unacceptable thoughts and obsessive-compulsive disorderobsessive-compulsive disorder symptoms. According to the results of correlation analysis of chart 2, the category of reactive obsessions has a significant positive correlation with the total scores of obsessive-compulsive disorderobsessive-compulsive disorders category ($p < 0/01$, $r = 0/18$). Also autogenous obsession has a positive significant correlation

with the total scores of obsessive-compulsive disorderobsessive-compulsive disorder (p < 0/01, r = 0/21). Among the subscales of thought control strategies, social control (p < 0/01, r = 0/29) and concern (p < 0/01, r = 0/44) there is the highest correlation and distraction (p < 0/01, r = 0/21) and re-evaluation (p < 0/01, r = 0/16) have the least correlation with obsessive-compulsive disorderobsessive-compulsive disorder symptoms. Correlation rate of punishment subscale with intellectual-practical symptoms measured p < 0/01, r = 0/28. Thus, more use of thought control strategies is more related with obsessive symptoms. Also unacceptable thoughts have a positive significant correlation with obsessive-compulsive disorderobsessive-compulsive disorder (p < 0/01, r = 0/24).

Standard Deviation	Average	Variables	
16/88	30/56	Intellectual obsession	Obsessive-compulsive disorderObsessive-compulsive disorder
11/81	28/79	Practical obsession	
27/81	59/35	Total	
6/23	37/95	Total	Reactive obsession
7/31	33/05	Total	Autogenous obsession
3/01	13/51	Distraction	Thought control strategies
3/05	13/90	Social control	
3/24	12/72	Punishment	
3/31	11/21	Concern	
2/81	13/36	Re-evaluation	
8/45	64/71	Total	
8/30	31/99	Total	Unacceptable thoughts

Chart 1-average and standard deviation of the research variables

Obsessive-compulsive disorder Obsessive-compulsive disorder	Practical obsession	Intellectual obsession	Statistics	Variable
0/18	0/14	0/20	Correlation coefficient	Reactive obsessions
*0/01	*0/04	*0/005	Significance level	
0/21	0/18	0/22	Correlation coefficient	Reactive obsessions
*0/003	*0/01	*0/002	Significance level	
0/21	0/24	0/18	Correlation coefficient	Distraction
*0/003	*0/001	*0/01	Significance level	
0/29	0/30	0/28	Correlation coefficient	Social control
*0/001	*0/001	*0/001	Significance level	
0/28	0/25	0/28	Correlation coefficient	Punishment
*0/001	*0/001	*0/001	Significance level	
0/44	0/41	0/44	Correlation coefficient	Concern
*0/001	*0/001	*0/001	Significance level	
0/16	0/16	0/15	Correlation coefficient	Re-evaluation
0/02	0/03	0/03	Significance level	
0/36	0/33	0/36	Correlation coefficient	Total
*0/001	*0/001	*0/001	Significance level	
0/24	0/22	0/25	Correlation coefficient	Unacceptable thoughts
*0/003	*0/001	*0/01	Significance level	

Chart 2-correlation coefficient of reactive and autogenous obsessions, thought control strategies and unacceptable thoughts with obsessive-compulsive disorderobsessive-compulsive disorder disorder symptoms.

Multiple regression analysis results showed that autogenous and reactive obsessions have a significant relation with intellectual-practical symptoms (F = 4/52, df = 2, p < 0/01). 3/2% of variance of intellectual-practical disorder symptoms is identified by reactive obsessions and 4/3% of that is identified by autogenous obsessions. According to Beta amounts, reactive obsessions (β = 0/177) and autogenous obsessions (β = 0/138) can predict the changes related to symptoms of obsessive-compulsive disorderobsessive-compulsive disorder disorder significantly. The results of regression analysis about the contribution of thought control subscales show the impact of these subscales on obsessive-compulsive disorderobsessive-compulsive disorder symptoms (F = 13/28, df = 5, p < 0/01) in predicting symptoms of obsessive-compulsive disorderobsessive-compulsive disorder disorder presented in chart 4. According to these findings subscales of distraction (r = 0/210), social control (r = 0/332), punishment (r = 0/424), and re-evaluation (r = 0/503) have a significant relation with obsessive-compulsive disorderobsessive-compulsive disorder disorder. Totally 25/3% of the variance of obsessive-compulsive disorderobsessive-compulsive disorder disorder symptoms is identified by thought control strategies components. Due to Beta amounts distraction (β = -0/210), social control (β = 0/259), punishment (β = 0/265), and concern (β = 0/297) can predict the changes related to symptoms of obsessive-compulsive disorderobsessive-compulsive disorder disorder significantly. Also the results of regression analysis in chart 5 show that unacceptable thoughts have a significant relation with obsessive-compulsive disorderobsessive-compulsive disorder symptoms (F = 12/71, df = 1, p < 0/01, r = 0/224). 5/9% of symptoms variance of obsessive-compulsive disorderobsessive-compulsive disorder disorder is identified by unacceptable thoughts. Due to Beta amounts, unacceptable thoughts (β = 0/224) can

predict the changes related to symptoms of obsessive-compulsive disorderobsessive-compulsive disorder disorder significantly.

P	T	Standard coefficients	Non-standard coefficients		ARS	R2	R
		BETA	SE	B			
0/001	15/91		2/788	44/35	–	–	–
0/01	2/58	0/179	0/053	0/138	0/027	0/032	0/179
0/14	1/48	0/138	0/123	0/183	0/033	0/043	0/206
F = 4/52, P = 0/01							

Chart 4-Multiple regression analysis results to predict the symptoms of obsessive-compulsive disorderobsessive-compulsive disorder disorder by autogenous and reactive obsessions.

P	T	Standard coefficients	Non-standard coefficients		R2	R
		BETA	SE	B		
0/88	0/15		14/09	-2/10	–	–
0/003	-3/04	-0/210	0/637	1/938	0/044	0/210
0/001	3/83	0/259	0/615	2/357	0/110	0/332
0/001	4/12	0/265	0/552	2/271	0/180	0/424
0/001	4/01	0/297	0/618	2/480	0/242	0/492
0/09	1/70	0/113	652	1/108	0/253	0/503
F = 13/28, P = 0/001						

Chart 5- Multiple regression analysis results to predict the symptoms of obsessive-compulsive disorderobsessive-compulsive disorder disorder by thought control strategies.

P	T	Standard coefficients	Non-standard coefficients		ARS	R2	R
		BETA	SE	B			
0/002	3/06		7/57	23/21	–	–	–
0/001	3/57	0/244	0/229	0/817	0/055	0/059	0/224
F = 12/71, P = 0/001							

V. DISCUSSION

This research is on to determine the role of reactive and autogenous obsessions, thought control strategies, and unacceptable thoughts in predicting the symptoms of obsessive-compulsive disorderobsessive-compulsive disorder disorder in students. The results showed that the variables of reactive and autogenous obsession have a positive relation with obsessive-compulsive disorderobsessive-compulsive disorder disorder and can predict the changes related to the symptoms of obsessive-compulsive disorderobsessive-compulsive disorder disorder significantly. These findings are in harmony with the result of other studies. Reactive obsession is a really bad obsession that happens in the form of thoughts, tasks, or concerns about contamination, mistakes, accidents, or asymmetries that a foreign matter related to a threat causes (like touching the handle of a bathroom, seeing a messy desk). Autogenous obsession is bad and unreal thoughts, images or impulses that are perceived as a threat for the person, but they are unacceptable and control the person's thoughts. In contrast, reactive obsession is related to really bad thoughts, doubts, or concerns about contamination, accidents, asymmetries or irregularities. They are considered fairly real and cause obvious actions that change an uncomfortable situation to a desirable one. In fact, both reactive and autogenous obsessions can be a powerful predictor for the symptoms of obsessive-compulsive disorderobsessive-compulsive disorder disorder. The frequency of reactive obsession is related to distress caused by obvious symptoms of OCD (like washing and checking) and the frequency of autogenous obsession is related to distress caused by damage motives. Lee and Kan found that autogenous obsession is related to OCD symptoms and reactive obsession is related to behavioral symptoms. Also the results show that there is a relational pattern between autogenous and reactive obsession with knowledge and correlated symptoms (like obsessive beliefs), that can be compared with previous investigations. According to DSM-5 criteria, the presence of one of the intellectual obsession or practical obsession is enough to cause obsessive-compulsive disorderobsessive-compulsive disorder disorder.

The results of this research showed that there is a positive relation in the relation between thought control strategies and the symptoms of obsessive-compulsive disorderobsessive-compulsive disorder. These strategies can predict the changes related to the symptoms of obsessive-compulsive disorder disorder significantly. These findings are in harmony with the results of investigations. People with obsessive-compulsive disorder disorder use more thought control strategies to reduce anxiety caused by obsession than usual people. According to cognitive-behavioral model of obsessive-compulsive disorder disorder, neutral behaviors are considered as an interface between intrusive thoughts and obsession. Controlling thoughts is one of the effective neutral behaviors in this model. Cognitive-behavioral theory suggests that efforts to control thoughts increase prominence, access, and frequency of intervening thoughts. According to cognitive-behavioral theory, paying attention to control thoughts and intrusive thoughts, individuals become more obsessive. More use of thought control strategies is more related on obsessive symptoms. Suppressing and inhibiting unpleasant thoughts causes increasing and returning the inhibited thought. Thought control strategies have correlation with obsessive-compulsive disorder disorder semiotics and people with obsessive-compulsive disorder disorder use these strategies with more frequency than healthy people. According to metacognitive model of obsession, thought control strategies play an important role in obsessive symptoms. Replacing coping strategies with maladaptive strategies can help control the symptoms of obsession. There is a significant positive relation between the thought control strategies and OCD symptoms in non-clinical population. Among the subscales of controlling thought, concern, social control, and punishment there is more significant relation with OCD symptoms. Although it is unknown which thought control connects disturbing thoughts to obsession, available sources support the concept of the importance of a better understanding of the relation between these two cognitive events.

Also the results of this research showed that unacceptable thoughts have a positive relation with the symptoms of obsessive-compulsive disorder disorder and can predict the changes related to obsessive-compulsive disorder disorder significantly. The results of the investigations align with this research show that unacceptable thoughts play an important role in the incidence and persistence of obsessive-compulsive disorder and related intrusive symptoms. The person's beliefs (like trust amount) play an important role in making emotional disorders through guiding the focus on the inner processes (like doubt) about thought and memory abilities. According to this attitude, focus on inner processes, decreases the assurance that the person has done the right thing or done something special; as a result, doing more practice till the goal can be achieved is necessary. In the study of unwanted self-conscious thoughts, as a main feature of OCD, it was seen that some patients with this disorder believe that their unacceptable and unpleasant thoughts can impact on the events of the outer world. Irrational beliefs can be considered as a reason for obsessive-compulsive disorder disorder. Many researches showed a positive and significant relation between OCD symptoms and the merging of thoughts and considered it as a powerful predictor for OCD symptoms. The Rachman theory states that obsessions come from disastrous misunderstandings of disturbing thoughts; hence, obsession persists as long as these misunderstandings are continued. Velz thought that obsessive thoughts activate metacognitive beliefs about the meaning of thought. Jay Williams et al. showed that cognitive and metacognitive beliefs have a positive correlation with the symptoms of obsessive-compulsive disorder, but metacognitive areas have the strongest correlation with obsessive symptoms. Positive beliefs about concern, negative beliefs about uncontrollability, danger, and cognitive assurance are the important predictors of obsession symptoms.

The findings of this research have important practical implications in the planning of the treatment of and theorizing obsessive-compulsive disorder disorder. In terms of treatment, owing to these findings, identifying and changing unacceptable thoughts and thought control strategies should be considered in the treatment of obsessive-compulsive disorder disorder. Also, the questionnaires of this research can be used to identify the people that are in danger of obsessive-compulsive disorder disorder. The symptoms of obsessive-compulsive disorder can be prevented by making changes in unacceptable thoughts and maladaptive thought control strategies that are caused by acting on persisting of the symptoms of obsessive-compulsive disorder. At the theoretical level, these findings support metacognitive models. These theories state that beliefs on thought processes play an important role in cognitive processes caused by the symptoms of obsessive-compulsive disorder. Velz argues in his cognitive model that cognitive beliefs guide information process and cause ineffective evaluations and responses.

This research has some limitations that should be considered in the conclusion and generalization of results. The method of this research is a type of correlation studies that makes it difficult to come to a sound conclusion about these findings. Using self-assessment tool is one of the limitations of this research. This research was also conducted on a sample of students from Ardabil University of Medical Sciences. In generalization of results, one should be conscious; discontinuance of people with social base, economic base, using non-clinical sample, etc. were the other limitations of this research. Next researchers can help to clear the role of the variables in obsessive-compulsive disorder disorder by investigating the special variables with a wider statistical sample and also by investigating other obsessive patients. Using a structured interview method is better in meticulous identification of the obsessive-compulsive disorder disorder. Also researchers can investigate the relation between the variables in this research and those of obsessive-compulsive disorder disorder by investigating effective family, culture, and ethnic factors in obsessive-compulsive disorder disorder with more assurance.

REFERENCES

[1] Abramowtiz, J. s., Franklin, M., Schwartz, s., & Furr, J. (2003). Symptom Presentation and Outcome of Cognitive-Behavior Therapy for Obsessive-Compulsive Disorder. Journal of Consulting and Clinical Psychology, 71, 1049-1057.

[2] American Association of psychiatry. *Diagnostic and Statistical Manual of Mental disorders (4th ed., text rev.)*. Washington: Dc: Author; 2000.

[3] Amir N, Cashman L, Foa EB. Strategies of Thought Control in Obsessive-Compulsive Disorder. Behavior Research and Therapy. 1997; 35: 775-777.

[4] Amiri, Ahmad, Pursharifi, Hamid, Ghasempur, Abdolah (2012). The Relation between Thought Merging Beliefs and Thought Control Strategies with Compulsive Obsessive Symptoms in Non-Clinical Population. Urumiye Medical Journal, 23 (4), 2012, September and December, 354-362.

[5] Angst, J., Gamma, A., Endrass, J., Ajdacic, V., Eich, D. (2004). Acritical Evaluation of Obsessive – Compulsive Disorder Subtypes, Sumptoms versus Mechanism Clinpsycho Rev. 24 (3): 283-373.

[6] Bound et al. Dose Meta-Cognition or Responsibility Predict Obsessive-Compulsive Symptoms: A Test of the Metacognitive Model.

[7] Bourons et al. (1996). Unwanted Intrusive Thoughts: Cultural, contextual and Characterological Determinants of Diversity. Journal of Obsessive-Compulsive and Related Disorders, volume 3, issues. April 1996, page 193-204.

[8] Clarc DA, Purdon C. New Perspectives for a Cognitive Theory of Obsessions. Australian Psychologist. 1993; 28: 161-167.

[9] Clark, D.M., R Purdon, c. (2004). *Cognitive Theory and Therapy of Obsession Compulsions*. In. M.A. Reineck, & D.A. Clark, Cognitive Therapy Across the Life's Pan: Evidence and Practice (pp. 91-115).

[10] Delavar, Ali (2009). Research Methods in Psychology and Educational Sciences. 4th Edition, Virayesh Publicationss: Tehran, Iran.

[11] Esmail Torkanburi, Yaghub (2013). Obsession Irrational Beliefs in People with Intellectual-Practical obsession. Donyaye Salamat Professional Medical Journal

[12] Foa, E. B., Huppert, J. D., Leibergs, S., Langner, R., Hajcak, G., & Salkovskis, P.M. (2002). The Obsessive-Compulsive Inventory: Development and Validation of a Short Version. Psychological Assessment, 14, 485-496.

[13] Ganji, Mahdi (2013). Psychopathology (according to DSM-5). Savalan Publicationss: Tehran, Iran.

[14] Gudarzi, Mohamad Ali, Esmsil Torkanburi Yaghub. The Relation between Effective Thought Control Strategies and Tense Obsessive Symptoms. Hakim Research Journal. 2005; (4): 45-51.
[15] Hadson B, Rachman, S.J. (1997). A Cognitive Theory of Obsessions: Elaboration. Behavior Research and Therapy, 36, 385-401.
[16] Han-Joo Lee, Soon-Hee Lee, Hyang-Suk Kim, Seok-Man Kwon, Michael J. Telch (2004). A Comparison of Autogenous / Reactive Obsessions and Worry in a Nonclinical Population: A Test of the Continuum Hypothesis. Behavior Research and Therapy, 43, 999-1010.
[17] Hermans D, Martens K, Decort K, Pieters G, Eelen P. Behavior Research and Therapy. Reality Monitoring and Metacognitive Beliefs related to Cognitive Confidence in Obsessive-Compulsive Disorder. Behavior Research and Therapy. 2003; 41: 383-401.
[18] Jang – Won Seo, Seok-Man Kwon (2013). Autogenous / Reactive Obsessions and Their Relation with Negative Self-Inferences. Journal of Obsessive-Compulsive and Related Disorders, 2, 316-321.
[19] Li Hi, Jenna Ewing, Ashley M. Shaw, Jianping Wang, Gregory S. Chasson (2015). A Cross-Sectional Investigation of Autogenous and Reactive Obsessions and Associated Cognitive and Symptom Correlates in China. International Journal of Clinical and Health Psychology, 14, 93-101.
[20] McKay, D., Abramowitz, J.S., Calamari, J.E., Kyrios, M., Radomsky, A., Sookman, D., et al. (2004). A Critical Evaluation of Obsessive-Compulsive Disorder Subtypes: Symptoms versus Mechanisms. Clinical Psychology Review, 24, 283-313.
[21] Mohamadkhani, Shahram & Farjad, Maryam (2009). The Relation between Metacognitive Beliefs and Thought Control Strategies with Obsessive Symptoms in Non-Clinical Population. Clinical Psychology Journal, 1 (3), 35-51.
[22] Moulding, R. D., & Kyrios, M. (2006). Anxiety Disorders and Control Related Beliefs: The Exemplar of Obsessive-Compulsive Disorder (OCD). Clinical Psychology Review, 26, 573-583.
[23] Purdon cc. Metacognition and Obsession. Clinical Psychology and Psychotherapy. 1999; 30: 102-110.
[24] Purdon, c (2004). Cognitive-Behavior Treatment of Repugnant Obsessions. Journal of Clinical Psychology: In session, 60, 1169-1180.
[25] Rachman S, Shafran R. Cognitive Distortion: Thought-Action Fusion. Clinical Psychology and Psychotherapy 1999; 6(2): 80-5.
[26] Rachman, S. J (1998). A Cognitive Theory of Obsessions: Elaboration. Behavior Research and Therapy, 36, 385-401.
[27] Richard Moulding, Michael Kyrios, Guy Doron, and Maja Nedeljkovic (2006). Autogenous and Reactive Obsessions: Further Evidence for a Two-Factor Model of Obsessions. Journal of Anxiety Disorders, 21(5), 677-690.
[28] Sticket A, Cohen, R. J., Rector, N. A., Szacun-Shimizu, K., Riemann, B. C., & Norberg, M. N. (2006). Dysfunctional Belief-Based Obsessive-Compulsive Disorder Subgroups. Behavior Research & Therapy, 44, 1347-1360.
[29] Symond, Tourp A, Eliyout NG. (2006). *Dysfunctional Belief-Based Obsessive-Compulsive Disorder Subgroups*. Behavior Research & Therapy, 44, 1347-1360.
[30] Thomas, A. Fergus (2012). Thought control moderates the relation between autogenous intrusions and the severity of obsessional symptoms: Further Support for the Autogenous-Reactive Model of Obsessions. Journal of Obsessive-Compulsive and Related Disorders, 2, 9-13.
[31] Varda D. Meta-cognition and Obsession-Compulsive Disorder: A Cognitive Model of Generalized Anxiety Disorder. Behave Cognitive Psychotherapy 1998; 23: 301-320.
[32] Wegner DM, Schneider DJ, Carter SR, White TL. Paradoxical Effects of Thought Suppression. Journal of Personality and Social Psychology. 1987; 53: 5-13.
[33] Wells A, Matthews G. Attention and Emotion: A Clinical Perspective. Hove, uk: Erlbaum; 1994.
[34] Wells A, Papa Georgiou C. Relationships between Worry, Obsessive-Compulsive Symptoms, and Meta-Cognitive Beliefs. Behavior Research and Therapy. 1998; 389 9-913.
[35] Wells A, Rinvelds M. Relationships between Worry, Obsessive-Compulsive Symptoms, and Meta-Cognitive Beliefs. Behavior Research and Therapy. 1999; 389 9-913.
[36] Wells A. Cognitive Therapy of Anxiety Disorders: A Practice Manual and Conceptual Guide. Chichester-uk: wiley; 1997.
[37] Williams JMG, Wells A, Cartwright-Hatton S. Dose Meta-Cognition or Responsibility Predict Obsessive-Compulsive Symptoms: A Test of the Metacognitive Model. Clinical Psychology & Psychotherapy. 2004; 11: 137-144.

AUTHOR'S PROFILES

Soheila Hoseinpur Said, Master of Clinical Psychology, Islamic Azad University, Ardebil, Iran, Soheila_h63@yahoo.com

Dr. Abbas Abolghasemi, Professor of psychology, Gilan University, abolghasemi1344@guilan.ac.ir