Symptoms of Obsessive Compulsive Disorder and Their Relation to Locus of Control in Armenian Participants

Hamidreza Akbarikia [1]* Khachatur Gasparyan[2]

[1]Payame Noor university Iran*, [2]Yerevan state Medical University, Armenia
E-mail:hamid_akbarikia@yahoo.com

Abstract: Obsessive compulsive symptom is a debilitating disorder marked by two distinct phenomena: recurrent, disturbing, intrusive thoughts (obsessions) and overt repetitive behaviors or mental acts (compulsions) that are performed to reduce distress caused by obsessions. Locus of control is concerned with the degree to which an individual perceives that she/he has control over a given event, or whether she/he perceives it lays outside his/her control. The study aimed to evaluate correlation of obsessive compulsive symptoms with locus of control. This research emphasized on cognitive and practical approach on OCD. For the current study 150Armenian participants were male40% and 60% were female. Participant'age ranged from 17 to 30in students and the mean age for the samples was 21.78(SD=3.52), and other samples were OCD patients with ranged age 25 to 58 and the mean age was 37.40(SD=9.61). Participants completed Armenian version questionnaire batteries including measure of Levenson locus of control, and Ybocs OCD scale. the multiple liner regression analysis with total OCD scores as the dependent variable had a significant association with powerful others scores. After including this variable, we found (total obsessive compulsive β= .42 F=25.7 T= 4.68 P.V <.01) so result showed robust association between powerful others and obsessive compulsive disorder, scores significantly predicted total OCD scores. Finally, powerful others were strong predictor then subscale obsessive and compulsive attendant severity OCD (obsessive: β= 32 F=11.8 T= 2.9 P.V <.05). Locus of control had only a main effect on obsessive compulsive disorder. That is, high levels of locus of control, indicating a powerful others and chance was associated with higher obsessive compulsive disorders, special obsessive thinking symptoms.
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Introduction

Obsessive-compulsive symptoms is a rather disabling condition which is described by recurrent unwanted ideas, thoughts or impulses (obsessions), and repetitive, irresistible and often ritualized behavior (compulsions) to avoid anxiety or to neutralize the obsessions (American Psychiatric Association, 1994) Obsessive–compulsive disorder (OCD) is currently classified as an anxiety disorder in the Diagnostic and Statistical Manual of Mental Disorders (DSM) (American Psychiatric Association, 2000). Indeed, throughout most of the twentieth century, OCD has been regarded as an anxiety disorder or neurosis (Tynes et al., 1990).

OCD is a debilitating disorder marked by two specific phenomena: recurrent, disturbing, intrusive thoughts (obsessions) and overt repetitive behaviors or mental acts (compulsions) that are performed to decrease distress caused by obsessions. (Eisen and Rasmussen, 2002)

Although the specific content of obsessions and compulsions may vary from patient to patient, a common subject matter concerns uncertainty over responsibility and situation is external or powerful others for harm or mistakes. For example, thoughts such as ''I may have unknowingly hit a pedestrian with my automobile'' give rise to urges to check the road for injured people. The life span prevalence rate of OCD has been consistently estimated at 2–3%in the general adult population throughout the world (Angst, 1994; Karno, Golding, Sorenson, & Burnam, 1988), making it one of the more common psychiatric disorders.

Locus of control is concerned with the degree to which an individual perceives that she/he has control over a given event (internal), or whether she/he perceives it lays outside his/her control (external). The underlying presumption on the moderating effect of locus of control on the relationship between obsessive compulsive disorder is that individuals who define stressors as controllable will be more likely to attempt to cope with them through problem focused actions and there by promote existing health states. On the other hand, subjects with an external locus of control are more vulnerable to OC symptom.

The multidimensional Locus of Control construct has been around for about 30 years . (Wallston KA, et al., 1978) It has helped in the understanding of the role of beliefs in the context of health behaviors, health outcomes, and health care

(Luszczynska A, et al. 2005),. Normal locus of control comprises a person's beliefs regarding where control over his or her illness lies. A person's normal locus of control orientation is one of several factors that determine which health-related behaviors a person will perform.

These health-related behaviors, in turn, partially determine a person's health status (Wallston KA,et al. 1994) For example, Patients with spinal cord injury (SCI) who approved an internal locus of control experienced greater well-being and decreased pain feeling of SCI than those who approved an external locus of control. On the other hand, patients with SCI who accepted an external locus of control experienced more psychological distress, physical disability, lower self-esteem, and more helplessness and hopelessness than those who were not using an external locus of control (Chung MC et al2006),.In one study, compared with patients with low internal locus of control, patients with medium and high internal locus of control lived longer after lung transplant. (Burker EJ, et al, 2005). Some evidence suggest the observation that anxiety and powerful others health locus of control (PHLC) were significantly related to self-perception of precipitants such as stress and lack of sleep in epilepsy patients (Sperling et al 2006)that psychological adjustment and modification, adjustment may be one mechanism by which perceptions of control can affect extension of life or existence (Burker EJ, et al, 2005).

Method

For the current study 150Armenian participants were male40% and 60% were female. Participant'age ranged from 17 to 30in students and the mean age for the sample was 21.78(SD=3.52), and other samples were OCD patients with ranged age 25 to 58 and the mean age was 37.40(SD=9.61). Participants completed Armenian version questionnaire batteries including measure of Levenson locus of control, and Ybocs OCD scale In patient with a primary OCD according to DSM-IV criteria were recruited,. The other samples are students recruited at the university were selected for this cross-sectional study. The participants comprised 110 under graduate and post graduate students without record in concealing center and other groups are co morbid psychiatric disorder patients in hospital and center of counseling in clinical psychology in Yerevan sity, consecutively referred to a specialized OCD program of the 40 patients, OCD subjects have OCD in their life, and the other110 students without OCD symptoms.

Instruments

Yale-Brown Obsessive–Compulsive Scale: The Yale-Brown Obsessive–Compulsive Scale (Y-BOCS; W.K. Goodman et al., 1989; Goodman, Price, Rasmussen, & Mazure, 1989)is a widely-used semi structured, clinician-administered measure that assesses the severity of obsessions and compulsions. Ratings are based on information provided by the patient and surety, as well as clinical observations. The Y-BOCS is administered in two parts: first, clinicians utilize a symptom checklist to determine the types of obsessions and/or compulsions experienced by the patient. Next ,severity of these obsessions and compulsions are rated using a five point Likert scale ranging from 0 to 4, with higher scores indicating greater severity. The 10severity items, which assess distress, frequency, interference, resistance, and symptom control, yield three scores: an Obsessions Severity Score (range = 0–20), a compulsions Severity Score (range = 0–20) and a Total Score (range = 0–40). Six additional items examine features that can be used to aid with differential diagnosis and treatment (e.g., degree of insight, avoidance).

Levenson locus of control scale: Locus of control was measured with Levenson,I,P and C scales. Each scale includes eight items and is designed to measure the extent to which individuals believe that outcomes are due to their own actions, to powerful others or to chance. Participants asked to rate each statement on a 4point likert scale with 1=strongly disagree 4 strongly agree (petrosky,birkimer 1991). The Rotter(1966) I-E locus of control assesses an individual's attributions of control as being either internal(I) external(E) Levenson(Levenson1973,) modified I-E scale to distinguish attribution of control to other persons, powerful others(P) from such other external factors as fate or lock ,which she categorized as chance(C)Thus, her multidimensional instrument contains three separate I,P and C scales. In doing so,Levenson also attempted to reduce the biases in the Rotter . Levenson scale has Reliability and validity that had been identified by numerous researchers (Garcia, C., & Levenson, 1975).

Result

Regression statistics and item and reliability analysis calculated with SPSS version 19 ,Table 1 shows the mean severity of symptoms assessed by means and other indicator at the first time point of the examination under graduate students (B.S)showed a greater OCD symptoms than post graduate students (M.A) (BS :X=42 and MA : X=31.78). At the second time point patients of the obsessive compulsive disorder showed a greater total of OCD symptoms (patient=88). At the third time no differences

internality were found between patients, under graduate student and post graduate students (BS: X=33.10 MA: 33.11patients: X=32).

Scores on the two OCD subscales were very similar to scores obtained in the Study BS Scores with other student samples(M.A) in powerful others (BS:X=16.6, M.A=15.73) Scores on the powerful others in patients were found (M= 31.68, SD= 9.01); were also fairly consistent with data from previous student samples.

Table 2 presents descriptive information and the inter-correlations of the measures of the current study. As can be seen from Table 2, all measures had adequate internal consistency coefficients.

Separate hierarchical multiple regression analyses were performed in order to examine the impact of, locus of control and their interaction on the total OC scores, and on the two OC symptom clusters (obsessive thinking and compulsive behavior).

The first regression analysis in students was performed to examine whether the interaction of locus of control would predict total OC scores above and beyond the main effects of powerful others attitudes and locus of control. Table 2 presents the summary statistics for the multiple regression analysis with total OCD scores as the dependent variable had a significant association with powerful others scores. After including this variable, we found (total obsessive compulsive β= .42 F=25.7 T= 4.68 P.V <.01) so result showed robust association between powerful others and obsessive compulsive disorder, scores significantly predicted total OCD scores. Finally, powerful others were strong predictor then subscale obsessive and compulsive attendant severity OCD (obsessive: β= 32 F=11.8 T= 2.96 P <.05).

These probes revealed in table3 that subjects with powerful others attitudes, OCD symptom

severity was lower among those with internal locus of control as compared to those with chance locus of control (chance:β=.36 ,F= 24.5 ,T= 4.04 ,P.V <.01)(internal:β= .16 ,F= 24.5,T= 1.91,P.V <.059)However, for Participants with low internality attitudes, simple slope was not significant, indicating that their levels of OC symptoms were low regardless of their levels of locus of control. In other words, when OCD was high, the presence of powerful others and chance locus of control orientation increased the scores, whereas the occurrence of internality had a dampening effect by producing lower OCD scores. When the relationship scores were low, locus of control level did not influence the internal scores.

Factor analysis correlation Matrix coefficients were computed to examine the relationship between the OCD and the measures of symptom severity and cognition obsession and compulsion level of (P <.01). The results of this analysis, which are displayed in Table4, revealed a moderately strong and significant relationship between the OCD and the obsessing subscale of the Y-bocs. However, no other significant relationships with internal subscales were detected. In addition, the internality was not related to either the Y-BOCS total or subscale scores,(OCD with powerful others R=.663 but OCD with internal locus of control R=.060)A number of cognitive measures obsessive were significantly related to the chance(R=.50)

Table 1: General data on participants

demography in State under graduate students post graduate and patients,						
Variables	under graduate students		post graduate		patients	
	Mean	S D	Mean	S D	Mean	S D
OCD total	42.97	23.67	31.78	24.11	88.11	15.71
Internal	33.10	7.71	33.11	9.66	32.57	6.6
Powerful others	16.69	8.93	16.12	9.72	31.86	9.01
Chance	22.45	7.32	19.78	8.32	32.57	7.63
Obsessive	7.69	4.33	4.49	3.58	10.93	2.91
Compulsive	7.07	4.32	4.11	3.58	11.86	2.41
Severity	14.72	8.40	8.91	7.00	22.19	4.26

Table 2 Regression analyses on variables of locus of control and O C D in Students

Locus of control	internal				chance				Powerful others			
OCD	β	F	T	P-value	β	F	T	P.V	β	F	T	P-value
OCD total	.17	25.7	2.7	<.27	.42	25.7	3.845	<.01	.42	25.7	4.68	<.01
Obsession	.20	11.8	2.00	<.41	.25	11.8	2.07	<.05	.32	11.8	2.96	<.05
Compulsive	.16	9.33	1.6	<.97	.21	9.33	2.7	<.05	.32	9.33	2.0	<.05
Severity	.19	10.4	1.97	<.52	.22	10.4	2.12	<.05	.34	10.4	3.16	<.05

P<.01 and p<.05

Table 3: Regression analyses on variables of locus of control and O C D in patients

Locus of control	internal				chance				Powerful others			
OCD	β	F	T	p.v	β	F	T	P.V	β	F	T	P.V
OCD total	.19	19	1.57	<.014	.33	19	1.6	<.12	.61	19	3	<.05
Obsession	.071	.69	-.24	<.81	.007	.69	-.001	<.99	.40	.69	.16	<040
Compulsive	.16	7.4	1.6	<.11	.18.7	7.4	1.6	<.05	.30	7.4	2.77	<.05
Severity	.19	8.30	2.90	<.06	.19	8.30	1.8	<.07	.31	8.30	2.90	<.05

P<.01 and p<.05

Table 4: relationship among variables with factor analysis

Correlation Matrix

Correlation	1	2	3	4	5	6	7
OCD total	*						
internal	.069	*					
Powerful others	.665	-.244	*				
chance	.672	.115	.581	*			
severity obsessive	.720	.094	.475	.508	*		
severity compulsive	.715	.102	.488	.479	.884	*	
Severity OCD	.725	.108	.491	.492	.963	.967	*

P<.01

Discussion:

Recent studies on the importance of dysfunctional beliefs as well as attitude to internal locus of control or externality that characterize, suggest that the description of subtypes requires an examination of cognitive underpinnings that are potentially connected to the etiology and maintenance of symptoms. For example, effective treatment for obsessions without overt compulsions (e.g., Freeston et al., 2001)

The aims of this study were to investigate relationships between obsessive compulsive disorder and locus of control; and to examine the independent and relative contributions of obsessive severity and compulsive behavior .present study were found relationship between OCD and powerful others locus of control and this research were consistent with previous stud y that studied also highlights the importance of obsessive compulsive cognitions in the prediction at baseline of the symptoms of Mental Control, Contamination and Checking, but not of Obsessive impulses, independent of internal locus of control This is consistent with the results of many studies that have found that dysfunctional beliefs measured by scales can predict OC symptom (Julien, O'Connor, Aardema, &Todorov, 2006; Tolin, Woods, & Abramowitz, 2003). The study showed not only the capacity of dysfunctional beliefs to predict the development of obsessive and compulsive symptoms, but above all, dysfunctional beliefs are risk factors in the development of obsessions and compulsions following stressful events. Our study thus revealed stability in obsessive compulsive symptoms conceptualized as categories and a close relation between dysfunctional beliefs in general and symptomatology associated with impaired mental control, Contamination and Checking. (Novara, C et al., 2011).

Approach to locus of control is a cognitive in obsessive compulsive disorder and previous study was consistent with present study that found moderate associations between a range of obsessive beliefs and OCD severity, and certain obsessive beliefs continued to predict specific OCD .These

findings broadly replicate and extend findings of Abramowitz et al. (2009). And the other hand we favor a ‘‘cognitive’’ rather than a ‘‘neurological’’ understanding of obsessions (Moritz et al., 2007; Obsessive Compulsive Cognitions Working Group, 1997, 2001, 2003).

Present study showed Relationship between obsessive with powerful others locus of control were stronger than relation between compulsive and powerful others or chance and this result was indication that obsessive compulsive has cognitive approach and result of this research supported by result that found , metacognitive variables of need to control thoughts, beliefs about uncontrollability and danger, and fusion beliefs were also positively correlated with O C symptoms replicating previous findings (Myers S., Wells A., 2004).

This study has been suggested that perceived disruption of control and locus of control is important in maintaining anxiety and obsessive compulsive symptom. In particular, based on the review of the theoretical literature and empirical studies, it was argued that incorporation of the concepts might prove important to etiological theories of OCD. Given its phenomenology, it is perhaps surprising that such little attention has been given to the role of control cognitions in OCD. However, there is evidence that both anxiety and OC symptoms are associated with lowered levels of sense of control, and weaker evidence that OC symptoms are associated with elevated levels of desired control, both over thoughts and the environment. More importantly, a discrepancy between the concepts, where the desired level of control is not attained, may be an important factor in driving compulsive actions. This conceptualization may help to account for motivational aspects of the disorder (O'Kearney., 1998).

Between-group comparisons post graduate students reported lower OCD than under graduate students. Results were accepted because students in level of post graduate have a stable situation in developmental life.

Conclusion

Locus of control had only a main effect on obsessive compulsive disorder. That is, high levels of locus of control, indicating a powerful others and chance was associated with higher obsessive compulsive disorders, special obsessive thinking symptoms .According to this result, it seems that locus of control exerts an impact more on the thinking symptom than compulsive disorder

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Corresponding Author:*: Institute of Payame Noor University; PO BOX 19395-3697 Tehran, Iran

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