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The relationship between schema and locus of control with obsessive compulsive symptoms

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ABSTRACT

Background: To our knowledge, this is the first study to investigate obsessive–compulsive symptom structure in patients with schema and locus of control. Present study demonstrates significantly association between schema and obsessive compulsive disorder with locus of control approach in patients and other participants.

Aim: The study aimed to evaluate correlation of schema and locus of control with OCD. This research emphasized on cognitive approach (schema) on obsessive compulsive symptom.

Method: For the current study 273 Iranian participants were male 30% and 70% were female. Participant's age ranged from 19 to 34 and the mean age for the sample was 23.42 (SD=2.46). Participants completed questionnaire batteries including measure of Levenson locus of control, Young schema scale and Y-bocs OCD scale. In patient with a primary OCD without comorbid as a pure OCD according to DSM-IV criteria were recruited in counseling center. The other samples are students recruited at the university were selected for this cross-sectional study.

Result: Regression demonstrated significant associations between some of the major Y–BOCS symptom categories. The most significant correlations ($p < .01$, $\beta = .43$) among patients were between schema obsession and powerful others, OCD severity. In addition, significant but less robust correlations ($\beta = .32$, $p < .01$) were found between repeating and powerful others locus of control.

Conclusion: The findings of the present study showed that schema and powerful others related significantly to both total OCD symptom severity and also other sub scale OCD. It is important as schema significantly predicted all symptoms dimension of OCD also the analyses showed that schema was strong predictor for obsessive.

Keywords: Schema, Locus of control; Obsessive-compulsive symptom

Introduction

Obsessive-compulsive disorder (OCD) is now recognized to be a relatively common disorder in society, with prevalence estimates ranging from 1% to 4% in epidemiological studies (1).

Individuals with OCD suffer from recurrent, unwanted, and intrusive thoughts (obsessions) and/or engage in repetitive ritualistic behaviors (compulsions). Obsessions include worries, doubts, or images that evoke anxiety or distress and persist even though the individual recognizes the symptom as irrational, unrealistic, or untrue (2). Locus of control was another variable that investigated in this research, Locus of control is effectively defined as a person's perception of control over his/her own life and how he/she copes with events(3). It is emphasized in the literature that individuals have two locus of control, internal and external. Rotter expressed internally controlled individuals believe that they have control over things that happen to them. Others believe that outside forces control what happens to them (4).

In relation to person factors, Folkman (5) has argued that since individuals with an internal LOC believe that they can control the outcome of events, these individuals are more likely than individuals with an external LOC to use coping strategies aimed at directly solving the problem, i.e. approach or problem-focused coping. This view implies that individuals with an external LOC are likely to use weak strategies when faced with conflicts since they believe that life's events are outside their control. Consistent with Folkman's view, studies with adults have generally found a positive association between internal LOC and approach coping (6)

The other variable in this study is schema and we can hypothesis.in obsessive compulsive disorder that psychological connectedness can

be identified through examining the cognitions behind this complex behaviours. The utility of understanding core beliefs has been highlighted in treating more complex cases, where there is frequently comorbidity of psychopathology (7). This understanding of the role of core beliefs and the maintaining processes is the central theme of the schema-focused approach to cognitive behavioural therapy (8). Young (1999) describes "early maladaptive schemas" as pervasive themes in thinking about oneself and one's relationships, which begin in childhood and elaborated on as we grow, but which have become dysfunctional in the present environment. Such schemas include negative core beliefs (content) and schema processes. Negative core beliefs have been found to be useful in the appraisal of cognitive patterns in obsessive compulsive (9).

Maladaptive cognitive schemas are proposed as the core of personality disorders (10) these schemas are thought to influence how people view themselves, others and the world. Given that personality pathology is quite common in OCD (11) examining underlying schemas among people with OCD is important in order to gain a deeper understanding of the relationship between personality pathology and treatment outcome. Increased knowledge about underlying schemas, particularly among treatment non-responders, could inform more comprehensive and individually tailored OCD treatment programs.

Method

For the current study 273 participants were male30% and 70% were female. Participant'age ranged from 17 to 42 and the mean age for the sample was 24.42 (SD=2.46). Participants completed questionnaire batteries including measure of Levenson locus of control. Young schema

questionnaire 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 213 students without record in concealing center and other groups are co morbid psychiatric disorder patients in center of counseling in university, consecutively referred to a specialized OCD program of the 60 patients, OCD subjects have OCD in their life, and the other 213 students without OCD symptoms. Descriptive statistics showed the mean score for OCD patients were (M=71, STD=12.40) and students were (M=40.13, STD=13.40).

Instruments

Y-BOCS Symptom Checklist and Severity Ratings

The Y-bocs scale was successful in distinguishing between patients with OCD and patients with other anxiety disorder as well as normal persons. (12) A number of different types of reliability and a measurement of internal consistency are appropriate to the psychometric analysis of the Y-bocs. Test-retest reliability was used for Y-bocs scale. The interrater reliability of the 10 item Y-bocs was initially evaluated in patient with OCD. Spearman correlation revealed that raters generally agreed with each other's on how to rank order the patients (13). The Y-bocs has been widely used as outcome measure in both clinical trial and clinic setting, and indeed are considered the good-standard, measure of response to treatment in international treatment guide line for adult (13).

Levenson locus of control scale

Locus of control was measured with Persian version 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 4-point Likert scale with 1=strongly disagree 4 strongly agree (14). The Rotter (1966) I-E locus of control assesses an individual's attributions of control as being either internal (I), or external (E). Levenson (15) modified I-E scale to distinguish attribution of control to other persons, powerful others (P) from such other external factors as fate or luck, which she categorized as chance (C) (16). 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. Reliability and validity of Levenson scale had been identified by numerous researchers (17).

Young schema questionnaire

The Young Schema Questionnaire – Short form (YSQ-) consists of 75 items and measures eighteen cognitive schemas. To establish the psychometric properties of the version of YSQ, The instrument and its subscales have a very good reliability, the α Cronbach coefficients run between .68 and .96. To test the discriminative validity of this measure, The YSQ has a good discriminative validity. Based on YSQ scores it can be predicted the social phobia development and significant correlation was found between YSQ and automatic thoughts scores (18).

Results

The regression and factor analyses were applied in order to test college students' and patients schema strategies and obsessive compulsive disorder regarding the locus of control. As seen in Table 1, the results of the analysis indicated that students and patients have significantly higher powerful others locus of control in the y-bocs scales ($r=.63$, $p < 0.05$), the relationship between checking subscale with powerful others locus of control was high ($r=.56$, $p < 0.05$). On the other hand, no significant relation was found between chance with obsessive compulsive disorder among participants.

The analysis (Table1) showed a considerable relationship between schema with obsessive compulsive disorder and had high association with OCD ($r=.63$ $p < 0.05$) relationship between aggression OCD subscale with schema calculated by factor analysis method and the high correlation was found between them ($r=.50$, $p<.05$).

Table 2 presents descriptive information and the inter-correlations of the measures of the current study.

As can be seen from Table 2, some measures had adequate internal consistency coefficients. Multiple regression analyses were performed in order to examine the impact of schema, locus of control and their interaction on the total OC scores, and on the OC symptom.

The first regression analysis was performed to examine whether the interaction of locus of control with Obsessive compulsive disorder would predict total OC scores above and beyond the main effects of schema and locus of control. Table 2 presents the summary statistics for the regression analysis with total y-bocs scores as the dependent variable.

As shown in Table 2, the interaction between Correlations powerful others and chance locus

of control with obsessive compulsive were overall high ($p<0.1$ $\beta=.45$), but significant in the case patients, the relationship between OCD and chance locus of control was insignificant .

Regression demonstrated significant associations between some of the major Y-BOCS symptom categories. Table 3 shows the most significant correlations ($p<.01$ $\beta=.43$) among patients were between schema obsession and powerful others, OCD severity. In addition, significant but less robust correlations ($\beta=.32$ $p<0.01$) were found between repeating and powerful others locus of control.

Discussion

To our knowledge, this is the first study to investigate obsessive-compulsive symptom structure in patients with schema and locus of control. Present study demonstrate significantly association between locus of control, schema and obsessive compulsive symptom and this result Constance with study produced results That shows within the OCD group, our correlational analysis showed that the severity of overvalued ideas in OCD may be closely related to cognitive impairments in OCD, especially with respect to schema or cognitive functions (19).

In the research that to performed in Iran was found generally the findings of this research supported the results of previous studies on the relationship between dimensions of locus of control and mental health .In regard to the purpose dimensions of locus of control, and only depression and somatization. It also found a relationship between chance locus of control and depression, obsessive-compulsion

and somatization (20). Locus of control have an important role in cognitive approach There is a relationship between schema or beliefs and personal characteristic such as locus of control, problem solving and learning strategies (21).

The present study aimed to evaluate the impact of generalized beliefs about control (i.e., locus of control), schema attitudes and their interaction in the obsessive-compulsive disorder of patients in Iran., the findings of the present study indicated that schema related significantly to both total OCD symptom severity and also to the three subtypes of OCD symptoms, namely obsessive thinking, checking and repeating. Higher degree of obsessive-compulsivity was found to be associated with higher degree of schema attitudes. That is patients who had an increased sense of powerful others tended to report more OCD symptoms.

Barbara et al studied Levenson, internal (I) powerful others (P) and chance (C) locus of control scale with other anxiety disorder, they found specific pattern for some of diagnostic categories, on the basic of this research the obsessive compulsive patients had the lowest (P) and (C) scale as compared with other group whit anxiety disorder.(22). These results were inconstant with result of current present. Locus of control had only a main impact on obsessive thinking symptom score On the basis of the finding other earlier studies were conducted to investigate relationship between locus of control and anxiety, these study was found correlation between externality and anxiety disorder (23).

However, it is also important to state that although schema and powerful others significantly predicted all symptom dimensions of OCD.

There is some study that confirms result of this study for example studies were conducted to investigate the relationship between locus of control and anxiety. The distinction between state and trait anxiety led to the predictions that internal subjects show more state-anxiety than external subjects in 'luck' situations, whereas 'externals' show more state-anxiety under 'ability' situations. Externality was predicted to correlate positively with trait-anxiety (23).

Past researchers have found conflict relationship between schema and OCD, but present study has found relationship between schema and OCD and this result is consistent with finding of Foa et al (24) in their research they have found relation between thinking and cognitive style with OCD. Schema therapy significantly contribute to the cognitive-behavioral approach, This support the finding of previous studies in which strong correlation has been observed between cognition and OCD symptom(25) in addition to result of present study were consistent with research that found OCD patients were impaired in recognition accuracy and control on mental health.(26)

Conclusion

Schema and powerful locus of control are significantly correlated with OCD especially with obsessive disorder, That is high level of

schema grade and locus of control indicating a powerful others and chance was associated with higher obsessive thinking and OCD symptoms. Individuals with low schema score and high internal locus of control exhibited significantly better control on thinking than those with the opposite pattern as well as high powerful others and chance.

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Conflict of interest

None to declare

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Table 1: factor analyses and correlation between OCD and locus of control calculated by SPSS

Correlation Matrix

Correlation	O C D	repeating	aggression	checking	internal	others	chance	schema	
O C D	*								
repeating	.605								
aggression	.602	.273							
checking	.669	.395	.424						
internal	.118	.132	-.015	-.019					
others	.405	.253	.327	.435	.147				
chance	.236	.156	.155	.295	.072	.541			
schema	.530	.277	.484	.458	-.016	.317	.215	*	

p<.01 and p<.05

Table 2: Regression - Analyses on variables of locus of control and O C D as general

Locus of control O C D	internal		chance		powerful others	
	P.V	Beta	P.V	Beta	P.V	Beta
O C D	<0.9	B- 37	<0.1	B-- 45	<0.1	β - 30
Severity	<0.6	β-1	<0.1	B-57	<0.1	β - 23
Compulsion	<0.1	β-16	<0.1	β-52	<0.1	β- 25
obsession	<0.30	β-0.34	<0.1	β-52	<0.1	β- 30
schema	<0.32	β- 0.79	<0.1	β-45	>0.27	β-.092

P<.01 p<.05

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

Locus of control O C D	I		C		P	
	P.V	Beta	P.V	Beta	P.V	Beta
O C D	<0.45	β -15	<0.5	β 35	<0.1	β 40
Schema	<0.6	β -0.62	<0.88	β 0.16	<0.1	β 43
Severity ocd	<0.52	β -12	<0.19	β -32	<0.1	β 40

P value at level $p < .01$