



Quality of Life in Anxiety Disorders: A Comparison of Obsessive-Compulsive Disorder and Social Anxiety Disorder in Light of Demographic Variables in Saudi Arabia

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Abstract

Objective: The aim of this study is compared to the quality of life among patients with obsessive-compulsive disorder (OCD) and social anxiety disorder (SAD) in light of demographic variables.

Methods: A sample study of (41) patients with OCD patients and (50) patients with SAD, total sample of these study is (91) patient, Their distribution is (7) OCD and (5) SAD Clinic patients from King Fahd University Hospital in Al Khobar and (12) OCD and (11) SAD Clinic patients from Al Amal Complex for Mental Health in Dammam and (14) OCD and (23) SAD clinic patients from Psychiatric clinics in primary health care centers in Dammam and Al Khobar and (11) OCD and (8) SAD clinic patients from Abha Mental Health Hospital. The percentage of males and (51%) female (49%), and the average age was (48) years were evaluated using the Y-BOCS, FNE and QOL Scale.

Results: Quality of life among all patients with OCD and SAD is Low. Our study finding revealed that there are no statistically significant differences between patients of OCD and SAD in terms of quality of life. Our finding revealed that there are no statistically significant differences in the quality of life among patients with OCD depending on the gender, age, marital status and educational level.

Conclusion: The findings of these studies confirmed the impairment in quality of life among patients with OCD and SAD. In this current study, no statistically significant differences in the quality of life among patients with OCD and social phobia in all dimensional scale of quality of life and no statistically significant differences among patients with OCD or SAD due to the variables of gender, age, marital status and education was observed.

Keywords

Quality of Life; Anxiety Disorders; Obsessive-Compulsive; Social Anxiety; Gender; Age; Marital status; Educational level

Introduction

The Quality of Life (QOL) in individuals with anxiety disorders specifically is still in its infancy [1]. Research done till date, portrays

a consistent picture of anxiety disorders as conditions that markedly compromise (QOL) and psychosocial functioning in several functional domains [2]. There is growing recognition, for example, that obsessive-compulsive disorder (OCD) is a disabling disorder, associated with substantial morbidity and impaired (QOL) [3]. Many studies have shown that (OCD) is associated with moderate to severe interference with socializing, family relationships and ability to study, work, as well as with decreased self-esteem and suicidal thoughts [4].

Patients with the social anxiety disorder (SAD) are at an increased risk of social impairment and are associated with reduced work performance, decreased social interaction and possible more school problems during adolescence [1].

Quality of Life

Quality of Life (QOL) is a complex concept with multiple aspects (Figure 1), these aspects (usually referred to as domains or dimensions) can include: cognitive functioning; emotional functioning; psychological well-being; general health; physical functioning; physical symptoms and toxicity; role functioning; sexual functioning; social well-being and functioning; and spiritual/existential issues [5].

The World Health Organization (WHO) defines "An individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad-ranging concept affecting in a complex way by the person's physical health, psychological state, and level of independence, social relationships and their relationships to salient features of their environment".

Anxiety disorders

Anxiety disorders include disorders that share features of excessive fear and anxiety and related behavioral disturbances. Fear is the emotional response to real or perceived imminent threat, whereas anxiety is anticipation of future threat. Obviously, these two states overlap, but they also differ, with fear more often associated with surges of autonomic arousal necessary for fight or flight, thoughts of immediate danger and escape behaviors. Anxiety is more often associated with muscle tension and vigilance in preparation for future danger and cautious or avoidant behaviors. Sometimes the level of fear or anxiety is reduced by pervasive avoidance behaviors [6]. Diminished QOL has been well documented across a broad range of anxiety disorders including panic disorder, social phobia, generalized anxiety disorder and posttraumatic stress disorder [7].

Obsessive-Compulsive Disorder (OCD)

OCD is an intriguing and often debilitating syndrome characterized by the presence of two distinct phenomena: obsessions and compulsions. Obsessions are intrusive, recurrent, unwanted ideas, thoughts or impulses that are difficult to dismiss despite their disturbing nature. Compulsions are repetitive behaviors, either observable or mental, that are intended to reduce the anxiety exhibited by obsessions. Obsessions or compulsions that clearly interfere with functioning and/or cause significant distress are the hallmarks of OCD [8].

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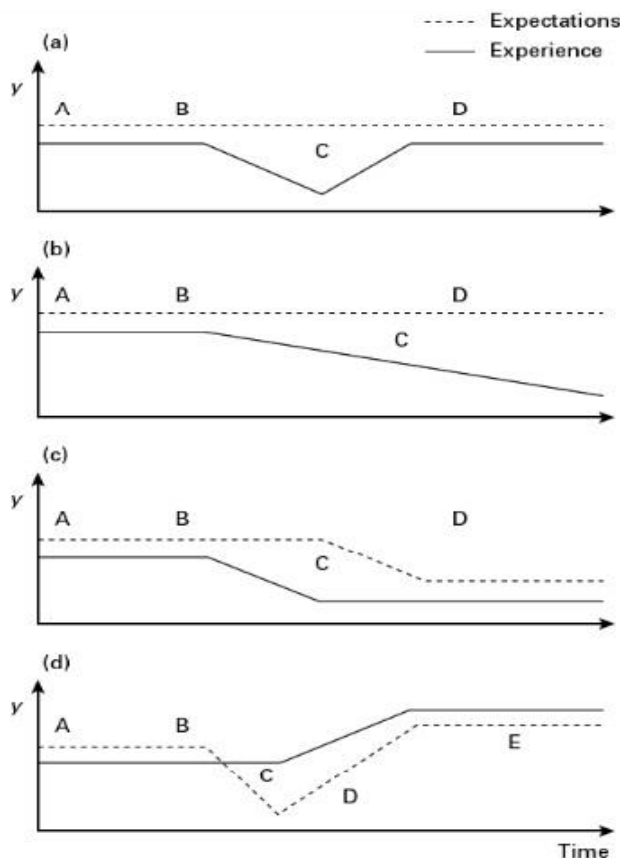


Figure 1: Four models of back pain occurring in a 35 year old woman at different times (A-E). In the figure (a) shows an acute episode; (b) shows a chronic episode; (c) shows her acceptance of a chronic condition; and (d) shows different effects of expectations and experience over time.

Social Anxiety Disorder (SAD)

Social anxiety disorder (SAD) was defined as “Clinically significant anxiety provoked by exposure to certain types of social or performance situations often leading to avoidance behavior [6]. Socially anxious individuals fear and avoid a variety of situations including social performance and interactions. These situations may feature eating or writing in public, initiating social conversations, going to social events, meeting strangers dating, or interaction with authority figures” [9].

Methods

Participants

The study population in this research is of OCD and SAD patients in Saudi Arabia, consisting of three specialized hospitals in psychiatry and five psychiatric clinics in primary health care centers in Dammam and Al Khobar, where it was a random sample by psychiatry clinics at King Fahd University Hospital in Al Khobar and Alamal Complex for Mental Health in Dammam and psychiatric clinics in primary health care centers in Dammam and Khobar and mental health hospital in Abha.

Where the sample was representative of the study population (103) patients from the outpatients Psychiatric Clinics of King Fahd University Hospital, Alamal Complex for Mental Health in Dammam, Abha Mental Health Hospital and Psychiatric clinics in

primary health care centers in Dammam and Al Khobar, ranging in age between (18-60) years Female and Male with diagnosed OCD and SAD according to Psychiatric diagnosis and Psychological assessment by Obsessive Compulsive Scale and Fear of Negative Evaluation Scale.

Their distribution is (7) OCD and (5) SAD Clinic patients from King Fahd University Hospital in Al Khobar and (12) OCD and (11) SAD Clinic patients from Al Amal Complex for Mental Health in Dammam and (14) OCD and (23) SAD clinic patients from Psychiatric clinics in primary health care centers in Dammam and Al Khobar and (11) OCD and (8) SAD clinic patients from Abha Mental Health Hospital (Table 1). The sample was distributed from OCD and SAD patients in the light of demographic variables as described in (Table 2).

After the application of the criteria correct sample scores on a scale of OCD and SAD were excluded from (9) patients with OCD do not getting classified within the scores standard OCD patients and (3) patients with SAD not getting classified within the standard score OCD patients (Table 3) Where it became a sample study of (41) patients with OCD patients and (50) patients with SAD. Total sample of these study is (91) patient.

Study design

This study is based on the approach of descriptive statistics, aims to study the differences in QOL among patient with OCD and SAD patients in the light of some of the demographic variables. In this

Table 1: Shows the distribution of places the sample collection.

Place	OCD	SAD
King Fahd University Hospital	7	5
Al Amal Complex for Mental Health in Dammam	12	11
Psychiatric clinics in primary health care centers in Dammam and Al Khobar	14	23
Abha Mental Health Hospital	11	8
Total	41	50

Table 2: Shows the distribution of the sample on demographic variables.

Demographic variables	Samples	N	Total	
Gender	SAD	Male	37	53
		Female	16	
	OCD	Male	16	50
		Female	34	
Age	SAD	18-37	40	53
		38-57	12	
		58-up	1	
	OCD	18-37	38	50
		38-57	11	
		58-up	1	
Marital	SAD	Single	25	53
		Married	27	
		Divorced	1	
	OCD	Single	29	50
		Married	20	
		Divorced	1	
Education	SAD	Illiterate	0	53
		Primary	3	
		Intermediate	8	
		Secondary	22	
		University	20	
	OCD	Illiterate	3	50
		Primary	6	
		Intermediate	4	
		Secondary	21	

Table 3: Cases of excluded after the application of Standard.

Group	Original number	Excluded	Study sample
OCD	50	9	41
SAD	53	3	50

study, two independent groups and a subsidiary variable in which demographic variables (age, gender, marital status and education) were taken.

It was evident from the results of descriptive statistics non normal distribution of the sample and the use of statistical Nonparametric Test for statistical significance of the differences among patients with OCD and SAD in QOL, as well as for the statistical significance of the differences in quality of life among patients with OCD due to age, gender, marital status and education. And depending on access to the statistical significance of the differences in QOL among patients with SAD due to age, gender, marital status and education, the researcher used statistical methods Nonparametric to detect differences between the two independent groups, such as: (Mann-Whitney test, Kruskal test, Casper test and Test "T."). The researcher also used a statistical method, Multi Analysis of Variance (MANOVA), to obtain the statistical significance of the differences in QOL among patients with OCD and SAD in the light of some of the demographic variables.

Finally, the researcher based on the statistical significance of the mean differences to test the validity of hypotheses of this study.

Procedure

We obtained approval to start the sample collection from Department of Psychiatry, Faculty of Medicine, University of Dammam, Psychiatric clinics at King Fahd University Hospital in Al Khobar and Alamal Complex for Mental Health in Dammam and Psychiatric clinics in primary health care centers in Dammam and Khobar, and Mental health hospital in Abha. We distributed study tools to psychiatrists and a psychologist and trained on the application method and the evaluation of the study sample.

Complete (50) patients OCD answer all study tools also completed (53) patient SAD response on all tools of the study under the supervision of a psychiatrist or psychologist and was visiting researcher psychiatric clinics, hospitals, day in each week to King Fahd University Hospital in Al Khobar and Alamal Complex for

Mental Health in Dammam and psychiatric clinics in primary health care centers in Dammam and Khobar.

Then collect a sample of the remaining study of Mental Health Hospital under the supervision of a researcher in Abha.

Materials

Obsessive Compulsive Scale

The Yale-Brown Obsessive Compulsive Scale (Y-BOCS) is known as 67-item scale, used to measure the OCD symptoms. The scale was translated into the Arabic language by the Department of Psychiatry, Ain Shams University in Cairo and has been used in several studies since 1994.

- **Reliability**

The researcher calculates the Reliability of the scale where it reached: (.783)

- **Validity**

The researcher used exploratory factor analysis and the results were as follows:

The Table 4 indicates previous existence of two factors explained 60.02% of the total variance and the following Table shows the components of Matrix for the OCD Scale: The Table 5 indicates that all Previous statements are on a saturated first factor, while two statements appeared found positive on a saturated two factors and therefore it is not statistically significant and this indicates that the ten statements represent one factor called obsessive compulsive scale.

Fear of Negative Evaluation Scale (FNE)

The Fear of Negative Evaluation Scale (FNE) is a 30-item, self-rated scale used to measure SAD. The FNE was developed by David

Watson and Ronald Friend. Each item on the FNE is a statement about some aspect of social anxiety. You must decide whether each statement is true or false for you personally. If the choice is difficult, you are asked to choose the one that is slightly more applicable based on how you feel at the moment. You are asked to answer based on your first reaction and not spend too long on any item.

- **Reliability**

The researcher calculates the Reliability of the scale where it reached: (.831)

- **Validity**

The researcher calculates the correlation coefficient between the total score of the scale and the degree of each statement and confined correlation coefficients between (30-721) and all of them were is statistically significant, which means that all the statements associated degree with the total score of the scale; this is called Validity of internal consistency.

Quality of life Scale

The World Health Organization Quality of Life (WHOQOL) project was initiated in 1991. The aim was to develop an international cross-culturally comparable quality of life assessment instrument. It assesses the individual's perceptions in the context of their culture and value systems, and their personal goals, standards and concerns. The WHOQOL-BREF instrument comprises 26 items, which measure the following broad domains: physical health, psychological health, social relationships and environment.

- **Reliability:** The researcher calculates the Reliability of the scale where it reached (see Table 6):

- **Validity:** The researcher used exploratory factor analysis dimensions of scale and the results were as follows:

Table 4: Total Variance Explained for the Obsessive Compulsive Scale.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.695	46.949	46.949	4.695	46.949	46.949
2	1.307	13.074	60.023	1.307	13.074	60.023
3	.974	9.738	69.761			
4	.800	8.003	77.764			
5	.652	6.521	84.284			
6	.462	4.619	88.903			
7	.411	4.109	93.013			
8	.348	3.483	96.496			
9	.219	2.189	98.685			
10	.132	1.315	100.00			

Table 5: Component Matrix for the Obsessive Compulsive Scale.

Items	Component	
	1	2
1	.803	
2	.801	
3	.782	
4	.731	
5	.698	
6	.669	
7	.655	.558
8	.613	
9	.548	-.470
10	.471	.717

The Table 7, Table 8 indicates previous existence of one factor explained 62.6% of the total variance; this means that the four dimensions is located behind one target factor.

Results

The first hypothesis

The level of QOL among all patients with OCD and SAD is Low. To test the hypothesis, the researcher divided the levels of the distribution of scores on each dimension as follows: Table 9. The Table 10 calculates the averages of patients with OCD and SAD on QOL results were as follows: Table 11 indicates that the level of QOL among patients with OCD and SAD was low.

The second hypothesis

No statistically significant differences between patients among OCD and SAD in terms of quality of life. To test the validity of this hypothesis, the researcher used, T-test for two independent samples, and the results were as follows: Table 12 indicates that there are no differences among patients with OCD disorder and SAD in the QOL and this proves the second hypothesis in this study.

The third hypothesis

There were statistically significant differences in the QOL among patients with OCD according to the gender, age, marital status and educational level. To test the validity of this hypothesis, the researcher used a Multi Analysis of Variance (MANOVA) and the results were as follows: Table 13 indicates that there are no differences in the QOL in patients with OCD due to the Gender and age, marital status and education.

Fourth hypothesis

There were statistically significant differences in the quality of life in patients with SAD according to the gender, age, marital status and educational level. To test the validity of this hypothesis, the researcher used a Multi Analysis of Variance (MANOVA) and the results were as follows: Table 14 indicates that there are no differences in the QOL in patients with SAD due to the Gender and age, marital status and education.

Discussion

The main objective of this study showed that the level of QOL among all patients with OCD and SAD is Low, and that are consisted

Table 6: Reliability of the Quality of life Scale.

Dimension	Reliability
Physical Health	.730
Psychological Health	.851
Social Relationship	.693
Environment	.832

Table 7: Total Variance Explained for the Quality of life Scale.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.504	62.6	62.603	2.5	62.6	2.5
2	.887	22.165	84.768			
3	.408	10.208	94.976			
4	0.201	5.024	100			

Table 8: Component Matrix for the Quality of life Scale.

Dimensions	Component
	1
4	.899
1	.786
2	.761
3	.707

Table 9: The distribution of scores on all dimension of quality of life.

Dimension	Very low	Low	Moderate	High	Very High
Physical Health	7-12.6	12.6-18.2	18.2-23.8	23.8-28.4	28.8-35
Psychological Health	6-10.8	10.8-15.6	15.6-20.4	20.4-25.2	25.2-30
Social Relationship	3-5.4	5.4-7.8	7.8-10.2	10.2-12.6	12.6-15
Environment	8-14.4	14.4-20.8	20.8-27.2	27.2- 33.6	33.6-40

Table 10: Averages of patients with OCD in the dimensions of quality of life.

Dimension	N	Mean	Std. Deviation	Level
Physical Health	41	12.7	5.82	Low
Psychological Health	41	11.17	5.63	Low
Social Relationship	41	6.9	5.93	Low
Environment	41	17.24	7.72	Low

Table 11: Averages of patients with social anxiety in the dimensions of quality of life.

Dimension	N	Mean	Std. Deviation	Level
Physical Health	50	15.02	10.01	Low
Psychological Health	50	12.38	5.20	Low
Social Relationship	50	6.42	3.88	Low
Environment	50	17.84	11.99	Low

Table 12: Test results "T" of the differences between patients with obsessive-compulsive disorder and social anxiety on quality of life.

Dimension	Group	N	Mean	Std. Deviation	Std. Error Mean	T	P. Value	95% Confidence interval
Physical Health	OCD	41	12.7	5.82	.9090	1.33	Ns	-5.87 to 1.15
	SAD	50	15.02	10.01	1.41			
Psychological Health	OCD	41	11.17	5.63	.8799	1.06	Ns	-3.47 to 1.05
	SAD	50	12.38	5.20	.7367			
Social Relationship	OCD	41	6.9	5.93	.9273	0.44	Ns	-1.59 to 2.51
	SAD	50	6.42	3.9	.5496			
Environment	OCD	41	17.24	7.72	1.207	0.27	Ns	-4.90 to 3.71
	SAD	50	17.84	11.99	1.695			

Table 13: The results of analysis of variance of the differences in the quality of life in the light of demographic variables in patients with obsessive-compulsive disorder.

Demographic variables	Dimension	Type III sum of Squares	df	Mean Square	F	Sig.
Gender	Physical H.	37.34	1	37.34	1.24	0.273
	Psych. H.	31.74	1	31.74	0.981	0.33
	Social R.	26.54	1	26.54	0.697	0.41
	Environment	0.003	1	0.003	0	0.99
Age	Physical H.	17.32	2	8.66	0.289	0.751
	Psych. H.	44.3	2	22.152	0.684	0.512
	Social R.	40.28	2	20.14	0.529	0.594
	Environment	50.54	2	25.27	0.392	0.679
Marital	Physical H.	3.003	2	1.5	0.05	0.951
	Psych. H.	35.22	2	17.61	0.544	0.586
	Social R.	35.87	2	17.93	0.471	0.629
	Environment	32.48	2	16.24	0.252	0.779
Education	Physical H.	323.68	5	64.73	2.163	0.085
	Psych. H.	79.635	5	15.92	0.492	0.779
	Social R.	164.493	5	32.899	0.864	0.516
	Environment	192.67	5	38.53	0.597	0.702
Error	Physical H.	898.07	30	29.93		
	Psych. H.	970.93	30	32.36		
	Social R.	1141.71	30	38.05		
	Environment	1935.73	30	64.52		

of studies [1,10-12]. To extent of impairment due to OCD and SAD appears to be similar across the QOL. Our study finding revealed that there are no statistically significant differences among patients with OCD and SAD in terms of QOL and that are Consistent with studies [1,10,12]. Also, our finding revealed that there are no statistically significant differences in the QOL among patients with OCD according to the gender, age, marital status and educational level, it's consistent with studies [12,13-16]. The results of this study showed no statistically significant differences in the QOL among patients with SAD due to the Gender and age, marital status and education, and the researcher did not find studies on the QOL differences among patients with SAD in light of some demographic variables at the moment [16-24].

Recommendation

Based on the results of this study, the following are some

important recommendation to apply:

- A. This study recommends attention to determining the level of QOL for patients with OCD and SAD during the clinical interview or psychological treatment for the following:
 - To determine the level of QOL among patients with OCD and social anxiety.
 - To identify weaknesses in the QOL for patients and work on them, may be the reasons is the turbulence or disruption in the continuity of a patient's life factors.
- B. Promote the concept of QOL in psychiatric clinics to have an impact on the lives of OCD and SAD patients, such as psychological education about the importance of QOL and increase the level of well-being.

Table 14: The results of analysis of variance of the differences in the quality of life in the light of demographic variables in patients with social anxiety disorder.

Demographic variables	Dimension	Type III sum of Squares	df	Mean Square	F	Sig.
Gender	Physical H.	20.38	1	20.38	0.183	0.671
	Psych. H.	1.65	1	1.65	0.057	0.813
	Social R.	21.05	1	21.05	1.285	0.263
Age	Environment	0.467	1	0.467	0.003	0.957
	Physical H.	101	2	50.5	0.454	0.638
	Psych. H.	30.6	2	15.3	0.526	0.595
	Social R.	3.7	2	1.84	0.113	0.893
Marital	Environment	21.62	2	10.81	0.069	0.934
	Physical H.	118.32	2	59.16	0.532	0.591
	Psych. H.	89.66	2	44.83	1.541	0.226
	Social R.	29.72	2	14.86	0.907	0.412
Education	Environment	81.23	2	40.61	0.259	0.773
	Physical H.	89.39	3	29.79	0.268	0.848
	Psych. H.	6.93	3	2.31	0.079	0.971
	Social R.	37.57	3	12.52	0.765	0.52
Error	Environment	495.22	3	165.07	1.052	0.38
	Physical H.	4558.98	41	111.19		
	Psych. H.	1192.92	41	29.096		
	Social R.	671.69	41	16.38		
	Environment	6434.34	41	156.93		

C. The involvement of OCD and SAD patients in improving the QOL programs while receiving psychiatric treatment.

Future research is needed to address the following suggestions:

- A. Study the relationship to improve the QOL level during cognitive behavioral therapy with patients OCD and SAD.
- B. Further studies on the QOL in patients with SAD and compared with each other and between patients with psychosis and affective disorders.

Conclusion

The result of this study confirmed the impairment of QOL among patients with OCD and SAD. Found in this current study, no statistically significant differences in the QOL among patients with OCD and SAD in all dimensions scale of QOL with no significant differences among patients with OCD or SAD due to the variables of gender, age, marital status and education.

References

1. Lochner , Christine, Modise Mogotsi, Pieter L. du Toit, Debra Kammer, Dana J. Niehaus et al. (2003) Quality of Life in Anxiety Disorders: A Comparison of Obsessive-Compulsive Disorder, Social Anxiety Disorder, and Panic Disorder. *Psychopathology* 36: 255-262.
2. Mendlowicz MV, Stein MB (2000) Quality of Life in Individuals With Anxiety Disorders. *The Am J Psychiatry* 157: 669-682.
3. Bobes J, González MP, Bascarán MT, Arango C, Sáiz PA, et al. (2001) Quality of life and disability in patients with obsessive compulsive disorder. *Eur Psychiatry* 16: 239-245.
4. Hollander E, Kwon JH, Stein DJ, Broatch J, Rowland CT et.al (1996) Obsessive-compulsive and spectrum disorders: overview and quality of life issues. *J Clin Psychiatry* 57: 3-6.
5. Walters S J (2009) Quality of Life Outcomes in Clinical Trials and Health-Care Evaluation: A Practical Guide to Analysis and Interpretation. John Wiley & Sons.
6. American Psychiatric Association (2013) Diagnostic and statistical manual of mental disorders (DSM-5®). American Psychiatric Pub.

7. Barrera, Terri L, Norton PJ (2009) Quality of Life Impairment in Generalized Anxiety Disorder, Social Phobia, and Panic Disorder. *J Anxiety Disord* 23: 1086-1090.
8. Meaney MJ , LeDoux JE , Liebowitz ML (2008) Neurobiology of Anxiety Disorders. John Wiley & Sons.
9. Caballo VE, Salazar IC, Iurrtia MJ, Arias B, Hofmann SG (2012) The multidimensional nature and multicultural validity of a new measure of social anxiety: the Social Anxiety Questionnaire for Adults. *Behav Ther* 43: 313-328.
10. Olatunji BO, Cisler JM, Tolin DF (2007) Quality of life in the anxiety disorders: A meta-analytic review. *Clin Psychol Rev* 27: 572-581.
11. Cramer V, Torgersen S, Kringlen E (2005) Quality of life and anxiety disorders: a population study. *J Nerv Ment Dis* 193: 196-202.
12. Rapaport MH, Clary C, Fayyad R, Endicott J (2005) Quality of Life Impairment in Depressive and Anxiety Disorders. *Am J Psychiatry* 162: 1171-1178.
13. Hauschildt M , Jelinek L, Randjbar S, Hottenrott B, Moritz S (2010) Generic and illness-specific quality of life in obsessive-compulsive disorder. *Behav Cogn Psychother* 38: 417-436.
14. Albert U, Maina G, Bogetto F, Chiarle A, Mataix-Cols D (2010) Clinical predictors of health-related quality of life in obsessive-compulsive disorder. *Compr Psychiatry* 51: 193-200.
15. Eisen JL, Mancebo MA, Pagano ME , Stouf R, Rasmussen SA, et al. (2006) Impact of obsessive-compulsive disorder on quality of life. *Compr Psychiatry* 47: 270-275.
16. Rodriguez-Salgado B, Dolengevich-Segal H, Arrojo-Romero M, Castelli-Candia P, Navio-Acosta M, et al. (2006) Perceived quality of life in obsessive-compulsive disorder: related factors. *BMC Psychiatry* 6: 20.
17. Clark DA, Gonzalez Adriana del Palacio (2014) Obsessive-Compulsive Disorder. John Wiley & Sons.
18. ClarkDA, Simos Gregoris (2013) Obsessive-Compulsive Spectrum Disorders: Diagnosis, Theory, and Treatment. A John Wiley & Sons.
19. Clark DM , Ehlers A, Hackmann A, McManus F, Fennell M et. al. (2006) Cognitive Therapy Versus Exposure and Applied Relaxation in Social Phobia: A Randomized Controlled Trial. *J Consult Clin Psychol* 74: 568-578.
20. Eng Winnie, Heimberg Richard G (2007) Social Anxiety Disorder. John Wiley & Sons.

21. Gregoris Simos, Hofmann SG (2007) CBT for Anxiety Disorders. A John Wiley & Sons.
22. Hofmann SG, DiBartolo, Patricia M (2010) Social Anxiety: Clinical, Developmental, and Social Perspectives Elsevier Inc.
23. Hofmann SG, Anke Ehlers, Roth WT (1995) Conditioning theory: a model for the etiology of public speaking anxiety. Behav Res Ther 33: 567-571.
24. Hofmann SG, Aka BT, Alejandra Piquer (2014) Social Anxiety. John Wiley & Sons.

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