

Influence of Personality Traits on Sexual Functioning of Patients Suffering from Schizophrenia or Depression

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ABSTRACT

Aim of this research was to establish effects and influence of personality traits on sexual functioning of schizophrenic and depressive patients, compared to healthy individuals. 300 participants were included in this research. For patients suffering from schizophrenia it was established that the more they are open to experience and the less they are neurotic their sexual drive is stronger. For patients suffering from depression it was established that the more they are open to experience and conscientious and the less they are agreeable their sexual drive is stronger. Furthermore, higher openness is a significant predictor for easier sexual arousal and the more those patients are conscientious and the less they are agreeable easier is for them to achieve orgasms. Personality traits proved to be significant predictors of sexual functioning in schizophrenic and depressive patients, but not in healthy individuals.

Key words: schizophrenia, depression, personality traits, sexual functioning

Introduction

Majority of psychiatric disorders are a result of a complex interplay and an array of different interactions between biological (B), psychological (P), social (S) and developmental factors¹. This research focused on how personality traits influence sexual functioning, which is also a result of complex interplay between biological, psychological and social factors and is subject to change during one's life.

Human beings share many characteristics, but neither one of us is genetically the same as someone other. Here lies the root of all problems when it comes to classifying people into different types and categories. Personality implies something that is characteristic to a specific person and it manifests through behavior and reactions of that person, his/her relationships with other people and him/herself, as well as impressions they leave on other people around them².

Although there is no consensus about the role of personality and its theoretic model, psychology of personality grouped personality traits into five basic dimensions, which was substantiated by numerous researches with

various questionnaires, self-evaluation forms and observations³. Therefore, five-factor model of personality was constructed and is now widely used. It includes five dimensions: neuroticism, extraversion-introversion, openness to experience, agreeableness and conscientiousness. This theory represents a comprehensive systematization of personality traits, which through these five dimensions encompass normal and pathological into a single and unique area of personality⁴.

Research papers that directly deal with the issue of personality and sexual functioning in patients suffering from schizophrenia or depression are very few and far between. Therefore, goal of this research was to establish how personality traits influence sexual functioning of patients suffering from schizophrenia or depression, as well as healthy individuals.

Subjects and Methods

This research was conducted on 100 patients suffering from schizophrenia, 100 patients suffering from de-

pression and 100 healthy individuals. Patients suffering from schizophrenia or depression satisfied the criteria for schizophrenia or depression according to DSM-IV classification⁵. All three groups of participants completed NEO-PI personality questionnaire⁶ and Sexual experiences scale (Arizona)⁷.

One-way analysis of variances was used to test the differences between three groups of participants regarding dimensions of personality and sexual dysfunctions. Furthermore, Pearson's coefficient of correlation was used to test the connection between personality traits and sexual dysfunctions within each group of participants. Regression analyses were used to test how personality traits

could be used to predict sexual dysfunctions. Finally, path analyses were used to test some models of connections between personality traits and sexual dysfunctions.

Results

Results revealed a number of differences regarding sexual experience between the three groups of participants. Patients suffering from depression exhibit biggest number of sexual dysfunctions, compared to patients suffering from schizophrenia and healthy individuals. There is no difference between patients suffering from schizophrenia and healthy individuals regarding achiev-

TABLE 1
DIFFERENCES BETWEEN PATIENTS SUFFERING FROM SCHIZOPHRENIA OR DEPRESSION AND HEALTHY INDIVIDUALS ON THE SEXUAL EXPERIENCES SCALE (RESULTS SHOWN AS MULTIPLE CORRELATIONS – LSD TEST)

Dependent variable	(I) group	(J) group	Difference between arithmetic means (I–J)	Standard error	P	95% safety interval	
						Bottom threshold	Upper threshold
1. How strong is your sex drive?	Schizophrenia	Depression	-0.614*	0.170	0.000	-0.95	-0.28
		Healthy	0.964*	0.170	0.000	0.63	1.30
	Depression	Schizophrenia	0.614*	0.170	0.000	0.28	0.95
		Healthy	1.578*	0.172	0.000	1.24	1.92
	Healthy	Schizophrenia	-0.964*	0.170	0.000	-1.30	-0.63
		Depression	-1.578*	0.172	0.000	-1.92	-1.24
2. How easily are you sexually aroused?	Schizophrenia	Depression	-0.518*	0.166	0.002	-0.84	-0.19
		Healthy	0.885*	0.165	0.000	0.56	1.21
	Depression	Schizophrenia	0.518*	0.166	0.002	0.19	0.84
		Healthy	1.404*	0.167	0.000	1.08	1.73
	Healthy	Schizophrenia	-0.885*	0.165	0.000	-1.21	-0.56
		Depression	-1.404*	0.167	0.000	-1.73	-1.08
3. Can you easily get and keep an erection?	Schizophrenia	Depression	-1.026*	0.263	0.000	-1.54	-0.51
		Healthy	0.383*	0.247	0.123	-0.11	0.87
	Depression	Schizophrenia	1.026*	0.263	0.000	0.51	1.54
		Healthy	1.409*	0.214	0.000	0.99	1.83
	Healthy	Schizophrenia	-0.383*	0.247	0.123	-0.87	0.11
		Depression	-1.409*	0.214	0.000	-1.83	-0.99
4. How easily can you reach an orgasm?	Schizophrenia	Depression	-1.084*	0.238	0.000	-1.56	-0.61
		Healthy	0.412	0.224	0.067	-0.03	0.85
	Depression	Schizophrenia	1.084*	0.238	0.000	0.61	1.56
		Healthy	1.497*	0.198	0.000	1.11	1.89
	Healthy	Schizophrenia	-0.412	0.224	0.067	-0.85	0.03
		Depression	-1.497*	0.198	0.000	-1.89	-1.11
5. Are your orgasms satisfying?	Schizophrenia	Depression	-0.839*	0.234	0.000	-1.30	-0.38
		Healthy	0.832*	0.221	0.000	0.40	1.27
	Depression	Schizophrenia	0.839*	0.234	0.000	0.38	1.30
		Healthy	1.671*	0.192	0.000	1.29	2.05
	Healthy	Schizophrenia	-0.832*	0.221	0.000	-1.27	-0.40
		Depression	-1.671*	0.192	0.000	-2.05	-1.29

*. Significant difference between arithmetic means, on the level of 0.05

ing and sustaining erection and orgasms, but they differ regarding the strength of sexual drive, satisfaction with orgasms and easiness of achieving sexual arousal, where patients suffering from schizophrenia score lower than healthy individuals (Table 1).

Personality traits influence sexual experience in patients suffering from schizophrenia. Stronger sexual drive and easier sexual arousal were observed in those patients that exhibited higher degrees of extraversion, openness to experience, agreeableness and conscientiousness and lower neuroticism (Table 2).

Personality traits also influence sexual functioning in patients suffering from depression. Higher extraversion, openness to experience and conscientiousness are significantly correlated with fewer sexual dysfunctions, while higher neuroticism is significantly correlated with of- tener and more pronounced sexual dysfunctions. Agree- ableness was not found to be correlated with sexual dysfunctions among patients suffering from depression (Table 3).

In healthy individuals only two significant connec- tions were established: higher extraversion is connected to easier sexual arousal and higher neuroticism is con- nected with lower satisfaction with orgasms (Table 4).

Furthermore, results show that personality traits are significant predictors of sexual experiences in patients suffering from schizophrenia. Higher openness and lower neuroticism predict stronger sexual drive. Person- ality traits also predict sexual arousal, but none of the personality traits are statistically significant predictors.

Results also show that personality traits cannot be used as predictors for the remaining three sexual experiences (Table 5).

In patients suffering from depression, personality traits are significant predictors for all of the researched sexual experiences. Higher openness and conscientiousness and lower agreeableness predict stronger sexual drive. Higher openness is connected with easier arousal. Furthermore, higher conscientiousness and lower agreeableness are connected with easier achievement of orgasms. Those who perceive themselves more conscientious rate their orgasms more satisfying (Table 6).

Among healthy individuals personality traits are not significant predictors of sexual experience. Therefore, we have not used tables to present those results.

Discussion

It is interesting to discuss differences between the three groups of participants regarding sexual dysfunc- tions, especially because there are scientific papers that deal with this specific issue only in healthy population. To our knowledge, there are very few research papers that have dealt in this manner with sexual dysfunctions in mental health patients. Mental illnesses, as well as medications used to treat them, play an important role in pathogenesis of sexual dysfunctions⁸.

Results of this research point towards the fact that patients suffering from depression have more sexual dysfunctions (diminished libido, difficulties with achiev-

TABLE 2
RELATIONSHIP BETWEEN PERSONALITY TRAITS AND SEXUAL EXPERIENCES IN PATIENTS SUFFERING FROM SCHIZOPHRENIA (RESULTS SHOWN AS CORRELATION OF SEXUAL EXPERIENCES SCALE AND PERSONALITY TRAITS)

Sexual experiences scale		Personality traits				
		Extra- version	Agreeable- ness	Conscientious- ness	Neuroticism	Openness
1. How strong is your sex drive?	Pearson's coefficient of correlation	-0.432**	-0.230*	-0.386**	0.368**	-0.441**
		0.000	0.022	0.000	0.000	0.000
	Number	100	100	100	100	100
2. How easily are you sexually aroused?	Pearson's coefficient of correlation	-0.308**	-0.351**	-0.405**	0.321**	-0.365**
		0.002	0.000	0.000	0.001	0.000
	Number	99	99	99	99	99
3. Can you easily get and keep an erection?	Pearson's coefficient of correlation	-0.070	-0.034	-0.237	0.113	0.019
		0.701	0.850	0.184	0.530	0.915
	Number	33	33	33	33	33
4. How easily can you reach an orgasm?	Pearson's coefficient of correlation	0.027	-0.183	0.003	0.146	-0.066
		0.877	0.285	0.986	0.394	0.701
	Number	36	36	36	36	36
5. Are your orgasms satisfying?	Pearson's coefficient of correlation	-0.175	-0.246	-0.084	0.019	-0.248
		0.321	0.160	0.636	0.914	0.158
	Number	34	34	34	34	34

** Correlation is significant on the level of 0.01 (two way)

*. Correlation is significant on the level of 0.05 (two way)

TABLE 3
RELATIONSHIP BETWEEN PERSONALITY TRAITS AND SEXUAL EXPERIENCES IN PATIENTS SUFFERING FROM DEPRESSION
(RESULTS SHOWN AS CORRELATION OF SEXUAL EXPERIENCES SCALE AND PERSONALITY TRAITS)

Sexual experiences scale		Personality traits				
		Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
1. How strong is your sex drive?	Pearson's coefficient of correlation	-0.217*	-0.019	-0.313**	0.280**	-0.402**
	Number	0.035	0.858	0.002	0.006	0.000
2. How easily are you sexually aroused?	Pearson's coefficient of correlation	-0.211*	-0.040	-0.294**	0.158	-0.426**
	Number	0.040	0.702	0.004	0.126	0.000
3. Can you easily get and keep an erection?	Pearson's coefficient of correlation	-0.264	-0.047	-0.269	0.320*	-0.287*
	Number	0.059	0.740	0.054	0.021	0.039
4. How easily can you reach an orgasm?	Pearson's coefficient of correlation	-0.332*	0.133	-0.340*	0.270	-0.344*
	Number	0.015	0.343	0.013	0.051	0.012
5. Are your orgasms satisfying?	Pearson's coefficient of correlation	-0.297*	-0.231	-0.432**	0.291*	-0.335*
	Number	0.031	0.096	0.001	0.034	0.014

** . Correlation is significant on the level of 0.01 (two way)

* . Correlation is significant on the level of 0.05 (two way)

TABLE 4
RELATIONSHIP BETWEEN PERSONALITY TRAITS AND SEXUAL EXPERIENCES IN HEALTHY INDIVIDUALS (RESULTS SHOWN AS CORRELATION OF SEXUAL EXPERIENCES SCALE AND PERSONALITY TRAITS)

Sexual experiences scale		Personality traits				
		Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
1. How strong is your sex drive?	Pearson's coefficient of correlation	-0.198	-0.019	-0.010	0.163	-0.162
	Number	0.053	0.851	0.926	0.113	0.115
2. How easily are you sexually aroused?	Pearson's coefficient of correlation	-0.217*	-0.019	-0.038	0.102	-0.124
	Number	0.033	0.855	0.712	0.321	0.226
3. Can you easily get and keep an erection?	Pearson's coefficient of correlation	-0.049	-0.059	-0.109	0.102	-0.114
	Number	0.677	0.620	0.354	0.387	0.333
4. How easily can you reach an orgasm?	Pearson's coefficient of correlation	-0.127	0.003	0.004	0.156	-0.095
	Number	0.276	0.977	0.975	181	0.420
5. Are your orgasms satisfying?	Pearson's coefficient of correlation	-0.172	-0.150	-0.181	0.229*	-0.219
	Number	0.144	0.202	0.123	0.050	0.061

* . Correlation is significant on the level of 0.05 (two way)

ing sexual arousal and lower satisfaction with orgasms) than patients suffering from schizophrenia and healthy individuals. On the other hand, patients suffering from

schizophrenia have more sexual dysfunctions than healthy individuals, which has already been substantiated by other researches⁹. Sexual dysfunctions in pa-

TABLE 5

RELATIONSHIP BETWEEN PERSONALITY TRAITS AND SEXUAL EXPERIENCES IN PATIENTS SUFFERING FROM SCHIZOPHRENIA (RESULTS SHOWN AS REGRESSION ANALYSIS OF SEXUAL EXPERIENCES SCALE AS DEPENDENT VARIABLES AND PERSONALITY TRAITS; ONLY STATISTICALLY SIGNIFICANT PREDICTORS ARE SHOWN)

How strong is your sex drive?				
independent variables	R	R ²	Ratio	Beta
Openness	0.52	0.27	7.11***	-0.35*
Neuroticism				0.24*
How easily are you sexually aroused?				
independent variables	R	R ²	Ratio	Beta
	0.46	0.21	5.01***	
Can you easily get and keep an erection?				
independent variables	R	R ²	Ratio	Beta
	0.27	0.07	0.41	
How easily can you reach an orgasm?				
independent variables	R	R ²	Ratio	Beta
	0.33	0.11	0.74	
Are your orgasms satisfying?				
independent variables	R	R ²	Ratio	Beta
	0.28	0.08	0.49	

*** p<0.001; ** p<0.01; * p<0.05

tients suffering from depression can be partially explained by the severity of clinical picture and lowered volition-drive dynamisms, one of which is sexual functioning which is disturbed by the illness itself. The other part can be attributed to the effects of psychotropic medication. It is well known that antidepressant medication causes sexual dysfunctions. Some researches showed that SSRI's cause from 30% to 60% of sexual dysfunctions¹⁰. On the other hand, SSRI's have also shown to lower the incidence of sexual dysfunctions in patients suffering from depression. However, that was not the case in males, where treatment with SSRI's can cause orgasm difficulties. In patients suffering from schizophrenia, illness itself and its course influence sexual functioning, but as was already the case in depression, medication, especially antipsychotic medication, also has an important role in the onset and severity of sexual dysfunctions¹¹. Furthermore, certain type of antipsychotic medication is important for the quality of sexual life¹².

Furthermore, patients suffering from depression also have significantly more erectile dysfunctions – problems with vaginal dryness and orgasm difficulties than patients suffering from schizophrenia and healthy individuals, among which there are no significant differences. That can partially be explained due to the fact they are treated with atypical antipsychotics that produce much less sexual dysfunctions¹³.

As far as personality traits and sexual dysfunctions in patients suffering from schizophrenia are concerned, it has been showed that those that are more extraverted, conscientious, open to experience and agreeable and less

TABLE 6

RELATIONSHIP BETWEEN PERSONALITY TRAITS AND SEXUAL EXPERIENCES IN PATIENTS SUFFERING FROM DEPRESSION (RESULTS SHOWN AS REGRESSION ANALYSIS OF SEXUAL EXPERIENCES SCALE AS DEPENDENT VARIABLES AND PERSONALITY TRAITS; ONLY STATISTICALLY SIGNIFICANT PREDICTORS ARE SHOWN)

How strong is your sex drive?				
independent variables	R	R ²	Ratio	Beta
Openness				-0.37**
Agreeableness	0.50	0.25	6.01***	0.30**
Conscientiousness				-0.24*
How easily are you sexually aroused?				
independent variables	R	R ²	Ratio	Beta
Openness	0.48	0.23	5.19***	-0.45***
Can you easily get and keep an erection?				
independent variables	R	R ²	Ratio	Beta
	0.40	0.16	1.76	
How easily can you reach an orgasm?				
independent variables	R	R ²	Ratio	Beta
Agreeableness	0.56	0.31	4.25**	0.45**
Conscientiousness				-0.35*
Are your orgasms satisfying?				
independent variables	R	R ²	Ratio	Beta
Conscientiousness	0.47	0.22	2.66*	-0.41*

*** p<0.001; ** p<0.01; * p<0.05

neurotic, have much better sexual drive and easier sexual arousal. That can, at least partially, be explained through the fact that less neurotic patients form interpersonal and sexual relationships much easier. The fact that they are more open to experience, conscientious and agreeable makes it much easier for them to do so¹⁴.

Among patients suffering from depression, all personality traits are connected with sexual functioning. The more patients suffering from depression are extraverted, open to experience and conscientious they have fewer sexual dysfunctions. Sexual functioning is worse and sexual dysfunctions are much more present, beside sexual arousal, if patients have more pronounced neuroticism. Some researches showed that the use of antidepressants can positively influence certain personality traits. Some antidepressants have been noticed to lower neuroticism and raise extraversion, openness to experience and conscientiousness and that positively influences sexual satisfaction¹⁴.

Among healthy individuals only two personality traits were connected with sexual dysfunctions. Higher extraversion is connected with easier sexual arousal and higher neuroticism leads to lower sexual satisfaction. The same fact was established in patients suffering from schizophrenia or depression, which is substantiated by other researches¹⁵.

Contrary to patients suffering from schizophrenia or depression, personality traits in healthy individuals are

not significant predictors of sexual dysfunctions. That basically means that none of personality traits can completely predict a certain sexual dysfunction. But why is that the case? One of possible explanations is that certain personality traits have a strong presence in patients suffering from schizophrenia or depression and therefore influence sexual functioning. Furthermore, it is possible that personality traits could predict other important functions and should be further explored as such.

Conclusion

We can conclude that personality traits influence sexual functioning of patients suffering from schizophrenia or depression. However, certain personality traits have a different effect on sexual functioning in depression and different in schizophrenia. Also, certain personality traits are significant predictors of sexual functioning in pa-

tients suffering from schizophrenia or depression, but that is not the case among healthy individuals. In healthy individuals personality traits can influence sexual functioning, but none of personality traits can be used to definitely predict sexual functioning.

This research showed that certain personality traits negatively affect sexual functioning of patients suffering from schizophrenia or depression. It needs to be stressed that personality traits that can negatively affect sexual functioning need to be detected much earlier than is the case now. By doing so, we can timely provide preventive treatment with medicaments and psychotherapy. Psychotherapy can help to diminish those negative effects or completely change them to positive. Finally, we need to remember that sexual functioning is an immensely important aspect of quality of life of mental health patients which can be adequately managed.

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UČINCI OSOBINA LIČNOSTI NA SEKSUALNO FUNKCIONIRANJE U SHIZOFRENIH I DEPRESIVNIH BOLESNIKA

SAŽETAK

Cilj ovog istraživanja je bio utvrditi učinke osobina ličnosti na seksualno funkcioniranje u shizofrenih i depresivnih bolesnika, u odnosu na zdrave pojedince. Tri stotine ispitanika je sudjelovalo u istraživanju. Za bolesnike oboljele od shizofrenije ustanovljeno je da što su više otvoreni i manje neurotični to im je jači spolni nagon, a crte ličnosti značajno predviđaju i spolno uzbuđenje. U bolesnika oboljelih od depresije utvrđeno je da što su više otvoreni i savjesniji, a manje ugodni jači im je spolni nagon. Nadalje, viša otvorenost je značajni prediktor za lakoću kojom se bolesnici s depresijom spolno uzbuđuju, a što su bolesnici s depresijom više savjesniji i manje ugodni lakše postižu orgazam. U zdravih ispitanika crte ličnosti nisu značajni prediktor seksualnog funkcioniranja. Zaključno možemo reći da su crte ličnosti značajni prediktori seksualnog funkcioniranja u bolesnika oboljelih od shizofrenije i depresije, ali ne i u zdravih ispitanika.