

Available online at www.sciencedirect.com**ScienceDirect**

Procedia - Social and Behavioral Sciences 86 (2013) 578 – 583

Procedia
Social and Behavioral Sciences

V Congress of Russian Psychological Society

The Study of Wishful Thinking Phenomenon in Patients with Personality Disorders

Alexander Tkhostov^a, Marina Vinogradova^{a*}^a*Lomonosov Moscow State University, Mokhovaja str., 11/9, Moscow, 125009, Russia*

Abstract

In the article the problem of cognitive activity is discussed. It is associated with a decreased sensitivity to contradictions. The authors suggest the interpretation of the phenomenon of "wishful thinking". This phenomenon can be observed among patients with personality disorders. For this purpose the method of "Contradictory statements" has been developed, which consists of proverbs and aphorisms on the subject of morality and human behavior regulation. In order to eliminate the influence of the general factor of intellectual development, in conjunction with established methodology tested the Wechsler Adult Intelligence Scale. The study results have shown that patients with histrionic (hysterical) personality disorder tend to ignore the contradictions in their judgments. One of the operational aspects of "wishful thinking" phenomenon associated with decreased sensitivity to contradictions and considered as specific cognitive style of patients with HPD.

© 2013 The Authors. Published by Elsevier Ltd. Open access under [CC BY-NC-ND license](https://creativecommons.org/licenses/by-nc-nd/4.0/).
Selection and/or peer-review under responsibility of Russian Psychological Society

Keywords: Disorders of thought with personality disorders, "Wishful thinking", Violation arbitrary regulation of cognitive activity, Cognitive style

1. Introduction

The pilot study aims to examine the psychological mechanisms of the "wishful thinking" phenomenon. With this type of thinking judgments, inferences and interpretations correlating to the desires of the individual, replace (substitute) or distort the objective appraisal of reality [1]. The specificity of this distortion (perversion) is ensured by lowering value (up to the denial or recognition as false or inessential) of the parameters of incoming information, which do not coincide with desired or expected, while the objectivity and rightness of parameters which conform to the individual's desire, get revalued. This phenomenon does not match the type of autistic thinking, selected by Bleuler E., in which the central features are ignoring reality and manifest a non-standard individual world view [2]. There are similarities of "mythical thinking" concept [3] and the concept of "wishful thinking" due to important feature of both: the non-compliance of the formal logic laws; but thinking itself is not

* Corresponding author. Tel.: +7-916-0615020
E-mail address: mvinogradova@yandex.ru

illogical or disordered. Mythical thinking has difference, namely replacing the formal logical connections on the mystical one, while the "logic" itself, albeit peculiar, remains.

One of the operational aspects of "wishful thinking" might be decreased sensitivity to contradictions, denominated in both: excess mobility of criteria for judging, and the rigid ignoring of polysemy (and possible contradictory) of information. At the behavior level, a decreased sensitivity to contradictions might be associated with the limited using of previous experience to understand the conditions of the problem or situation, with disturbances of reference actual desires and aspirations to "suprasituational" goals and life programs, clinically manifested in impulsive, infantile behavior of patients.

When studying the problem of sensitivity to contradictions (in the general sense - in the incoming information) ways of solving the problem of ambiguity should be taken into consideration: creating a clear and consistent system of representations of himself and the world around (reducing cognitive dissonance) while preserving the possibility to modify and supplement this system upon new information, minimizing the effects of negative emotional and increase positive emotional stimulation value (psychological defense mechanism, fantasy). To do this, a healthy person is able to update the various semantic field values, conclusions, statements, etc. A decreased sensitivity to contradictions in personality disorders expresses in specific clinical phenomena of reducing cognitive dissonance and parallel co-existence in a conflict systems of representations. In our opinion, this "atrophy" of cognitive dissonance lies at the heart of the phenomenon of "wishful thinking".

2. Methodology

As subjects of the experimental group were selected patients with hysterical (histrionic) personality disorder (ICD code F60.4x), because of their course and productivity of cognitive activities (especially analytical and synthetic) which are essential to emotional characteristics. The identification of the objective features of reality can also be impeded or distorted in accordance with emotional focus - all this leading to the accumulation of impressions, but not facts. Judgments of these patients easily change, do not refer to formally articulated goals, intentions, interests, not relied on stable principles, which in turn formulated on the basis of the knowledge or facts of personal experience [4], [5], [6], [7].

For comparison group were selected patients with obsessive-compulsive personality disorder (OCPD) (ICD code F60.5x), featured by polar cognitive strategies (compared with the experimental group), such as: increased thoroughness, meticulously, the desire for formal accuracy of judgments, focusing on facts, not on their emotional value, expressing in mechanistic speech style [5], [8], [9]. Mentally healthy subjects were included to the control group.

The study involved 133 women. The selection of female participants is aimed to minimize gender differences to improve the reliability of data. A significant prevalence of hysterical (histrionic) personality disorder in a female population was taken into consideration. Subjects were distributed into the three groups as presented in Table 1.

Table 1. Subjects groups

	Experimental group (patients with HPD)	Control group (mentally health)	Comparison Group (patients with OCPD)
Number of subjects	50	50	33
Age	range 19 - 54 years mean age 36,28±1,28	range 19 - 55 years mean age 33,68±1,08	range 19 - 53 years mean age 33,85±1,48

To identify key factors that ensure the specified participation of sensitivity to contradictions in forming violation of cognitive activity, especially in the context of "wishful thinking" and its underlying "atrophy" of cognitive dissonance, the method of "Contradictory statements" was developed.

Stimulus material is presented in the form of proverbs, aphorisms of morality saying, justice, and human behavior regulations etc. Each statement has matching one with the opposite meaning. Statements are presented on separate cards in random order. The subjects were asked with following statement: "Collect statements with which you agree." For the analysis the frequencies of answers to each pair of sentences was accepted (there are four answer types: "yes" – I agree with both of the alternatives, "no-no" – the rejection of the two alternatives, the "yes-no" or "no-yes" – if agree of only one of statements).

The same subjects were asked to take Wechsler Adult Intelligence Scale (WAIS) to assess the possible influence of disturbance in formal intellectual ability and general disorders of thoughts on understanding the stimulus material (proverbs) and on sensitivity to contradictions.

3. Study results

3.1. Method "Contradictory statements"

Distribution of results can reject the hypothesis of random answer choice from misunderstanding of the stimulus material. The reducing sensitivity to contradictions was revealed in the experimental group: "yes-yes" answer occurs more often in comparison to the subject's answers of the control group and the comparison group, and the "yes-no and no-yes" answers occur significantly less than in the control group. Statistically significant differences between the answers of the control group and the comparison group were not found. Table 2 illustrates the data received in the experiment. It contains the percentage distribution of types of answers by three subjects groups with rates of statistical significance.

Table 2. Answers distribution of "Contradictory statements" method (compare by Mann-Whitney criteria; the significance levels: * – $p < 0,05$; ** – $p < 0,005$)

	Experimental group (patients with HPD)	Control group (mentally health)	Comparison group (patients with OCPD)
Answer type "yes-yes"	41,6%**	28,3%	33,3%
Answer type "no-no"	11,3%	15,7%	13,9%
Answer type "no-no"	47,1%*	56%	52,8%

3.2. Correlation analysis of violated sensitivity to contradictions and results of Wechsler Adult Intelligence Scale (WAIS).

There are interesting results obtained from the analysis of correlation WAIS results and numbers of different types of answers from "Contradictory statements" (Table 3).

Table 3. Correlation matrix of WAIS indicators and different types of answers of "Contradictory statements" method (the values marked as bold are statistically significant correlations)

	Experimental group			Control group			Comparison group		
	Answer type "yes-yes"	Answer type "no-no"	Answer type "yes-no", "no-yes"	Answer type "yes-yes"	Answer type "no-no"	Answer type "yes-no", "no-yes"	Answer type "yes-yes"	Answer type "no-no"	Answer type "yes-no", "no-yes"
Totals of test and subtests of WAIS									
General	-0.21	0.03	0.20	-0.29	0.33	0.07	-0.37	0.47	0.05
Verbal	-0.14	0.09	0.08	-0.36	0.40	0.15	-0.36	0.37	0.07

comprehension									
Nonverbal comprehension	-0.33	-0.03	0.39	-0.07	0.04	-0.03	-0.29	0.43	-0.01
1. Information	-0.12	0.09	0.05	-0.41	0.28	0.27	-0.02	0.09	-0.06
2. Comprehension	-0.05	-0.01	0.04	-0.45	0.33	0.29	-0.49	0.24	0.28
3. Arithmetic	-0.03	-0.06	0.04	-0.02	0.18	-0.09	-0.19	0.30	-0.05
4. Similarities	-0.13	0.18	0.01	-0.20	0.09	0.24	-0.22	0.28	0.15
5. Digit Span	-0.06	0.10	0.06	-0.11	0.31	-0.05	0.05	0.06	-0.19
6. Vocabulary	-0.06	0.07	-0.02	-0.39	0.43	0.08	-0.38	0.40	0.06
7. Digit Symbol	-0.01	-0.30	0.19	0.23	-0.30	0.05	-0.05	0.27	-0.24
8. Picture completion	-0.26	0.03	0.25	-0.33	0.26	0.22	-0.22	0.38	-0.06
9. Block design	-0.18	-0.06	0.23	0.10	0.02	-0.23	-0.36	0.37	0.11
10. Picture arrangement	-0.28	0.21	0.22	-0.37	0.27	0.23	-0.33	0.38	0.06
11. Object Assembly	-0.07	0.01	0.06	-0.08	0.01	-0.03	-0.27	0.41	-0.06

In the control group, significant correlations of the Wechsler scale with the types of choices observed in 1/3 of the possible combinations. Meanwhile, significant correlations relate primarily to the types of answer combinations "no-no" and "yes-yes." Level of general and verbal intellect, and the results of subtest "Comprehension", "Vocabulary" positively correlated with the number of answers "no-no" and negatively with the number of answers "yes-yes."

As well, a high number of even more significant correlations were registered between results of two methods in the comparison group, but unlike the control group, these correlations are associated with "no-no" answers.

Completely different correlations were obtained in groups with HPD. In this group, the number of different types of answers in "Contradictory statements" was not connected with formal indicators of intellect.

4. Results Discussion

Analyzing results, we can conclude that patients with HPD tend to ignore the contradictions in their judgments using mutually exclusive basis. Thus, the comparison of results of the method "Contradictory statements" with indicators of formal intelligence (according D. Wechsler test) explores that patients with HPD have a relative independence of sensitivity to contradictions of intellectual productivity, which is different from the disposition of bond that was identified comparing the results of two methods by subjects of other groups.

We find interesting results (which should be further studied) that these subjects showed the reducing numbers of apparently contradictive answers "no-no." Although, based on a formal point of view, this type of answers can also be attributed to the controversy, but in our opinion, other interpretations are more adequate.

Stimulus material used in the method of "Contradictory statements" is a proverb – the concrete expression, the meaning of which is beyond of the particular values of the general and abstract judgments. "No-no" answer type may imply the impossibility of making any of the controversy as universal, super-flexible (multi-purposed): each of them is considered to have a limited validity. Reducing the number of answers such as "no-no" with significant increase of "yes-yes" answers can be treated as a special psychopathological phenomenon in case of patients with HPD and can be described as "situational globality of judgment".

It can be assumed that for these patients every judgment tends to become excessively flexible (universal), but in each given situation it can be succeeding, not accompanied by cognitive dissonance, as a universal opposite judgment. Certain tolerance to contradictions was indentified among the control group subjects, but in case of pathology, this ability is hypertrophied and leads to insensitivity of contradictions and appears to the clinical phenomena, e.g. high mendacity or pseudology. Herewith the specificity of such mendacity is paradoxical

subjective "truth" of these patients: they are "convinced" in the correctness of their contradiction statements, their actions and "truth" of their explanations.

The large number of correlation parameters in Wechsler scale and the results of "Contradictory statements" can be considered as an indirect confirmation of their greater thoroughness, rigor, a greater focus on the formal accuracy of judgments. Herewith the implementation of such a cognitive style in this group of patients requires the preservation of formal indicators of intellect, make reasonable, not random judgments.

HPD patients showed sharp decline in the number of correlations between the two methods, that allows us to put forward a hypothesis about the autonomy of the "situational globality" in the structure of «wishful thinking» phenomenon. This hypothesis agrees with clinical impressions, as well as descriptions of the behavior of HPD patients in everyday life, such as a combination (in some cases seems paradoxical) of secure intellectual productivity, the ability to appropriate, "ultra-realistic" response and at the same time, unexpected bright appearance of a violation in process of using information, and violations of logic in judgments and actions, violation arbitrary regulation of cognitive activity.

Cognitive style of patients with HPD is defines by globality, insteadness of judgments, rapid change of their base, which is largely determined by the exceptional role of the affective attitude that presenting on the phenomenological level as «wishful thinking» - thinking that focused on the desire or "wishful thinking." Such insteadness, changing basis of judgments provide an opportunity of quick access to relevant external reality, to "normative" behavior, and as well extreme flexibility, polymorphic clinical representation of histrionic disorder.

Globality of judgments and decreased sensitivity to contradictions as the features of the cognitive style in HPD require a comparison with the concept of the "eastern" type of thinking, which is actively developed at present, and defined as opposite to the "western". It is postulated that the "eastern" type of thinking is dialectic thinking (so-called "naive dialectic") and has a significant tolerance to contradictions and has a significant expectation of variability occurring [10], [11]. But if naive dialectic implies that the truth lies in a certain average range, in relation to the opposition parameters, whereas the cognitive function of HPD patients appears to be "sandy", unstable system of judgments, with ease of transition from one to the other alternatives, and due to this transition rejected part gets "lost" and are not retained.

As a more appropriate understanding of the dialectics could be revealed in the "no-no" type responses in the method of "Contradictory statements", when, perhaps, instead of choosing a correct decision of the two opposite, a testee would have to recognize one correct solution. But the "no-no" answers fit the logic of the analytical type ("western") of thinking, which implies the need to find other and the only option, whereas the presented options are rejected. As a result, using comparison of the results of methods with selected types of thinking turns out to be counterproductive.

Moreover, dialectical meaning when there is no absolute truth, appears to be unattainable to the patient with a personality disorder, often avoidable with the help of defense mechanisms and the experience of reality and himself in it. For example, for individuals with OCPD the dissatisfaction with any choice expresses at the behavioral level as intractable uncertainty (insecurity) and intractable doubt. The coexistence of opposites for them is intolerable: this variant is strongly avoided (by drawing defenses such as the cancellation of madden, the reaction formation, etc.), as if patients are threatened by the destruction of their belief system, based on the need for consistency, accuracy, their own "goodness". Patients with HPD lacked tolerance for uncertainty and variability; in the case when it is impossible to ignore the uncertainty and volatility may occur, for example, a perfect indifference (la belle indifference) - unconcern of their symptoms, along with declaring "some problems" in their presence.

5. Conclusion

Using the proverbs and aphoristic utterances in experimental study can indicate different degrees of sensitivity to contradictions concerning test subjects with personality disorders and subjects of norm group. The results confirm the assumption on decreased sensitivity to contradictions in the incoming information in patients with histrionic personality disorder. It was proved that the decrease in sensitivity to contradictions can not be

reduced to lowering indicators of intellect productivity, but represents the specific result of cognitive-affective interaction. The combination of propensity to give an excessive flexibility (universalism) to the judgments (global as opposite of concrete) with tendency to avoid selection, rejection (conjunction as opposite of disjunctions) can be considered as a special case of cognitive style in the histrionic personality disorder.

Acknowledgements

Study was supported by Russian Foundation for Fundamentals Sciences, project 11-06-00733a.

References

- [1] Rebel A.S. *Dictionary of Psychology*. L.: Penguin books, 2009, p.928.
- [2] Bleuler E. *Affectivity, suggestibility, paranoia*. Moscow: Center of psychology culture, 2001. 208 p.
- [3] Levy-Bruhl L. *The Mystic Experience and Primitive Symbolism*. Moscow: Educational-Press, 1999. 608 p.
- [4] Beck A.T., Freeman A., Davis D.D. *Cognitive Therapy of Personality Disorders*. NY, Guilford Press; 2nd ed., 2004. 412 p.
- [5] Shapiro D. *Neurotic styles*. Moscow: Institute of humanities research. 1998. 200 p.
- [6] Yacubick A. *Hysteria*. Moscow: Medicine. 1982, 343 p.
- [7] Sokolova E.T. Affective-cognitive Differentiation and Integrity as a Dispositional Factor in Personality and Behavioral Disorders. *Psychology in Russia: State of the Art v. 5*, Lomonosov Moscow State University; Russian Psychological Society Moscow, 2012; p. 185-202.
- [8] Fergus T.A., Wu K.D. Do Symptoms of Generalized Anxiety and Obsessive-Compulsive Disorder Share Cognitive Processes? // *Cognitive Therapy Research*, 2010, 34, p.168–176.
- [9] Rappaport D., Gill M., Schafer R. *Diagnostic psychological testing*. N.Y., Int.Univ.Press. 1978. 563 p.
- [10] Peng K., Nisbett R.E. Culture, dialectics, and reasoning about contradiction // *American Psychologist*, 1999, 54, 741-754.
- [11] Spencer-Rodgers J., Williams M. J., Peng K. Research cultural differences in expectations of change and tolerance for contradiction. // *Personality and Social Psychology Rev.*, 2010, april (<http://www.sagepublications.com>).