

Cognitive and Perceptual Selectivity and Target Regulation of Mental Activity in Personal Evaluation Situations of Social Anxiety Disorder

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ABSTRACT

ARTICLE HISTORY

This article analyzes modern theoretical and conceptual models of social anxiety disorder (SAD) (cognitive, metacognitive, psychopathological) with a view to determine specific features of psychological mechanisms of disorders studied in various approaches, to identify similarities and differences in conceptual SAD models, their heuristic specifics and efficiency in the diagnostics and practice of psychological intervention. The authors demonstrated psychopathological mechanisms related to SAD origin and development shows the effectiveness of psycho-pathological approach to diagnostics and therapy. Analyzing the psychopathological approach, the authors revealed that the key mechanisms, which cause SAD, are specific disturbances of target regulation of mental activity and mediation of anxiety during evaluation, changes in the "motive-goal-means" system, social behavior aberrations and distortion of selectivity in mental activity. The comparative analysis revealed that maximum diagnostic and therapeutic efficacy is achieved during combined application of the models in the psychological practice.

KEYWORDS Social anxiety disorder, theoretical and conceptual

Received 12 April 2016 SAD models, attention selectivity, attention self-Revised 23 May 2016 Accepted 25 May 2016 focus, assessment situation

Introduction

SAD is one of the most widespread disorders in the western society, after depression and alcoholism. From 7 to 16% of the population in modern Western society may have SAD symptoms. Most often, SAD symptoms start in childhood or in early adolescence and much less - after the age of 25. Each tenth adolescent suffers SAD or has individual SAD symptoms. Both men and women equally suffer from this type of disorder, although they have specific symptoms of social fears and realize presence of this disorder (Rapee, Heimberg & Brozovich, 2010).

According to DSM-5 and ICD-10, SAD refers to anxiety disorders. DSM-5 defines social anxiety disorder, or social phobia as a disorder that makes an individual feel fear or anxiety or reveals itself in the form of avoidance behavior in the following situations: 1) social interaction; 2) observation / self-focused

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attention; 3) performing activities in the presence of other people (DSM-5, 2013). A key feature of anxiety is that it refers to these situations, because of the likelihood of a negative assessment of the subject. According to ICD-10, social phobias are centered on observation patterns / self-focused attention in relatively small groups (as opposed to crowds), which often causes avoidance behavior (ICD-10, 1992). Social phobia is often associated with low self-esteem and fear of criticism; a person tries to avoid frightening situations as quickly as possible.

In Russia, the SAD issue is no less relevant. The studies, devoted to SAD severity within young people aged between 16 and 22 (1500 persons, studied in 2013-2014), residing on the territory of Altai Krai (Russia), carried out using a Questionnaire on social anxiety and social phobia (Sagalakova, Stoyanova & Truyevtsev, 2014), as well as through a number of other diagnostic tools, showed the following results. 54.8% of the subjects have strong social and initiativeoriented skills, and they do not tend to worry about "maladaptive" manifestations of anxiety in the evaluation situations, they use flexible coping strategies in failure situations, adequate judgments about the abilities and mature goal-setting structure. 32,2% have difficulty in self-introduction situations, feel lack of social skills in unfamiliar situations when dealing with strangers, but do not tend to avoid participating in social situations, striving to overcome anxiety. Representatives of this subclinical group may show an increased level of excitement, up to severe social anxiety in the stress assessment situations. About 10% of the participants represent the "severe social anxiety" cluster (SAD), followed by the fear of assessment, avoidance, post-situational rumination, cognitive distortions in self-assessment and assessing situations as threatening their status, in goal-setting distortions with the dominance of an overvalued level of claims in the self-introduction. This sampling segment is prone to the secondary emergence of depressive, autoaggressive tendencies, dysfunctional ways of coping with anxiety (Sagalakova & Truyevtsev, 2014). The age of 16-17 is the most vulnerable to auto-aggressive tendencies in SAD cases, communication experience of individuals aged 18-19 allows efficient management of their emotions and behavior. 42.3% (the second and the third sampling segments) have SAD symptoms, such people periodically face up to serious difficulties in social assessment situations, 10% of them are highly prone to avoidance and acute deadaptation (Sagalakova & Truyevtsev, 2014).

Background Paper

In more recent times, the world witnessed active debate regarding definition of SAD, as well as many other disorders caused by the revision of classifiers (5th version of DSM was published in 2013, (Regier, Kuhl & Kupfer, 2013), the 11th revision of ICD was rescheduled for 2018). These discussions resulted in some clarification of SAD definition aimed at providing most accurate research and clinical data (Bo¨gels et al., 2010).

Unlike SAD, generalized anxiety disorder is revealed mainly as a "free-floating" anxiety regarding different areas of life (DSM-5; ICD-10). While in the presence of SAD, a subject starts being afraid of both social situations and anxiety symptoms. The key feature of this mental disorder is that individuals with SAD experience subjectively unbearable fear in potentially evaluative

situations. There are no rational signs of danger for the individual in reality, or they are greatly exaggerated.

The authors of this paper believe that cognitive and metacognitive SAD models effectively explain the mechanisms of emergence and rise of anxiety in assessment situations ("snowball"), but they do not describe how this disorder "fits" the entire life structure of the individual. Psychopathological description of SAD provides the possibility to reveal its most common mechanisms - its origin and course; and this will show functioning of the human psyche in the presence of this disorder.

In most cases, a psychiatric diagnosis is not a disease with a specific etiology. Taking into account description of symptoms and manifestations of syndromes, clinicians cannot always distinguish between normal and abnormal emotions using only quantitative data (Stein & Nesse, 2015). Syndromic approach in the psychiatric model presents a solid method, which provides more accurate and effective psychodiagnostics and clinical observations.

In addition to improving the quality of diagnosis, one can expect best performance and therapy. Studies related to the effectiveness of psychological assistance to people with SAD clearly show that this method has a therapeutic effect (in adults), but it may cause little effect as compared with pharmacotherapy and stronger resistance of severe disturbances in comparison with the mild ones (Acarturk et al., 2009). Besides, the methodology of a number of these studies does not provide relevant comparison and adequate estimate accordingly. The authors of this research believe that the developed psychopathological model will promote better definition of therapy "targets" and thus it will contribute to influencing the cause of disorder and the system vision will provide better results as compared with isolated application of techniques.

Epidemiological data and the high probability of derivative disorders, young age of disorder onset, the prevalence of symptoms, absence of a single SAD model, determines consideration of specific features of the most effective SAD models (cognitive, metacognitive, psychopathological). Comparative analysis of these models will give the possibility to discern basic mechanisms of disorder development and to determine disorder pattern, common for all models. Comparative analysis of these models will allow formulating the integrative approach using non-contradicting techniques of psychological intervention in SAD cases. In the present study the SAD psychopathological model is firstly presented, social anxiety syndrome is defined, and comparison of this model with cognitive and metacognitive models is performed.

Research Purpose

The main purpose of this study was to determine specifics of the psychological SAD mechanisms in the cognitive, metacognitive and psychopathological approaches and implementation of psychopathological syndromeoriented analysis of the social anxiety phenomenon.

Research questions

The main questions that determined the present study was:

What are the key characteristics of SAD in modern conceptual models; in which way the presented psychopathological SAD model provides more effective psychological diagnosis and therapy?



Method

The key research method is a comparative analysis of the theoretical and conceptual models related to SAD and social anxiety. In addition, the paper uses the theoretical analysis of performance and features (similarities and differences) of psychological mechanisms that determine SAD by the example of cognitive, metacognitive and psycho-pathological approach. The paper also provides psycho-pathological syndrome-oriented analysis of the social anxiety phenomenon and visualized scheme of SAD psychological mechanisms in psycho-pathological approach.

Data, Analysis, and Results

The cognitive approach to the analysis of mechanisms related to SAD generation and maintenance is presented by different conceptualizations of psychological mechanisms of this disorder. The most developed and effective are the R. M. Rapee and R. G. Heimberg model and metacognitive SAD model by A. Wells and Clark.

The Rapee and Heimberg model. R. M. Rapee & R. G. Heimberg (1997) presented one of the most developed and empirically proven SAD concepts – the cognitive-behavioral SAD model, based on attention disturbance as a factor in the generation and maintenance of anxiety in social-evaluative situations. The authors describe in detail the "self-focused" position, typical for anxious individuals (Hope, Gansler & Heimberg, 1989). A person with SAD being in a social situation, constructs a mental image of what he looks like in the eyes of others, how the others view him, and then begins to behave as if he were under the close supervision of other people.

This position ("I am the object of assessment") contradicts another position, necessary for successful participation in the situation, which is: "I am the subject of activity", and it results in the reduction of subjective self-introduction controllability. Under SAD, attention is fixed on "the self-image in the eyes of others"; one could observe the self-focusing (Hofmann, 2000). The cognitive perspective ("I am the object of evaluation") is formed in the context of dysfunctional beliefs about self-perception as "awkward" and "not meeting the standards" (Spokas, Rodebaugh & Heimberg, 2004). The self-absorbed attention provides a false experience of "confirmation" of assumptions about how other people perceive the socially anxious individual.

The metacognitive SAD model by D. M. Clark & A. Wells. The metacognitive SAD model presents further development of cognitive models; it is a new vision of the well-known SAD cognitive mechanisms. As in the classical cognitive approach, the model emphasizes the crucial role of distortion of attention (e.g., self-focusing), focused on the inner psychic phenomena (thoughts of thoughts, emotions, images). This model is based on cognitive models suggested by D. M. Clark & A. Wells (1995), and L. Stopa & D. M. Clark (2000). The metacognitive model allowed taking a fresh look at the treatment of emotional disorders, shifting the emphasis from teaching management of automatic cognitive phenomena to reducing management of inner phenomena and the relevance of "detached mindfulness" – DM (Wells, 2007).

It is expedient to consider social anxiety and avoidance in the light of the current problems related to information processing, as well as to the issue of DM status. This construction also emerges in the self-regulation information processing theory during emotional disorders (Wells & Matthews, 1996); it is regarded as metacognitive state, which promotes mental flexibility during mental disorders.

The SAD problem within psychopathology is considered in line with the syndromic approach, with a view to analyze the qualitative structure of mental activity in situations of evaluation, i.e. given the growing impact of emotions on mental activity and conduct mediation. The structure of mental activity is isomorphic to the external activity, it takes place and is accomplished in it. Determination of the key disturbance against the background of its derivatives and spontaneously compensated sides of mental activity during task performance means definition of the psycho-pathological SAD syndrome.

Human ability to arrange its business pursuant to its purpose, to find meaning, to choose the means to fulfil the set tasks, to execute operations, to correlate capabilities with the degree of task complexity, to adjust the level of claims, to set intermediate goals — all this describes the goal-setting features, providing the stability of self-evaluation.

The psycho-pathological approach implies SAD comprehension through the mechanisms of goal regulation disturbances and mediation of evaluation anxiety, which disrupt cognitive activities (including mental activity, attention and memory, meaningful perception) and the planned goal attainment in social multi-task situations, in the allocation of mental activity resources, and their rapid depletion, loss of goal-oriented priority in social situations (Zeigarnik, Nikolaeva & Lebedinsky, 1987; Bratus & Pavlenko, 1986; Sagalakova & Truyevtsev, 2014).

The problem is associated with the analysis of mechanisms aimed at the response mediation reduction, reduction of voluntariness and flexibility of mental activity regulation in terms of expert assessment in different social situations. Difficulties in the regulation and voluntary management of personal response impede the necessary and timely organization of purposeful mental activity throughout the whole situation and maintain the temporary dynamic tense system formed in the course of activities within the situation.

The organizational activity component is presented by the goal setting and the action plan, regularity and critical attitude towards its results. This organizational-program activity architecture allows building and "editing" all the steps and items (to set goals, to determine a plan and means of its fulfillment, to control the process of its implementation and to make adjustments, to break secondary stimuli, to use part of the operations "automatically"). The activity, both internal and external - is primarily a process controlled by a system of goals. The goal implies regular planned activities aimed at the "image result".

Disturbance in the system of management and regulation (organizational link in the structure of mental activity) as the primary disturbance causes secondary changes in the motivational component of activity and causes deeper disturbance of response in evaluation situations ("motif shift on goal", "goal at the expense" mismatch between the meaning making and the inducing motive function). The purposefulness and goal setting during SAD is disturbed by the type of loss of a priority goal under overloading of any voluntary mental activity in the evaluation situation, fluctuation of priorities and systematic multitask



character of voluntary attention. The "ideal" goal in a social situation is often identified with the "real" one, and the subjective evaluation of real possibilities is unstable and highly dependent on the assessment. The tested subject ignores the psychological distance between the actual and the potential possibilities, overstating the estimated requirements for success in such a way that it is practically impossible to meet the standards. This makes self-assessment vulnerable to evaluation.

The specialist in psychopathology examines the safe and broken components of mental activity, the primary defect in the activity structure, i.e., determines the syndrome-generating radical. Determination of psychopathological SAD syndrome requires qualitative analysis of the mental activity structure in the performance of cognitive tasks given the situation of varying terms ("success / failure", "criticism / appraisal") simulations related knowledge expertise, time tasks. (See Figure 1).

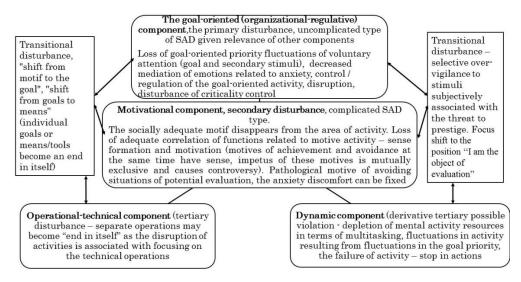


Figure 1. The psycho-pathological SAD syndrome

These disorders are common to all types of mental activity, during the performance of activities in assessment situations by SAD. More pronounced anxiety and fear of negative assessment cause greater avoidance of social situations, as well as the higher probability of the secondary and tertiary mental disturbances in assessment situations. The content-purposeful and secondary information is poorly differentiated against the SAD background. The subject acts in the "multi-purpose" mode; this quickly drains his mental activity. Subjective manageability of the situation is decreased, and the purposeful regulation of the activities becomes difficult. Examination of specific features of these mechanisms gives the possibility to develop methods of mental activity correction in terms of evaluation and prevention of self-destructive forms of decompensation.

Discussion and Conclusion

The common pattern of all models (cognitive, metacognitive, psychopathological) is the idea of specific selectivity of cognitive activity by SAD

(specific features of memorization and reproduction of social information, the position of "multitasking" and self-perception as "an object of evaluation"), the need to work with the voluntary attention, however, using different strategies (depending on the approach).

D.J. Stein & R.M. Nesse (2015) believe that diagnosis of SAD and emotional disorders in general always demands considering motivational structure of human life, goals, strategies, opportunities and the possible obstacles. This leads to additional difficulties in assessing SAD causes, but, on the other hand, provides consistency in dealing with this type of disorder. The above-mentioned authors suggest considering the evolutionary perspective. The authors of this research totally agree with the need to consider not only the symptoms but also the context. For these purposes, psychopathological SAD model was developed. It provides the possibility to determine the most common causes of disorders, which symptoms - can be observed both clinically and in practice.

This study developed the psycho-pathological SAD model, where the central disturbance is presented by distorted regulation and mediation of anxiety assessment, disturbance of goal setting in estimating, fluctuation of the goal priority in social situations, as well as secondary disturbances of motivational component. The psycho-pathological SAD model shows that the situation of subjective failure by SAD is experienced as "incomplete action" concentrating motivational tension for a long time (Sagalakova & Truyevtsev, 2014). The process of structural regulation of mental activity in a social situation is possible only through active focusing on the goal image, keeping it in memory during all activities while abstracting from unimportant details (Zeigarnik, Nikolaeva & Lebedinsky, 1987; Luria, 2002; Bratus & Pavlenko, 1986). All cognitive-perceptual processes should be viewed in accordance with the currently implemented goal aimed at breaking the distracting stimuli (Sagalakova, Stoyanova & Truyevtsev, 2014).

Implications and Recommendations

Implications and recommendations for the future studies are as follows. Firstly, psychopathological SAD model should be considered as the basis for diagnosis. Classification based on fear causes might be clinically more relevant compared to listing social situations. (Regier, Kuhl & Kupfer, 2013). The important diagnostic feature of SAD is the motivational mismatch between fear of evaluation situations, the tendency to avoid them and the desire for confident, successful engagement (Sagalakova & Truyevtsev, 2014). Under severe social anxiety, which does not reach the SAD level, this symptom is less important. Secondly, psychopathological SAD model provides the possibility to develop better therapeutic approaches.

The main psychological techniques related to the disorganized assessment affect, as well as to the formation of adaptive and flexible regulation of mental activity, are the following:

1) The introduction of sign-symbolic mediation of cognitive-communicative, perceptual activity in speaking to the audience and other situations are more effective regulators than direct willpower (via self-instruction, inner speech and inner action planning, the introduction of assistance tools, having direct response, the introduction of mediation-based "rules" of the decision-taking);

- 2) Formation of a flexible goal-setting system (the psychological distance between the immediate and long-term purposes);
- 3) Stabilization of self-esteem regardless of situational success / failure, forming the semantically integrated and adaptive image of success and failure, formation of positive experience in the application of adaptive tactics related to activity structuring.
- 4) Informing of the anxiety mechanisms and training mental activity regulation along with goal priority retention, allocation of attention in the social assessment situations.

Acknowledgments

Publication of this article is supported by the Russian Science Foundation. Grant (14-18- 01174); project manager – O.A. Sagalakova, main executors – D.V. Truyevtsev, A.M. Sagalakov.

Disclosure statement

No potential conflict of interest was reported by the authors.

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References

- Acarturk, C., Cuijpers, P., van Straten, A., & de Graaf, R. (2009). Psychological Treatment of Social Anxiety Disorder. *Psychological Medicine*, 39, 241-254.
- Bo"gels, S. M., Alden, L., Beidel, D. C., Clark L. A., Pine, D. S., Stein, M. B. & Voncken, M. (2010). Social Anxiety Disorder. Depression and Anxiety, 27(2), 168-189.
- Bratus, B. S. & Pavlenko, V. N. (1986). The Correlation of Self-esteem Structure and Target Activity Regulation in Normal and Abnormal Development. *Questions of Psychology*, 4, 146-155.
- Clark, D. M. & Wells, A. (1995). A Cognitive Model of Social Phobia. In R. G. Heimberg, M. R. Liebowitz, D. A. Hope, & F. R. Schneier (Eds.), Social phobia: Diagnosis, assessment, and treatment. New York: Guilford Press, 69-93
- DSM-5 (2013). Diagnostic and Statistical Manual of Mental Disorders. American Psychiatric Association, 78 p.
- Hofmann, S. G. (2000). Self-focused Attention Before and after Treatment of Social Phobia. Behaviour Research and Therapy, 38, 717-725.
- Hope, D. A., Gansler, D. A. & Heimberg, R. G. (1989). Attentional Focus and Causal Attributions in Social Phobia: Implications from Social Psychology. *Clinical Psychology Review*, 9, 49-60.
- ICD-10 (1992). Classification of Mental and Behavioural Disorders. World Health Organization, 109 p..
- Luria, A. R. (2002). The Nature of Human Conflict. Moscow: Kogito Center, 253 p.
- Rapee, R. M. & Heimberg, R. G. (1997). A Cognitive-Behavioral Model of Anxiety in Social Phobia. Behavior Research and Therapy, 35(8), 741-756.
- Rapee, R. M., Heimberg, R. G. & Brozovich, F. A. (2010). A Cognitive Behavioral Model of Social Anxiety Disorder: Update and Extension. In S. Hofmann & P. DiBartolo (Eds.), *Social anxiety: clinical, developmental and social perspectives*. San Diego: Academic Press, 395-422

- Regier, D. A., Kuhl, E. A. & Kupfer, D. J. (2013). The DSM-5 Classification and Criteria Changes. World Psychiatry, 12(2), 92-98.
- Sagalakova, O. A. & Truyevtsev, D. V. (2014). Structural Equation Modeling of Cognitive Disturbances of Affect Regulation during Estimation of Anti-vital Behavior. *Universum: Psychology and Education*, 12(11), 36-41.
- Sagalakova, O. A., Stoyanova, I. Y. & Truyevtsev, D. V. (2014). Social Anxiety a Marker of Antivital Behavior in Adolescence and Early Adulthood. *Clinical and Health Psychology: Research, Teaching, Practice, 4(6), 6-18.*
- Spokas, M. E., Rodebaugh, T. L., Heimberg, R. G. (2004). Cognitive Biases in Sosial Phobia. *Psychiatry*, 3(5), 51-55.
- Stein, D. J. & Nesse, R. M. (2015). Normal and Abnormal Anxiety in the Age of DSM-5 and ICD-11. Emotional Review, 7, 223-229.
- Stopa, L. & Clark, D. M. (2000). Social Phobia and Interpretation of Social Events. Behaviour Research and Therapy, 38(3), 273-283.
- Wells, A. (2007). Cognition about Cognition: Metacognitive Therapy and Change in Generalized Anxiety and Social Phobia. Cognitive and Behavioral Practice, 14, 18-25.
- Wells, A. & Matthews, G. (1996). Modelling cognition in emotional disorder: the S-REF model. Behaviour Research and Therapy, 32, 867-870.
- Zeigarnik, B. V., Nikolaeva, V. V. & Lebedinsky, V. V. (1987). Workshop on Abnormal Psychology. Moscow: Publishing House of Moscow University, 352 p.