

# The Features of the Interrelation between Inward Picture of the Disease and Autobiographical Memory among Offenders with Schizophrenia

Dubinsky Alexander Aleksandrovich<sup>1</sup>, Bulygina Vera Gennadiyevna<sup>1</sup> and Pronicheva Maria Mikhailovna<sup>2\*</sup>

<sup>1</sup>Serbsky Federal Medical Research Centre of Psychiatry and Narcology, Ministry of Healthcare of the Russian Federation, Moscow, Russia

<sup>2</sup>Faculty of Juridical Psychology, Federal State Budgetary Institution of Higher Professional, Moscow State University of Psychology and Education (MSUPE), Moscow, Russia

## Abstract

The results of studies on the interrelation of autobiographical memory with the features of the inward picture of the disease among offenders with schizophrenia. There were examined 17 patients with schizophrenia with criminal history, under compulsory treatment. The comparison group consisted of 17 patients with schizophrenia with prosocial behavior and 18 mentally healthy individuals without criminal history. The following techniques aimed to study the inward picture of disease were used: the types of attitude towards disease, symptom checklist-90-revised, life-line (for studying the autobiographical memory), metaphor of the past, functions of autobiographical memory, the questionnaire of self-attitude and balanced inventory of desirable responding. Specific interrelationships between the types of attitude to the disease and perceived symptoms with the peculiarities of functioning of autobiographical memory were revealed. It was found that patients have less realistic possibilities of consciousness with reduced mediation of autobiographical memory representations of the disease at the higher level of severity of distress due to the perceived symptoms and to the less realistic and adaptive types of attitude to disease. It was discovered that offenders with schizophrenia are characterized by the predominance of negative perceptions of past experience, the fragmentation of attitude to disease with low awareness of their symptoms, which is associated with a lower contribution to the mediation of ideas about the disease of functional constructs of autobiographical memory.

**Keywords:** Inward picture of the disease; Autobiographical memory; Offenders with schizophrenia

## Introduction

In the fairly extensive contextual space of psychological studies of the problem of the inward picture of the disease (IPD) as a person's reflection and self-presentation about their disease [1] among people with schizophrenia, the influence of autobiographical memory (AM) on the features of IPD is poorly studied.

The appeal to autobiographical memories (AM) and possibilities of AM refers to internalized forms of internal polylogue based on the appropriate cost-sharing person's multi-temporal memories about itself (multi-temporal self). There were identified 4 functions of AM [2,3]. Self-regulative function means tendency to refer to AM as a mean of regulation of mental state. Pragmatic function focused on the retrieval of autobiographical experience (life lessons). Communicative function represents the willingness to refer to personal memories during interacting with others and is aimed at maintaining the active communication with the participants. Existential function (maturity of AM) means a high level of voluntariness when referring to personal memories, and also it is linked with the awareness of identity, personal uniqueness and temporal integration of the personality.

AM plays an important role in the regulation of mental state. It was found that it is easier to tolerate difficult situations for people who are satisfied with their past [4]. Strengthening of the positive orientation of AM has proved itself as an effective tool to improve the psychological status of patients with different nosology [5]. Quam and Abramson [5] found an improvement in mental status of patients with chronic schizophrenia, in their general condition, an increasing level of contacting and goodwill in the application of the method of constructing a "life line" in order to reconstruct an image of the past. In the reports on the progress of the disease was noted more satisfaction of the life, reduction of anxiety, guilt, fear, and what is most important – greater confidence to an ongoing medical treatment than in the

control-group, as a result of using the method of "life review" in the framework of psychosocial rehabilitation programs targeting the care of inpatients [6].

The inward picture of the disease is defined as the dynamic structure, which is associated with the formation of personality's ideas about their own disease [7,8]. The representations about the disease are made based on "sensual fabrics" and personal meaning, leading to the restructuring of the key motives of ill person [1,9]. In addition, the IPD plays a significant role in the formation of compliance determining a correct understanding of the presence of the disease and the appropriateness of the proposed treatment [10].

The forming of the IPD allows reducing the level of the cognitive dissonance. The patient in a certain way adapts to the disease basing on the concepts of disease. Inconsistency of complaints and lack of criticism enhance cognitive dissonance. Such methods of protection from fear as little adaptive methods of psychological defense, infringement of tactics of problem solving behavior, of different options dependent behavior are actively used as the resolution of the internal conflict of patients [11,12].

**\*Corresponding author:** Pronicheva Maria Mikhailovna, Faculty of Juridical Psychology, Federal State Budgetary Institution of Higher Professional, Moscow State University of Psychology and Education (MSUPE), Moscow, Russia, Tel: +79163022358; E-mail: [mariya\\_pronichev@mail.ru](mailto:mariya_pronichev@mail.ru)

**Received** September 19, 2016; **Accepted** November 28, 2016; **Published** November 30, 2016

**Citation:** Aleksandrovich DA, Gennadiyevna BV, Mikhailovna PM (2016) The Features of the Interrelation between Inward Picture of the Disease and Autobiographical Memory among Offenders with Schizophrenia. J Forensic Res 7: 355. doi: [10.4172/2157-7145.1000355](https://doi.org/10.4172/2157-7145.1000355)

**Copyright:** © 2016 Aleksandrovich DA, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

It is noted that the IPD of the patient with schizophrenia is characterized by "separation" of the associations from the sensory experience that is caused by disorders of the identity and by inability to integrate their feelings [1,13-16]. Patients with schizophrenia are characterized by a low ability to recognize psychopathological symptoms, which leads to inability to forecast and control their own condition.

The lack of understanding the reasons of worsening of the health and the necessity of the treatment leads to abandonment of medication, drug abuse etc. The lack of awareness of the disease causes the poor therapeutic alliance and nonadherence to treatment as risk factors for the criminalization of patients with schizophrenia [17,18].

The criminal activity can be regarded as a manifestation of social maladjustment. Committing an offence by patients with schizophrenia, in most cases, is associated with the impaired ability of conscious regulation of behavior and the emotional-volitional deficits, inadequate recognition of semantic context of social situations [19].

In addition, the crucial risk factors of criminal acts of the patients with schizophrenia are premorbid personal traits, which significantly affect the formation of the attitude to disease (ATD — as a form of response to the disease) [20].

In general, the aggressive behavior among patients with schizophrenia has a multifactorial nature. Such behavior is determined by biological, social, and psychological factors. This determines a multidisciplinary campaign in solving practical problems of psychosocially dangerous acts, development of rehabilitation (psychological correction) activities for mentally ill people [21].

Based on insufficient empirical content, it is necessary to explain the link between AM and identity in norm and mental pathology, to complement theoretical constructs with experimental data. It seems relevant to study the impact of specificity of perception of the disease on AM, which is aimed at maintaining self-identity in a situation of disease. The data obtained about the influence of AM on the inward picture of the disease will allow rectifying the ideas about the production of AM, which is significant for risk assessment of maladaptive and criminal behavior of mentally ill persons.

In this regard, the aim of the study was to determine the effect of self-awareness and identity in norm and among offenders with schizophrenia on the specificity of the AM, and to determine the influence of AM on the inward picture of the disease of patients with schizophrenia, with noncriminal and criminal activity.

## The Study

The study involved 52 male persons (average age 34.15). The main group consisted of 17 male offenders with the presence of schizophrenia spectrum disorders ranging in age from 22 to 55 years (average age of 33.00) undergoing compulsory treatment in psychiatry hospital with high level of security.

Patients had the following diagnoses: paranoid schizophrenia (of 64.71%); paranoid schizophrenia with episodic course (F 20.1)-5.88%; schizophrenia with psychopathic syndrome (F 21.4)-of 5.88%; residual schizophrenia (F 20.5)-of 5.88%, organic schizophreniform personality disorder (F 06.2)-11.76%, and schizotypal disorder (21.8 F) is of 5.88%.

Distribution of character of the last criminal fact was: the murder is of 64.71%, sexual offences-17.65%, theft-11.76 %, violence against the personality-5.88%. One or more offenses in anamnesis were in 64.71% of cases.

The comparison group consisted of 17 people who have schizophrenia spectrum disorders without criminal history. The age of the respondents ranged from 24 to 52 years (average age of 35.29).

The patients were diagnosed of paranoid schizophrenia in 76.47% of cases, paranoid schizophrenia with episodic course-17.65%; schizophrenia with psychopathic syndrome-5.88%.

Conditional normality group consisted of 18 people ranging in age from 23 years to 64 years (average age of 37.06).

The criteria for inclusion in the empirical study were: the decision of the forensic psychiatric expert commission of the patient's diminished responsibility at the time of committing the socially dangerous acts; court direction on compulsory treatment in a psychiatric hospital (with a high degree of oversight); for patients with schizophrenia and normal behavior information about the confirmation of the diagnosis of a psychotic disorder schizophrenia spectrum and age (from 18 years). Exclusion criteria were: onset of the disease after committing the socially dangerous act; adolescence; acute psychotic, depressive symptoms at the time of the survey; deep state of dementia, explicit cognitive and emotional disorders.

## Methods

- Questionnaire "Functions of Autobiographical Memory" (FAM), which was used to diagnose typical ways of using autobiographical memories. This questionnaire consists of 22 statements. Participants have to evaluate the statements from -3 to 3, regarding how each statement reflects the typical usage of the AM. The Questionnaire contains five scales: polyfunctionality, communication, self-regulation, pragmatism and maturity [22].
- Projective technique "The Life Line" [2,3], in which the respondent was asked to place its significant life events relatively to the line indicating the time axis. Formalization of the responses was carried out by the following indicators: total number of memories, the number of positive memories, the number negative memories, the number of life topics, number of events of the childhood, the density of the memories as a whole and the age of first memory.
- The questionnaire of self-attitude (SA) allows identifying the 3 levels of self-attitude, which differ in degree of generality: 1) global self-attitude; 2) self-attitude, differentiated self-esteem, auto-sympathy, self-interest and expectations attitude; 3) specific actions (readiness) regarding one's self. The questionnaire contains of 7 scales, which measures the severity of attitudes to certain internal actions regarding one's self: 1) self-confidence-conveyance of a sense of self-value and the estimated value of one's self for others; 2) the attitude of others-diagnosis of the prevalence of one of the two trends: either the conformity expressed motivation of social approval, or criticism, deep self-awareness, inner honesty and openness; 3) self-acceptance, which defines the expression of sympathy to one's self, agreement with its internal motives, self-acceptance, in spite of the shortcomings and weaknesses; 4) self-management, which reflects the view of the person on the main source of its own activity and achievements, the source of self-development, underlines the dominance of either of self or external circumstances; 5) self-blame characterizes the severity of negative emotions in the address of the self; 6) self-interest identification of self-respect, relevance to themselves as the confident and strong-willed person; 7) self-understanding detection of the presence

of internal conflicts, doubts, disagreement with one's self, the tendency to soul-searching and reflection [23].

- Questionnaire "Type of Attitude to the Disease" (TOBOL) [24], determining the dominant types of attitude to the disease, which demonstrate the prevailing features of the person's response to disease. The questionnaire consists of 12 statement sets (health, mood, etc.). Each set contains from 10 to 16 statements, which are based on clinical experience of experts. The patient is invited to select the two statements on each topic which are most relevant to him. There were allocated harmonious (realistic and weighted), ergopathic (retreat from the disease to the work), anosognostic (active rejection of thoughts about the disease), anxious (permanent concern and suspiciousness regarding the adverse course of the disease), hypochondria (an excessive focus on the subjective painful or other unpleasant sensations), melancholic (over depressed by the disease), neurotic (the type of behavior is "irritable weakness"), apathetic (indifference to the outcome of the disease), sensitivity (excessive sensitivity, concern about possible adverse experiences about the disease that can impress other people), egocentric ("acceptance" of the disease and searching benefits of it), paranoid (confidence that the disease is the result of external causes, malicious intent), and dysphoric (irritable, dominates-bleak, embittered mood) types of attitude to disease (TAD).
- Projective technique "Metaphor of the Past" [2,3]. Participants are asked to continue the following phrase: "my past is like ...". Formalization of the responses was carried out using the parameters: "vitality of metaphorical image", "static character/dynamism of the image", "locus of control", "forecast" and "overall assessment of the past".
- The Balanced Inventory of Desirable Responding (BIRD) [25] in the adaptation of Osin [26]. The Questionnaire is intended to study the influence of motivation of social desirability responses during the psychological distress. It consists of 60 statements, each of which should be rated from 1 to 7. It includes the following scales: "making an impression", "self-deception" and "protective denial".
- Questionnaire SCL-90-R (Symptom Checklist-90-Revised) [27] focuses on the diagnosis of the dynamics of symptoms during drug treatment and psychotherapy. Symptomatic questionnaire consists of 90 items, which rates distress by a five-point system ranging from "not at all" to "extremely". The technique allows to determine the severity of the following symptomatic scales: somatization, obsessive-compulsive, interpersonal sensitivity (interpersonal anxiety), depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism. In addition, technique includes such integral scales as: general symptomatic index, index of manifestation of symptoms and the index of severity of distress.

It was proved that the methods that were used in the study have a good representativity and high external validity [3,17,18,24]. Statistical analysis was performed using Student's t-test for independent samples, crosstabs, correlation analysis (correlation coefficients Pearson), and ROC analysis.

## Results

Positive correlation was found in the normative sampling between scales: multi-functionality and self-regulation ( $r=0.459$ ;  $p<0.05$ ), communication and pragmatics ( $r=0.560$ ;  $p<0.05$ ); self-regulation and pragmatics ( $r=0.517$ ;  $p<0.05$ ); the total number of memories and positive memories ( $r=0.886$ ;  $p<0.001$ ); maturity and self-understanding ( $r=-0.586$ ,  $p<0.001$ ). These results indicate homogeneity and interrelated importance of each distinct function of AM for the person's activity. The negative correlation between the indicators of communication and maturity ( $r=-0.543$ ;  $p<0.05$ ); pragmatism and maturity ( $r=-0.490$ ;  $p<0.001$ ) was also found.

Among "normal" participants most of the events from the total number of AM were positive and, overall, reflected satisfaction of their past.

The analysis of crosstabs revealed ( $p<0.05$ ) that patients with schizophrenia are significantly distinguished by higher average scores on scales: polyfunctionality, communication, self-regulation and pragmatics, as well as by lower values on scales of maturity and self-blame (Table 1 and Figure 1).

For individuals who showed high results on the scales ( $p<0.05$ ) polyfunctionality, self-regulation, pragmatics, attitude of others, self-management, self-interest, self-understanding combined with low scores on the scales of maturity and self-blame was typical: a low-learning, low cognitive level and intelligence, emotional instability, committing the homicide in past, criminal prosecution 3 times or more, alcohol abuse.

Also in almost all cases, these participants have an external locus of control regarding the incident life events.

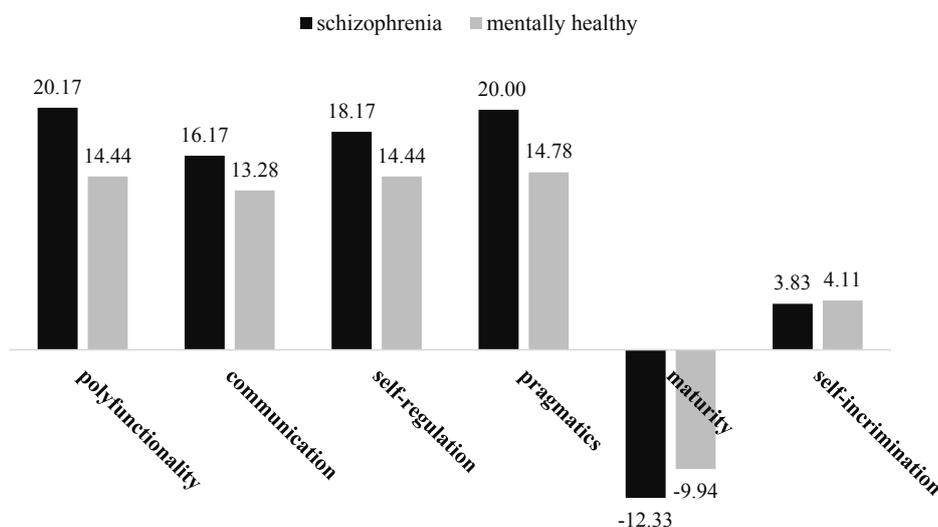
A positive correlation was revealed between the indicators ( $p<0.05$ ): multi-functionality and communication; multi-functionality and self-regulation; multi-functionality and self-understanding; self-blame and discreteness and connectedness of events; self-interest and the density of events generally. A negative correlation was found between the variables: confidence and the density of events generally; self-interest and overall assessment of the past.

The group of offenders with schizophrenia is significantly distinguished by more general number of negative events. Also this group have higher rates of motivation of social desirability with high values of scale making an impression (BIDR) (Table 2 and Figure 2).

Correlation analysis revealed that tendency to "make an impression" is positively associated with such variables as "somatization" ( $r=0.524$ ;

Variables	Schizophrenia			Normal			F	t	p (2-sided)
	M	SD	SEM	M	SD	SEM			
Polyfunctionality	20.17	4.46	1.05	14.44	4.13	0.97	0.054	3.991	0.000
Communication	16.17	5.17	1.22	13.23	4.08	0.96	0.752	1.860	0.042
Self-regulation	18.17	4.22	0.99	14.44	4.83	1.14	0.053	2.463	0.019
Pragmatics	20.0	3.94	0.93	14.78	3.46	0.81	0.127	4.227	0.000
Maturity	-12.33	3.22	0.76	-9.94	2.92	0.69	0.610	-2.333	0.026
Self-Blame	3.83	0.7	0.17	4.11	1.23	0.29	1.158	-0.830	0.012

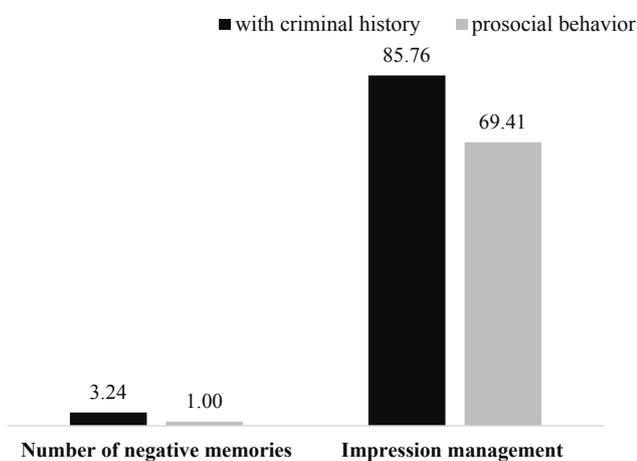
Table 1: Significant differences in the dispersions of the investigated variables between patients with schizophrenia and conditionally healthy people with no criminal history.



**Figure 1:** Statistically significant differences between the mean values of variables between patients with schizophrenia normal behavior and mentally healthy people with no criminal history.

Variables	With criminal anamnesis			Without criminal history			F	t	p (2-sided)
	M	SD	SEM	M	SD	SEM			
Number of negative events	3.24	1.44	0.35	1.0	1.27	0.3	0.049	4.797	0.000
Making an impression	85.76	18.2	4.41	69.41	18.18	4.4	0.019	2.621	0.013

**Table 2:** Significant differences in the dispersion of the investigated variables between patients with schizophrenia who have committed a socially dangerous act and with no criminal history.



**Figure 2:** Statistically significant differences between the mean values of variables in a group of offenders with schizophrenia and patients with "normal" behaviour.

p=0.031), "anxiety" (r=0.763; p=0.000), "dysphoric TAD" (r=0.557; p=0.020), "paranoid TAD" (r=0.545; p=0.024) and "general symptomatic index" (r=0.517; p=0.033).

Thus, the motivation of the making impression is associated with the severity of subjectively perceived symptoms and maladaptive TAD, for which is typical intersubjective aggressive response.

In the group of patients with schizophrenia, with a criminal history, the variable "pragmatic function of AM" is negatively associated with "hostility" (r=-0.625; p=0.007) and with the variable "depression" (r=-0.633; p=0.006). Also the scale of "the pragmatic function of AP" has

a negative correlation with the parameter "general symptomatic index" (r=-0.490; p=0.046).

Variable "maturity of AM" is positively correlated with the variable "harmonic TAD" (r=0.511; p=0.036). There were also revealed a positive correlations of the variable "maturity AM" with such formalized characteristics of the AM as "the total number of life events" (r=0.502; p=0.040) and "the number of positive events" (r=0.554; p=0.021).

The parameter of communicative function of AP is associated with such variables as "apathetic" (r=-0.674; p=0.003) and "anosognostic" TAD (r=0.504, p=0.039) (Table S1).

The following features distinguish the group of patients with schizophrenia without a criminal history. A significant contribution of AM to the IPD is observed among participants with ergopathic TAD, which is characterized by relatively realistic perceptions about the disease with preserved social adaptation.

Positive associations of the variable "ergopathic TAD" were revealed with the following parameters: number of life topics (r=0.608; p=0.010), the total number of events (r=0.551; p=0.022), the number of negative events (r=0.619; p=0.008) and the density of events generally (r=0.541; p=0.025). Sensitive TAD is associated with the prevalence of AM negative content. Neurotic TAD correlates with the variable communicative function of AM (r=0.495; p=0.043).

The variable number of negative events has a positive association with depression (r=0.642; p=0.005), interpersonal anxiety (r=0.585; p=0.014), psychotism (r=0.559; p=0.020) and the general symptomatic index (r=0.551; p=0.022) (Table S2).

Constructing the ROC curves relatively to the binary dependent

variable "presence of criminal history", with the aim of predicting the probability of attribution (qualification) independent variables, which are diagnosed, was found the following. Patients with schizophrenia with the results of more than 17.5 points (sensitivity-0.706) of the parameter "self-regulation function of AP", with the values of the parameter "pragmatic functions of AP" that exceed 19.5 points (sensitivity-0.706), the parameter "making an impression" above 72.0 points (sensitivity-0.706) and "number of negative events" more than 2.5 (sensitivity-0.765), would be assigned to the category of subjects who have criminal history. The value of variable "paranoid TAD" less than 1.0 points (sensitivity-0.706) allows including participants into the group who have criminal history (Figure 3).

## Discussion

Group of "norms" with greater voluntariness (maturity AM) slightly reduces the resource usage of the AM as a means of communication, and to extract "lessons" from past experience. Self-awareness, a high level of reflexivity and insight assume randomness and meaning when referring to personal memories, combined with capacity for the effective use of functional capacity of the AM.

In the group of patients with schizophrenia the usage of the functional capacity of the AP was mostly indicated for communication and as a means for the regulation of emotional-national state.

The subjects that are more consistently recall events of the past, have both a greater level of self-incrimination, awareness of their negative characteristics, a more realistic representation of self-identity and what happened with them.

In case of discreteness of the reproduced repertoire of the AM is registered a low level of self-prosecution. It reflects the reluctance of actualization of past events of personal history, irrelevant to the structures of identity and can be expressed in superficial, idealized translation of ideas about one's personality and one's past with fancy implantation in the AM artificial senses, which is congruent with their own pre-concepts.

Patients with schizophrenia are also less represented the events of internal life compared to the group of normal, which indicates the difficulty of actualization reflexive ideas about past events. The

interpretation of the past is carried out with formal positions in a distorted self-estimate under on broken ideas about their identity.

The prevailing negative assessment of the past at a high level of self-interest may indicate the use of primitive psychological defenses for minimization traumatic effects of past experiences, the reductive understanding of the events of the inner life, inadequacy of representation of yourself.

"Learning" from past experience in order of planning and implementation of activities, through the resources of the AM, mediate behavior, restraining aggressive tendencies. Herewith the ability to extract "life lessons" from past experience is reduced by increasing the level of perceived symptoms. The phenomenology that was discovered is likely reflects the affective acting of patients on social situation and at the same time reducing the extraction of "life lessons" from past experiences.

Among patients with schizophrenia in case with "carelessness" and "blurring" of internal boundaries, non-adequacy of self-esteem and uncritical to himself, the transformation of AM, based on the total disorganization of identity, which determines the nature of the available autobiographically relevant material.

Among offenders with schizophrenia, the development of pragmatic functions of AM depends on the severity of the perceived symptoms, in particular in the form of depression and hostility. Moreover "maturity of AM" is connected, mainly, with harmonious TAD. Subjects, who successfully implement communication capabilities for transmission and the exchange of AM, tend to downplay or even deny their disease, while they have more active life position.

The offenders with schizophrenia with a higher severity of perceived symptoms and maladaptive TAD accompanied by hostile response demonstrate such dominant motivation of social desirability as impressing.

The subjects of this group are also distinguished by the lack of link between actualized past events and adequate personal assessment, the appropriate sense of the past AM.

This suggests that this estimate is not based on united conscious self-relation, but is based on the distorted identity.

The patients with schizophrenia without a criminal history have the following characteristics: sufficient availability of events of the past; mediation of ideas about disease by mostly negative events, indicating the conjugation of negative past experience with nosology specific symptoms and affective disorders; the predominance of positive memories, contributing to the preservation of a positive self-attitude and satisfaction of the past.

In the case of mediated and informed appeals to personal memory more awareness and adequate TAD is formed, which is characterized by the realistic ideas about their disease. That is, greater awareness of autobiographical memories is associated with a better understanding of the disease.

A more rich representation of the past, with personal necessary idea of its positivity, allows to keep a positive self-attitude and to reduce overall tension.

Thus, the results allow identifying and substantiating the main directions of psychological effects on the patients with schizophrenia, which are under compulsory treatment, in order to prevent them from committing the socially dangerous acts once more. The main task is to

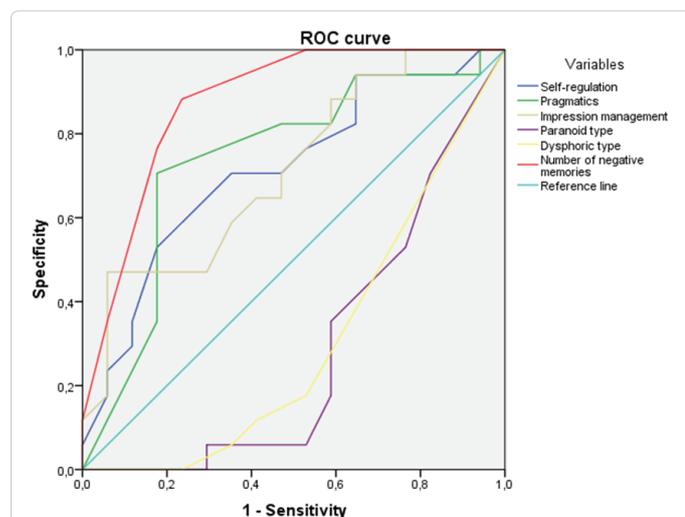


Figure 3: ROC-curve showing the quality of the built predictive models for the classification of cases of the presence of criminal activity among patients with schizophrenia.

develop an integrated and adequate perception of their mental disorder. This will increase the level of compliance and, in turn, will reduce the risk of committing the socially dangerous acts once more. Psychological effects are to be used in view of the identified features of perception of illness among patients with schizophrenia with a criminal history. In addition, the numerous acknowledgments of productive work with AM in psychotherapy practice (predominantly in cognitive-behavioral direction, as well as through psychoeducation, social and pedagogical work) should be considered. In this case, the main thing is the representation that directed transformation of autobiographical content leads to the stable situational or personality changes. Strengthening of the positive orientation of AM has proved itself as an effective tool to improve the psychological status of patients with different nosology, including patients with schizophrenia. It causes a better understanding of their current mental state, increases personal integration, enhances the credibility of the therapy and the motivation to treatment [6,28,29].

Various thematic trainings, which targets the skills of problem-solving behavior and skills of the coping behavior, the improving communicative competence and coping with anger should be created on the basis of resources and functional capacity of AM. An important target of psychological correction in this direction is to understand disease at the behavioral, emotional and cognitive level, taking into account the specifics of the IPD. In addition, it is important to remember that in the process of psychological correction with individuals with criminal histories generally accepted complex, multi-professional approach should be applied.

## Conclusion

Thus, the specific features of the relationship of parameters related to the autobiographical memory and inward picture of disease among offenders with schizophrenia and noncriminal patients were highlighted. The hypothesis about the mediating effect of autobiographical memory on the inward picture of disease among offenders with schizophrenia was confirmed.

In order to generalize the obtained results is possible to draw a number of conclusions.

- Patients with schizophrenia, who have committed socially dangerous acts, are distinguished by significantly greater total number of adverse events, lack of positive self-attitude and satisfaction in the past in their autobiographical memory.
- The motivation of making impression is associated with the severity of subjectively perceived symptoms and maladaptive types of attitude to disease, which are characterized by inter subjective aggressive response.
- The interrelation between the constructs of inward picture of the disease and autobiographical memory reflects the affective abreaction of patients on a social situation while reducing the extraction of "life lessons" from past experiences.
- Functional constructs of autobiographical memory make a smaller contribution to the mediation activities in general, and concept of the disease in particular, which is associated with a predominance of fragmented attitude to the disease, low awareness and explanation of the symptoms.
- The results are an important source of information about the targets of the psychological correction towards schizophrenic patients with a criminal history.

## References

1. Irgevskaia VP (2009) Disarrangement of perception of mental illness in schizophrenia. Moscow University, Moscow, Russia.
2. Nurkova VV (2004) The role of autobiographical memory in personal identity structure. *World Psychol* 2: 77-87.
3. Nurkova VV (2009) The cultural-historical approach to autobiographical memory. Moscow University, Moscow, Russia.
4. Dzhidar'yan IA (2001) The concept of happiness in the Russian mentality. St. Petersburg: Aleteiya, Russia.
5. Quam JK, Abramson NS (1991) The Use of Time lines and Life lines in Work with Chronically Mentally Ill People. *Health Soc Work* 16: 27-33.
6. Borden W (1989) Life Review as a Therapeutic Frame in the Treatment of Young Adults with AIDS. *Health Soc Work* 14: 253-259.
7. Amador XF, Strauss DH, Yale SA, Gorman JM (1991) Awareness of illness in schizophrenia. *Schizophr Bull* 17: 113-132.
8. David AS (1990) Insight and psychosis. *Brit J Psychiatry* 156: 798-808.
9. Nikolaeva VV (1992) Personality in chronic somatic illness. Moscow University, Moscow, Russia.
10. Vid VD (2008) Psychotherapy of schizophrenia. Saint-Petersburg State University, St. Petersburg, Russia.
11. Bartko G, Herczeg I, Zador G (1988) Clinical symptomatology and drug compliance in schizophrenic patients. *Acta Psychiatr Scand* 77: 74-76.
12. Greefield D, Strauss J, Bowers M, Mandelkern M (1989) Insight and interpretation of illness in recovery from psychoses. *Schizophr Bull* 15: 245-252.
13. Tattan TM, Creed FH (2001) Negative symptoms of schizophrenia and compliance with medication. *Schizophr Bull* 27: 149-155.
14. Thostov AS (1990) The theoretical aspects of the research of inward picture of the disease. Psychological diagnostics of the attitude to the disease among the neuro-psychic and somatic diseases: a collection of scientific papers. Leningrad State University, St. Petersburg, Russia.
15. Nelubina AS (2009) The role of conventional representations in the formation of the inward picture of the disease. Moscow University, Moscow, Russia.
16. Han'ko AV (2014) Psychological adaptation to the disease among patients with first-episode schizophrenia. Saint-Petersburg State University, St. Petersburg, Russia.
17. Bulygina VG, Makushkina OA, Belyakova MU (2014) Disarrangement of social apperception as a factor in the risk of committing repeated socially dangerous acts among people who suffers from mental disorders. Part 1. *Russian Psychiatr J* 4: 4-10.
18. Bulygina VG, Makushkina OA, Belyakova MU (2015) Disarrangement of social apperception as a factor in the risk of committing repeated socially dangerous acts among people who suffers from mental disorders. Part 2. *Russian Psychiatr J* 5: 4-9.
19. Bulygina VG, Kazakovcev BA, Makushkina OA (2014) Subjective evaluation and rehabilitation potential as risk reduction factors of violence: guidelines. Serbsky National Research Centre for Social and Forensic Psychiatry of Ministry of Health, Moscow, Russia.
20. Lichko AE, Ivanov NY (1980) Medical and psychological examination of somatic patients. *Korsakov J Neuropathol Psychiatr* 8: 1195-1198.
21. Ciompi L (1988) Learning from outcome studies toward a comprehensive biological-psychological understanding of schizophrenia. *Schizophr Res* 1: 373-384.
22. Vasilevskaya KN (2008) Development and testing of a diagnostic questionnaire "Autobiographical memory functions". *Psychol Sci Edu* 4: 101-110.
23. Stolin VV, Pantileev SR (1988) The questionnaire of self-attitude. Tutorial of psychodiagnostics: Psychodiagnostic materials, Moscow, Russia.
24. Wasserman LI, Iovlev BV, Karpova EB (2005) Psychological diagnostics of attitude to the disease. Bechtereiv Psychoneural Institute, St. Petersburg, Russia.
25. Paulhus DL (1998) Manual for the Balanced Inventory of Desirable Responding. Multi-Health Systems, Toronto, USA.

26. Osin EN (2011) The problem of social desirability in the studies of personal potential. In: Leontiev DA, editor. *Personal potential: structure and diagnostics*. Smysl, Moscow, Russia.
27. Derogatis LR (1994) *Symptom Checklist-90-R: administration, scoring and procedures manual*. National Computer Systems, Minneapolis, USA.
28. Philips E (1988) *Patient compliance*. Hans Huber, New York, USA.
29. Noordraven EL, Wierdsma AI, Blanken P, Anthony FT, Cornelis L (2016) Depot-medication compliance for patients with psychotic disorders: the importance of illness insight and treatment motivation. *Neuropsychiatr Dis Treat* 12: 269-274.