Ethno-, socio-cultural and nosological peculiarities of the phenomenon of secondary gain from illness (SGI)

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Abstract

Secondary gain from illness (SGI), understood as a complex of social (external) and intrapsychological (internal) advantages obtained by individual during his/her illness, was investigated in ethno-, sociocultural and nosological directions. Respondents of Kyrgyztan, Russia, France, and USA reported different levels of SGI, which indicates that SGI has sociocultural nature and is unique in each society. At the same time different levels of internal secondary gain was found in patients with schizophrenia and somatoform disorders which means that neurotic and psychotic symptoms play different role in gratification of meta-needs. Authors propose some additional aspects to the psychodynamic model of SGI.

Резюме.

Вторичная выгода от болезни (ВВБ) понимается как совокупность социальных («внешних») и интрапсихологических («внутренних») преимуществ, получаемых заболевшим как от самого факта наличия расстройства, так и от его признаков. Данная работа посвящена исследованию ВВБ в этно-, социокультуральном и нозологическом аспектах. У респондентов из Кыргызстана, России, Франции и США были обнаружены статистически достоверные различия в напряженности ВВБ, что, по мнению авторов статьи, является показателем социокультурального происхождения феномена. В то же время, различный уровень внутренней вторичной выгоды от болезни у пациентов с соматоформными расстройствами и шизофренией подтверждает гипотезу о неодинаковом участии невротической и психотической симптоматики в удовлетворении потребностей заболевшего. Авторы предлагают ряд дополнений к психодинамической модели ВВБ.

The term "secondary gain from illness" (SGI) is used in clinical psychology to define a complex of advantages obtained by individual from his/her illness. This term is more ambiguous then classic psychoanalytic term "primary gain from illness" (Freud, 1963) and popular in social psychology and psychiatry term "tertiary gain from illness" (Dansak, 1973).

The most detailed description of historical development and difficulties in use and interpretation of the concept of SGI was given by J.J. van Egmond (2003). The most profound literature review of investigations devoted to the problem of SGI was proposed by Fishbain D.A., Rosomoff H.L., Cutler R.B., Rosomoff R.S., (1995). Authors analyzed 166 articles described different versions of SGI and came to conclusion that results of these studies are in conflict and some of them have methodological flaws.

As a result of literature review a lot of questions were revealed concerning phenomenon of SGI. There are two the most important:

- 1. What is the relation between two psychological constructs adaptive by their nature "secondary gain from illness" – external and internal advantages and "social sick role" characteristics of a certain level of regressive behavior?
- 2. Is there a difference in manifestations and mechanisms of phenomenon of secondary gain from illness in patients with somatoform disorders and schizophrenia?

The main reason of the first question is a long-standing interest of authors of the current research in the field of ethno- and socio-cultural aspects of psychological and pathopsychological phenomena. Moreover, it's supposed that each culture would determine quantity and intensity of unique characteristics of a certain level of regressive behavior. Why phenomenon of SGI should be culturally determined? Because culture is a particular, important and materialized form of relationship.²

The main reason of the second question was the discrepancy between numerous articles about the role of SGI in somatoform and psychosomatic disorders, and absence of similar investigations in patients with "large" psychotic disorders (e.g. schizophrenia). Furthermore, phenomenon of SGI is heterogeneous. Freud referred to the possible formation of "internal part" of SGI, when symptoms of disorder help to satisfy needs that were frustrated before neurotic disorder. "External part" of the phenomenon is a result of Ego adaptation when illness and its symptoms help to obtain desired object or situation through manipulation. Sometimes such manipulation takes the form of blackmail. Thereupon, it would be logical to suppose that "external" and "internal" SGI would be different in somatoform disorders and schizophrenia.

Two research questions determined two quite independent studies according to its goals.

Study 1.

The purposes of the first study are: (1) development of psychodiagnostic instrument for the investigation of ethno-, socio-cultural and nosological peculiarities of "social sick role" and

¹ Study of ethno-cultural peculiarities of the "sick role" in different countries has different historical and descriptive character. In Slavic culture the attitude toward an ill person was always compassionate and an individual didn't take responsibility for his/her illness. To be weak and sick was not humiliation but a justification of failures in life. On the contrary, in Japan and China an illness is the sign of weakness and isn't approved by society. In countries with protestant religion an illness has negative meaning for personality in contrast to orthodox or catholic societies (Thostov, 2002).

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(2) comparative analysis of ethno- and socio-cultural peculiarities of "social sick role" of healthy individuals from different countries and cultures.

Method.

The instrument for the first study was the Questionnaire of Secondary Gain from Illness (OSGI) that was developed specially for this study. The type of illness was intentionally not specified. Presumably, the attitude of young people toward the illness is formed according to the observation of other's attitude toward sick people. Sick individual, the attitude of whom is measured by the questionnaire, is endowed by common characteristics of what should or should not do a person when he/she is ill. That is why the questionnaire didn't include indications on duration and type of illness. Thus, QSGI was more designed to measure parameters of "social sick role" then to measure intensity of SGI.

The first version of questionnaire included 28 statements. A 5 – point Likert-type scale was used ranging from 1 ("strongly agree") to 5 ("strongly disagree"). First version of the questionnaire included equal number of direct ("It's better not to postpone the resolution of urgent and vital daily problems until recovery") and indirect statements ("One must not demand from an ill person the performance of his/her usual duties").

After first approbation the questionnaire was translated into Kyrgyz, French and English languages using back-to-back translation procedure. Following statistical analysis was conducted using 12.0 version of the Statistical Package for the Social Science (SPSS).

Overall, 288 respondents from four countries (Kyrgyzstan, Russia, France, USA) participated in the first study. Age ranged from 16 to 65 (M=29.9). 96 residents of Kyrgyzstan were divided into three groups: 1 - "Russians" (32 respondents), 2 - "Russian-speaking Kyrgyz", they completed questionnaire in Russian" (32 respondents), 3 - "Kyrgyz-speaking Kyrgyz", they completed questionnaire in Kyrgyz" (32 respondents). Each group included 16 males and 16 females. Residents of Russia, France and USA had 64 respondents in each group. The number of males and females was equal – 32 males and 32 females in each group.

Questionnaires in Kyrgyz language were given to the respondents who recently immigrated to the capital of Kyrgyzstan Bishkek and were fluent in Kyrgyz language. Respondents who completed questionnaire in Russian language were chosen randomly. Respondents from Russia, France and USA were given an on-line version of the questionnaire³.

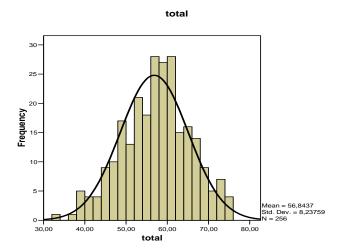
In order to improve internal consistency of the questionnaire, the items that had low correlation with the total score (r< .3) were deleted. Factor analysis extracted three different

³ First versions of questionnaires in Russian, French and English were put on: http://www.wellness.to.kg/psy/

factors: 1) "factor of secondary gain from illness"; 2) "factor of decrease of the responsibility of a sick person before him-/herself and the society"; 3) "factor of positive attitude of society toward a sick person". The final version of questionnaire included 21 statements (minimum score – 21, maximum – 105). The following analysis for reliability of a scale showed Cronbach alpha .7, demonstrating high internal validity of the questionnaire. Cronbach alpha of first factor is .65, of second factor - .67, of third factor - .60.

Table 1. Three factors of SGI.

	Component			
Item	1 Secondary Gain	2 Decrease of responsibility	3 Positive attitude	
One must not demand as much from an ill person as from a healthy	.608			
one. When you are ill there is time to think about possible changes in your life.	.556			
Problem solving can wait until full recovery.	.535			
When you are ill you can let yourself to do what you really like.	.470			
When you are ill you can be capricious.	.457			
It's cruel not to feel sorry for and not to pay extra attention to an ill person.	.436			
It's easier for a person to have an influence on others during his/her illness.	.429			
It's better not to think about unpleasant things otherwise you will not recover.	.416			
If you don't comply with request of an ill person he/she will feel worse.	.388			
During an illness, there is plenty of free time, however when a person is well, there is usually never enough.	.370			
All ill people demand particular attention and love.	.334			
It's better to solve unpleasant situations as soon as it appears no matter whether you are ill or healthy.		.766		
In spite of illness, it is necessary to carry out the daily duties.		.703		
It's better not to postpone the resolution of urgent and vital daily problems until recovery.		.623		
A well-mannered person will never let himself/herself to get out of control, even if he/she is ill.		.603		
Illness is not an excuse for self-pity and self-indulgence.		.416		
It is necessary to have strict and demanding attitude toward oneself during an illness in order to recover.		.346		
It's better not to manifest compassion toward an ill person. He/she might like it and not recover.			.754	
To be led by an ill person means to be under his/her manipulation.			.697	
One must treat an ill person as a healthy one.			.600	
% of variance explained	12.7%	11.2%	9.4%	



Scores on SGI in the general sample were normally distributed, M=56.8, SD=8.2 (pic.1).

Pic. 1.4 Histogram with normal distribution of scores according to QSGI in the general sample.

Results and discussion

The most important result of study 1 was statistically significant (p=.000) difference among respondents of four countries according to QSGI (pic.2). Interestingly, that there was no significant difference according to sex, age and ethnicity.

Pic. 2. Comparison of scores on QSGI by Kyrgyzstan (KG), Russia (RU), France (FR) and USA (USA).

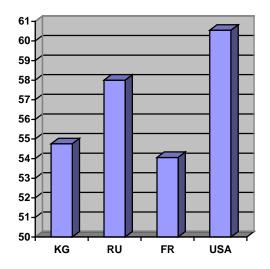


Table 2. Scores of residents of four countries according QSGI.

Country	M, SD	p<0.001
1. Kyrgyzstan	54.76 <u>+</u> 7,51	1-2; 1-4
(n=64)		
2. Russia	58.00 <u>+</u> 8.90	2-1; 2-3
(n=64)		
3. France	54.06 <u>+</u> 7,51	3-4; 3-2
(n=64)		
4.USA (n=64)	60,54 <u>+</u> 6,38	4-1; 4-3

⁴ Here and then the number of respondents is 256. Subgroup of respondents from Kyrgyzstan was reduced till 64 in order to conduct procedure of analysis. Data of respondents - Kyrgyz who completed questionnaire in Russian was used for analysis of Kyrgyzstan sample only.

Besides general score on SGI three factors were analyzed separately. Distributions of scores on each factor were normal. Each factor included different number of items. That is why it was necessary to transform raw scores into standard scores (M=50 and SD=10).

The following formula was used:

X = 50 + [(M country - M general sample) / SD general] x 10.

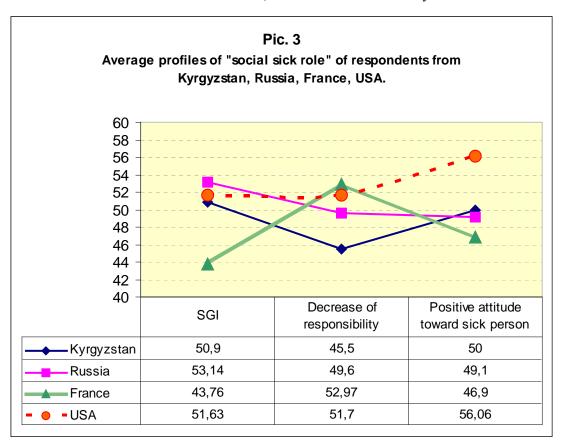
Raw and standard scores for each factor are presented in the following table:

Table 3. Comparison of three factors according to QSGI.

Scores		General	Kyrgyzstan	Russia	France	USA
		sample	1	2	3	4
		(n=256)	(n=96)	(n=64)	(n=64)	(n=64)
	M	29,13	29,6	30,7	26,2	29,9
1 factor	SD	5,1	4,9	5,0	4,7	4,7
	p<0.001		1-3	2-3	3-1: 3-2; 3-4	4 -3
	T-scores	50	50,9	53,14	43,76	51,63
	M	15,26	13,51	15,10	16,45	15,97
2 factor	SD	4,39	4,05	4,62	4,57	3,77
	p<0.001		1-3; 1-4		3-1	4-2
	T-scores	50	45,6	49,6	52,97	51,7
	M	9,71	9,7	9,45	8,80	11,53
3 factor	SD	3,02	3,2	2,9	3,20	1,76
	p<0.001		1-4	2-4	3-4	4-1;4-2;4-3
	T-scores	50	50,0	49,1	46,9	56,06

Factor 1, which is the "factor of secondary gain from illness", measures characteristics of socially normal regressive behavior that demonstrates sick person ("When you are ill you can let yourself to do what you really like", "When you are ill you can be capricious" and so on). Factor 2 – "factor of decrease of responsibility" - measures such traits of a person as postponement the problem solving until recovery ("In spite of illness, it is necessary to carry out the daily duties"; "It's better not to postpone the resolution of urgent and vital daily problems until recovery"). The more respondents accept such behavior the higher score on this factor he/she would have. And finally, factor 3 – "factor of positive social attitude toward sick person" – measures "helping", "supporting" attitude toward the sick person ("One must treat an ill person as a healthy one").

After transforming raw score into standard profiles of "social sick role" for respondents of four countries were built (Pic. 3).



"Kyrgyz", "Russian", "French" and "American" profiles of "social sick role" differ from each other. Low scores of "normative regressive behavior" (factor 1) and of "positive attitude toward sick person" (factor 3) in "French" profile mean that an illness doesn't justify regressive behavior⁵. At the same time, social sick role in France implies postponement of problem solving (factor 2). In this case an illness could play a role of "alibi".

"Kyrgyz" profile of "social sick role" is opposite to "French" one. Respondents of Kyrgyzstan reported high scores on "normative regressive behavior" (factor 1) and "positive attitude toward sick person" (factor 3) and low scores on "decrease of responsibility" (factor 2). Illness in Kyrgyzstan is a very effective way to get social attention. Sick person has compassionate and positive attitude. But, "in spite of illness, it is necessary to carry out the daily duties".6. It could be supposed that there is correlation between social security, living standard and "factor of responsibility".

"Russian" profile was quite straight with increasing on first factor.

"American" profile was interesting by its increase on "positive attitude toward sick person".

⁵ Presumably, the reason of the obtained results could be the "image of a sick person who shakes his fist at the illness" (Ch.deGaule) presenting in French culture.

⁶ Statement of a questionnaire QSGI.

Interestingly, there was no significant ethnic difference between Kyrgyz completed questionnaire in Russian and in Kyrgyz. Kyrgyz sample was quite homogeneous.

The logical conclusion of study 1 is answer to the first research question. Behavior of a sick person is determined by demands and requirements of the society. These demands are unique for each culture and include a certain number of benefits from environment, such as decrease of responsibility in the society and positive attitude toward a sick person. Overfulfilment and underfulfilment of "sick role" is perceived as non-normative in conditions of illness because it doesn't correspond with social demands and requirements. Behavior which is typical to Kyrgyzstan could be non-normative for France or USA. And behavior of sick American could be perceived as "strange" in Russia. At the same time, instrument QSGI included the most typical manifestations of SGI. Thus, phenomenon of SGI is socioculturally determined. And "sick role", which presented in each culture, becomes its important element.

Study 2

Participants

- (1) 32 patients (16 males and 16 females) with paranoid schizophrenia. At the moment of investigation they were under the inpatients treatment in Republic Center for Mental Health (RCMH), Bishkek, Kyrgyzstan. Diagnosis of paranoid schizophrenia was verified according to ICD-10. Patients with first psychotic episode, older 55 years, with bad knowledge of Russian language and with cognitive deficit were not included to the sample.
- (2) 32 patients (16 males and 16 females) with somatoform disorder. At the moment of investigation they were under the inpatients treatment in ward of psychosomatics and psychotherapy of RCMH, Bishkek. Diagnosis of one of the somatoform disorders (somatisation disorder, hypochondrias, vegetative somatoform disorder, chronic pain disorder) and conversional disorder was verified according to ICD-10. Patients older 55 years and with cognitive deficit were not included to the sample. The number of pervious hospitalization was not considered.
- (3) Patients with ischemic heart disease residents of Moscow. At the moment of investigation they were under the inpatients treatment.⁷

Participation in the study was voluntary, informed written consent of doctors and verbal consent of patients were obtained and confidentially respected.

⁷ This data was gathered by Semiglazova Maria and Rybina Nina – post-graduate students of Moscow Research Institute of Psychiatry. Patients completed only QSGI.

Materials

- 1. QSGI, was standardized in the study 1.
- 2. Semi-structured interview (two versions for patients with somatoform disorder and schizophrenia).
- 3. Clinical Evaluative Scale (CES), was developed specifically for this study for doctors (Crondah alpha = 0.89). CES was created to measure behavioral patterns of external and internal SGI in patients with somatoform disorder and schizophrenia. Scale had 2 stages of development: 1) creation of bank of statements measuring behavioral characteristics of SGI and 2) selection of statements measure characteristics of SGI in more exact way. Selection was made by doctors of RCMH. 14 statements that were chosen by doctors became scales measured external SGI in dichotomous (right/wrong) way. Other 14 statements represented characteristics of manipulative behavior of a sick person and measured internal SGI.

All psychodiagnostic instruments were chosen to fulfill two aims: 1) to measure and compare general level of SGI in patients of two clinical groups; 2) to compare the intensity of external SGI and internal SGI.

A one-way between groups analysis of variance (ANOVA) that utilized the 12.0 version of the Statistical Package for the Social Science (SPSS) was conducted to compare the level of SGI in two clinical groups. A one-way between groups multivariate analysis of variance (MANOVA) was conducted to reveal difference in three factors of SGI and correlation analysis.

Results and discussion

'Comparison of three clinical groups (patients with somatoform disorder, schizophrenia and ischemic heart disease) according to QSGI is presented in table 4 Raw scores were transformed into standard scores according to the following fornula:

$$T = 50 + [(M \text{ raw scores} - M \text{ general sample}) / SD \text{ general}] \times 10$$
.

Means and Standard deviation for the group of Kyrgyz and Russian respondents was used as normative scores.

As it was mentioned before, the questionnaire of SGI measures not exactly SGI but rather understanding of a "social sick role" by patients. Nevertheless, in the context of disorder, patients give more personal answers demonstrating perception of themselves in the "sick role". Thus, the questionnaire can reveal not really intensity of SGI but rather perception of own behavior in the context of illness, which corresponds or does not correspond to a certain "social role". There is no doubt that role "just sick" and role "I'm sick" are different. Hospitalization in the center for mental health, its environment, interaction with doctors influence autostigmatization, that form additional sides of "I'm sick" and transforming this role into "I'm mentally sick". So, it was supposed to find out by means of this questionnaire if perception of oneself in the role of "mentally sick" differs from the normative "social sick role" in Kyrgyzstan.

Table 4 Comparison of three clinical groups according to QSGI.

Sco	ores	General sample			Somatoform disorder		
		(Kyrgyzstan +	Schizo	phrenia			
		Russia)					Ischemic heart
		(n=96)	F (n=16)	M (n=16)	F (n=16)	M (n=16)	disease (n=20)
					, , ,	, ,	
	M	30,20	44,75	41,31	41,00	39,19	40,55
Factor 1	SD	5,037	5,568	6,457	6,044	5,648	4,136
	Standar	50 <u>+</u> 10	77,09	72,05	71,44	67,85	70,57
	d scores						
	M	14,31	11,06	13,56	13,44	9,63	14,05
Factor 2	SD	4,406	3,454	4,546	3,723	3,538	4,045
	Standar	50 <u>+</u> 10	42,6	48,29	47,79	39,38	49,4
	d scores						
	M	9,27	6,63	9,50	7,88	8,75	8,05
Factor 3	SD	3,088	3,403	3,327	2,553	1,949	2,982
	Standar	50 <u>+</u> 10	41,4	50,7	54,51	48,31	46,038
	d scores						

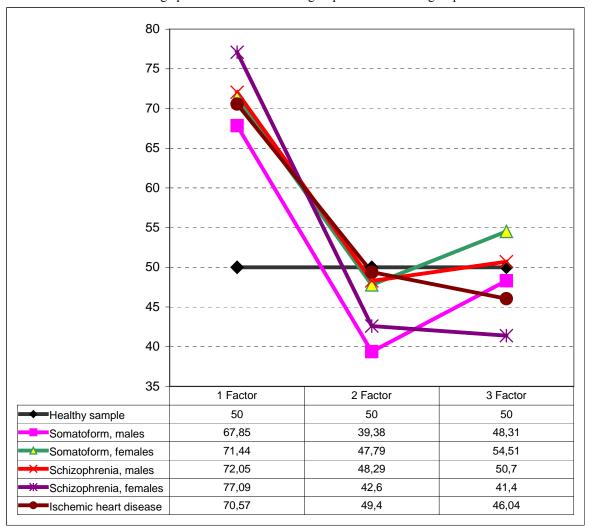
There was no significant difference between clinical and healthy groups $(p=.078)^8$. However, it was possible to compare profiles of each group according to three factors.

Patients of three clinical groups demonstrated higher scores then in normative group according to fist factor (factor of secondary gain from illness). It could be an indirect proves of validity of the questionnaire. Researches of the current investigation didn't aim to study correlations between SGI and the level of depression. But such hypothesis could be quite logical. First factor could demonstrate the perception of oneself as seriously ill ("the more serious my illness is more regressive behavior I could afford to myself").

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⁸ Probably, because of small sample (16 males and 16 females in each group).

Picture 4 Average profiles of three clinical groups and normative group.



All profiles do not differ much from each other by its configuration except the dispersion of scores on thirds factor. Such result could be due to vulnerable of the third factor because of its number of statements.

There was also no significant correlation between first factor (factor of secondary gain) and duration of illness (r= .12 p> .1). But results were quite interesting:

Table 5 Correlation between "duration of illness" and 1 factor

F			DURATION OF ILLNESS				
A			Somatoform disorder Schizophrenia			phrenia	
C			Males	Females	Males	Females	
	Somatoform	Males	27				
O R	disorder	Females		.33			
K	Schizophrenia	Males			11		
1		Females				.59*	

Positive correlations reported by females and negative correlations reported by males could indicate functioning of different psychological defense mechanisms in formation of own "sick role".

One more important result is that there was significant difference in the level of external and internal SGI between patients with somatoform disorder and schizophrenia. To define behavioral patterns of external and internal SGI clinical evaluated scale (which was filled by the doctors) was used. Scale consisted of two parts: 1) first part measure manipulative behavior in the context of illness – external SGI; 2) second part measure internal SGI. Minimum total score 0, maximum – 14 for each part. Results are presented in the following table:

Table 6 Expert evaluation of behavioral patterns of external and internal SGI in two clinical groups.

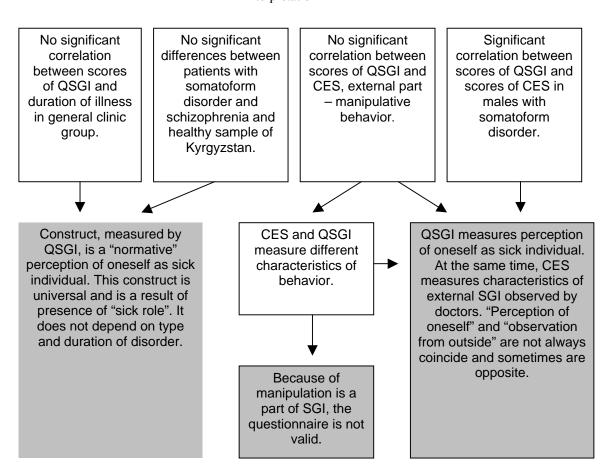
	Patients with	n schizophrenia		with somatoform disorder	
Scores	(1) Females (n=16)	(2) Males (n=16)	(3) Females (n=16)	(4) Males (n=16)	
Manipulative behavior – external SGI (a)	6,25+3,25	10,44+3,09	8,0 + 3,03	6,44+1,86	
Evaluation of doctors of internal SGI (b)	5,69+2,87	9,56+1,63	4,28+2,45	3,38+1,08	
Significant level p<0.05	1a-2a; 1b-2b; 1a-3a; 2a-4a; 2b-4b.				

The level of external SGI was quite high in two groups. Concerning the internal SGI, patients with schizophrenia reported higher-level then patients with somatoform disorders. It means that patients of two clinical groups can use symptoms of their illness to manipulate others. But, concerning satisfaction of meta-needs, neurotic and psychotic disorders play a different role. Thus, neurotic symptoms satisfy need for security and love. At the same time, positive symptoms of schizophrenia satisfy not only needs in love and to be in groups, but need in self-actualization ("savior of the world", "new messiah" and just an author⁹).

There was no significant correlation between general score on SGI according QSGI and scores on external SGI according CES, except significant negative correlation (r= - .75; p<.05) in the groups of males with somatoform disorder. In other words, the manipulative behavior evaluated by experts was inversely evaluated to SGI by patients. Possible interpretations are presented in the following picture 5:

⁹ Khlebnikov is not only the poet but the "Chairman of the world".

Picture 5 Interpretation



Perception of oneself in the "role of mentally sick person" is formed under the influence of normative "social sick role". This normative and conscious pattern of SGI is universal and doesn't depend on type and duration of illness. This mechanism is the same for patients with somatoform disorder and schizophrenia, because this is influence of social understanding of what behavior of a sick person should or should not be. We assume that "social sick role" is contradictory. From one side this is a way of obtaining the freedom from demands and requirements of society (not to fulfill responsibilities, not to go to the work, to the school and so on). Person can neglect dictated by the society the forms of behavior during the illness. From the other hand side "sick role" implies strict rules including harsh restriction of freedom. Formation of "social sick role" is a result of resistance of society from the illness which is the factor of natural selection¹⁰. Social attention is a bonus that obtained by individual who "plays well the sick role. The choice "to play sick role" or "to play the healthy role" is made due to the decision of what is more secure for the personality at that time. Is it "more normally" to behave yourself

¹⁰ Civilization refuses natural selection that is why civilized society should be hostile toward the illness.

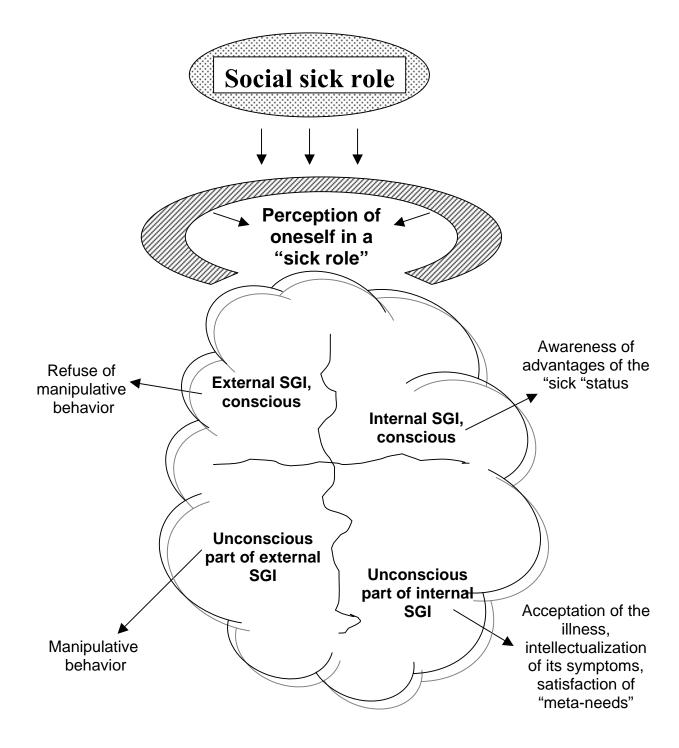
as a sick or as a healthy person? The second one implies conscious acceptance of illness. Maybe this is the reason of easy acceptance of not sever "normal" disorder and of denial of fatal illness (myocardial infarction) or abnormal disorder (schizophrenia).

Internal and external parts of SGI are unconscious strategies. These parts have positive significant correlations in all clinical groups (from r= .72 to r= .81, p< .01). Of course, these correlations don't indicate the type of relation. However, cause-effect relation between external and internal SGI is quite logical. Probably, internal SGI is a derivative of external SGI indication the level of Ego adaptation to the conditions of illness in patients with somatoform disorders. It's supposed that patients with schizophrenia could have external SGI as a derivative of internal SGI. In any case, the heterogeneous psychological construct SGI could become the target of future investigations.

Obtained results of the current research can improve understanding of SGI. We presented our view on the picture 6.

Conclusion

- 1. SGI is heterogeneous psychological construct which includes several elements: perception of oneself in a "sick role", manipulative "external" part, and "internal" parts satisfying needs that were frustrated before an illness.
- Perception of oneself in a "sick role" is universal phenomenon and unique in each culture. Moreover, it's determined by social expectation and requirements of each culture.
- 3. Significant difference between patients with somatoform disorders and schizophrenia according "internal" SGI indicates different destinations of neurotic and psychotic symptoms in satisfaction of needs that were frustrated before an illness.
- 4. Nonsignificant difference between behavioral patterns of "external" SGI demonstrated by patients with somatoform disorders and schizophrenia indicates similar use of manipulative behavior by patients with somatoform disorders and schizophrenia.



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