## **Original Article**

# Third-person Diagnostic Interview on the Cognitive Insight Level of Psychotic Patients with an Insight at the Denial Level

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#### ABSTRACT

**Objectives:** According to the previous findings, the third-person technique improved the clinical insight of psychotic patients, therefore the present study aims to examine the effect of a third-person interview compared to a first-person interview on the level of cognitive insight of psychotic patients with an insight at the denial level. **Materials and Methods:** In this study, using interviews and questionnaires, a total number of 44 patients of Razi Psychiatric Educational and Treatment Center with an insight at the denial level being assessed using diagnostic interviews were divided randomly into two groups. Then, the two groups of patients' cognitive insights were evaluated using Beck Cognitive Insight Scale. **Results:** The findings indicated that in psychotic patients with an insight at the denial level, the third-person technique of interview compared to the first-person had little effect on the improvement of overall cognitive insight and its components, including self-reflection and self-assurance; however, this effect was not strong enough to make a significant difference between the two groups of patients. **Conclusion:** According to the study findings, we can conclude that the third-person interview compared to the first-person interview has no effect on the improvement of the cognitive insight of psychotic patients with an insight at the denial level. This finding is consistent with the previous studies indicating that although the theory of mind has some correlations with the clinical insight of patients, it has no effect on their cognitive insight.

**Key words:** Beck scale, first-person diagnostic interview, insight, psychotic patients, theory of mind, third-person diagnostic interview

#### INTRODUCTION

Lack of insight is the main characteristic of patients with schizophrenia which has negative effects on the treatment of a client.<sup>[1]</sup> Studies show that a large percent of the patients with schizophrenia lack insight

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about their illness.<sup>[2-5]</sup> The Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition, Text Revision (DSM-IV-TR) describes the lack of insight in psychotic disorders as follows: "Most people with psychotic disorders have a weak insight because they

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have a mental illness. Based on some evidence, weak insight itself is a part of illness rather than a coping strategy." On the other hand, some researchers believe that lack of insight is a defensive strategy against one's illness attack. In addition, some studies show that illness denial is more a defensive method and a coping strategy. [6-8]

In summary, we can say that psychotic patients, who show significant insight impairment, can recognize their psychotic disorder. However, these patients are motivated to deny their illness, because they want to avoid the pressure and threats to their self-confidence resulting from their implicit discontent with the negative facts about themselves. Some findings that support this view include a higher tendency for positive evaluation in psychotic patients,<sup>[9]</sup> using the escapeavoidance coping styles<sup>[10]</sup> and defensive attribution biases.<sup>[11]</sup>

Lack of insight is not limited to patients with schizophrenia. Other mental disorders, especially mood disorders also include a lack of insight. [12,13] Although the mechanisms of lack of insight are still unknown, a definition of "lack of insight" depends on the theoretical background of the researcher. [14]

For example, previous studies considered insight as a one-dimensional phenomenon, meaning that a patient either has insight or does not,<sup>[15,16]</sup> but later studies considered insight as a multi-dimensional and continuum phenomenon. David<sup>[17]</sup> presented a concept for insight that consisted of at least three dimensions: Awareness of illness, the ability to accept the unusual mental experiences, and acceptance of treatment. Amador *et al.*<sup>[18]</sup> included two other dimensions into insight dimensions: Attributing the symptoms to the illness and awareness of the usefulness of illness acceptance.

In another approach, some researchers believe that lack of insight results from brain damage. For example, frontal lobe damage can lead to a lack of insight. [17,19] In fact, even if the patient disagrees, a medical damage can be the reason behind a lack of insight. In another study, it was found that problems in metacognition, self-assessment, and self-reflection resulted from prefrontal lobe damage. [20] However, some researchers believe that there is no relationship between lack of insight and brain damage. [14]

Finally, there is an approach that considers lack of insight as a basic and primary sign of schizophrenia.<sup>[14]</sup> In this study, we considered lack of insight which is a defense mechanism as a multi-dimensional factor.

Clinical insight usually refers to an awareness of

illness, relabeling the symptoms and recognition of a need for treatment.[21,22] Studies show that patients with schizophrenia are significantly unaware of the symptoms of their illness, including delusions, hallucinations, anhedonia, thought disorders, social isolation, and blunted affect. Nevertheless, clinical insight cannot evaluate the wrong presumptions and abnormal experiences of the patient; these evaluations are completed by cognitive insight. Cognitive insight evaluates clinically considerable cognitive impairments. It includes meta cognitive processes, i.e., reappraisal and modification of disturbed experiences (such as objective distancing and reappraisal of symptoms) which include self-reflection and confidence in beliefs.<sup>[23]</sup> Clinical insight and cognitive insight have different structures and are related to different neurological regions.<sup>[24]</sup> Studies also indicate that clinical insight and cognitive insight are not necessarily correlated to each other, but the presence of cognitive insight or having a higher cognitive insight may be effective in the improvement of clinical insight.<sup>[25]</sup>

Some studies show that patients with schizophrenia are also faced with theory of mind impairment. [26-28] Theory of mind is the ability to infer other's intentions, desires, and beliefs. [27] Defect in theory of mind is usually correlated with lack of insight about the illness; however, this relationship exists in an independent manner. [29,30]

Recently, some studies tried to increase the clinical insight of mental patients using third-person interventions that are in theory of mind category. In this approach, the pronouns are changed from the first-person pronoun (I) to the third-person pronoun (they) and, as a result, the attention is removed from the person, and this can finally lead to a better understanding of the self.<sup>[31]</sup>

Representation of others' mental state was first examined in patients with autism, and it was considered as impairment in theory of mind. Some researchers showed a relationship between impairment in meta-representation and psychopathologies and some degrees of illness severity. These results led to the hypothesis that some paranoia and behavioral symptoms can be due to impairment in the ability to infer others' intentions and beliefs.<sup>[32]</sup>

Some studies tried to use the third-person technique to improve the clinical insight of patients. The third-person technique is a method invented by researchers. For example, Garrett *et al.*<sup>[33]</sup> wrote 20 stories (containing 1-3 sentences) showing the subgroups of psychotic symptoms. Then, patients were asked whether they considered the person in the story a mental patient. Both experimental and control groups were able to make clear distinctions between the medical illness,

no illness, and mental illness categories. Although the patients did not show a lack of cognitive processing of the illness pattern, they were not able to relate their illness pattern to themselves.

In another study, Islam et al.[34] used a change from the first to the third-person view to test participants with mental disorder and psychotic mood disorder. They asked 92 patients to talk about their delusions. Then, the patients were asked whether what they were saying was believable to themselves and to the interviewer. Two weeks later, 79 patients listened to a tape playing the voices of two actors repeating their delusions, and then the patients were asked the same two questions. Some patients found insight after using the thirdperson technique. In another study, Marcel et al.[35] asked patients with unilateral paralysis along with anosognosia about the performance of their paralyzed limbs; the patients described the performance of the paralyzed limb as normal. However, when the researcher asked the same patient "if my hand was paralyzed, could I shuffle a deck of cards?" some of the patients answered: "Of course not!" these results indicated that the difference between the first-person and the thirdperson representations may affect a patient's awareness about his/her illness.

These studies show that using the third-person approach and changing the pronouns from "I" to "they" leads to an increase in the clinical insight of patients and generally confirm the studies that support a correlation between theory of mind and clinical insight of patients. [11,28,29,36] However, an improvement in the clinical insight of patients through this technique may not provide any help in the improvement of patients' cognitive insight. [25,30]

In the present study, we tried to design a clinical interview using the third-person technique and to examine whether an interview based on the third-person technique compared to the conventional clinical interview (first-person) has any effect on the cognitive insight of patients. As we could see, any of the aforementioned studies with the third-person approach

did not use an interview technique based on the thirdperson technique.

#### **MATERIALS AND METHODS**

In this study, 44 psychotic patients with an insight at the denial level in "Razi Psychiatric Educational and Treatment Center" were selected using the purposive sampling method. The inclusion criteria had an insight at the denial level, a definite diagnosis of psychosis, aged between 20 and 50 years, able to understand speech, patient's informed consent, and an education level above 5th grade of elementary school. The exclusion criteria were having an electroconvulsive therapy a week before the interview (reported in patient's profile), mental retardation, convulsions, and neurological disorders affecting cognition.

The patients were randomly divided into two groups, consisting of 21 and 23 individuals. Trained experts conducted the first-person interview on the first group and the third-person interview on the second group (the participants were not informed about the subject). The first group included 11 men (52.40%) and 10 women (47.60%) with an average age of 32.38 years, and the second group consisted of 13 men (56.50%) and 10 women (43.50%) with an average age of 32.43 years. The results of the Pearson's Chi-squared test (0.364) indicated that there were no significant differences between the two groups with regard to distribution of gender, and the results of the t-test (0.021) revealed that there were no significant differences between the two groups in terms of age. Following the interviews, participants in both groups were asked to answer questions of the Beck Cognitive Insight Scale (BCIS).

Table 1 shows the distribution of disorders in each group according to DSM-IV-TR and the significance of differences.

According to the table above, the results of the Mann-Whitney U-test indicate that there are no significant differences between the two groups with regard to distribution of diagnosis (U = 186.500; P > 0.5).

Table 1: The distribution of disorders in each group and the significance of differences

Group	Disorder	Frequency	Frequency (%)	Mann-Whitney U-test	Significance
Clinical	Schizophrenia	4	19.00		_
diagnostic	Schizoaffective	3	14.30		
	Bipolar	9	42.90		
	Substance-induced psychosis	4	19.00		
	Psychotic disorder	1	4.80		
Third-person	Schizophrenia	6	26.10	186.500	0.181
	Schizoaffective	8	34.8		
	Bipolar	6	26.10		
	Substance-induced psychosis	3	13.00		

#### Instruments

Clinical diagnostic interview with a first-person technique At first, eight psychology professors and eight psychiatry professors examined and approved the content validity of the first-person interview. At chief complaint stage and after acquiring patient's history, the interview was conducted by the interviewer.

#### Clinical diagnosis with a third-person technique

At first, eight psychology professors and eight psychiatry professors examined and approved the content validity of the third-person interview. The patient's history in the third-person interview as in the first-person was obtained by the interviewer, and the main complaint phase was conducted using a third-person pronoun, i.e., a person or people by whom the patient was brought for the treatment.

#### Beck Cognitive Insight Scale

This scale was designed by Beck *et al.*<sup>[23]</sup> It is a self-administrated scale consisting of 15 questions that are answered by the patient. The participants were asked to rate their agreement on each sentence of the questionnaire on a 4-point scale ranging from "zero" to "three." There was no time limit for answering the questions. BCIS includes two categories of questions.

The first category includes questions related to "realism and objectivity" and "reflectiveness and acceptability of feedbacks." The questions of this category were designed to assess a patient's cognitions. In fact, the questions of this category are consistent with a component, namely self-reflectiveness, extracted from factor analysis of this scale. The self-reflectiveness factor has been described as an index of "introspection," "a tendency for acceptance of errors" and "openness and receptivity." The questions of this component (which is considered as an index of "self-reflection" component) include 1, 3, 4, 5, 6, 8, 12, 14, and 15.

The second category of the BCIS' questions was designed to consider respondent's decisions. This category has six questions and examines patient's confidence in beliefs, judgments, personal conclusions, resistance against others' feedbacks, and righteousness. This category is consistent with a component, namely self-assurance, extracted from factor analysis of this scale. It has six questions including 2, 7, 9, 10, 11, and 13.

The validity and reliability of this scale were examined by Yousefi *et al.*<sup>[37]</sup> In this examination, the internal consistency of the items related to the self-reflection, self-assurance, and total scale were calculated at 0.69, 0.79, and 0.74, respectively. The reliability of the scale was calculated using the half-split method (r = 0.69). The concurrent validity of the scale was confirmed using the Scale to Assess Unawareness in Mental Disorder (r = 0.83).

#### **RESULTS**

After conducting the first-person interview on the first group and the third-person interview on the second group, the patients answered the questions of the BCIS. Table 2 shows the patients' scores on the self-reflection component of cognitive insight. This table includes the mean and the standard deviation of "self-reflection component of cognitive insight" and the results of independent *t*-test to test the significance of difference between the means of two groups for this component.

According to the above table, there are no significant differences between the first-person interview and the clinical diagnostic interview with regard to self-reflection component of cognitive insight (t = 1.294; P > 0.05).

Table 3 contains the data related to self-assurance component of cognitive insight in psychotic patients with an insight at the denial level. It shows the mean and the standard deviation of "self-assurance component of cognitive insight" and the results of the independent *t*-test to test the significance of difference between the means of the two groups, for this component.

According to the table above, there are no significant differences between the first-person interview and the clinical diagnostic interview with regard to self-assurance component of cognitive insight (t = 0.703; P > 0.05).

Finally, the results of the overall cognitive insight of psychotic patients with an insight at the denial level are shown in Table 4. This table shows the mean and the standard deviation of "cognitive insight" and the results of the independent *t*-test to test the significance of difference between the means of the two groups for this variable.

According to the table above, there are no significant

Table 2: The independent *t*-test to examine the significance of difference between the means of two groups for "self-reflection component of cognitive insight"

Group	Mean	SD	n	Leven's test			t-test		
				Homogeneity of variance	F	Significant	t	df	Significant
Clinical diagnostic	19.42	4.17	21	Equality of variances	0.926	0.341	1.294	42	0.203
Third-person	21.43	5.87	23	Inequality of variances			1.314	39.715	0.197

SD - Standard deviation

differences between the third-person interview and the clinical diagnostic interview with regard to overall cognitive insight (t = 0.726; P > 0.05).

#### DISCUSSION

In psychotic patients, insight can be related to their functions. Researches indicate that many patients with schizophrenia due to a lack of insight about their illness and symptoms use medicine just because of pressure from their families and do not accept that they are in need of treatment. The insight level affects the course of disease and acceptance of treatment. By an evaluation of the insight level of patients, we can also examine the course of disease, indirectly. According to different results, the low awareness of psychotic disorders among patients is due to the impairment in the cognitive and metacognitive processes, neurological disorders, an avoidance of mental-disorder labels, etc.

Because improvement of insight is very important for treatment, a wide range of studies with different approaches have examined this issue. As it was mentioned before, one of the approaches is called the third-person approach. Studies show the impact of the third-person approach on the improvement of the clinical insight of patients.<sup>[2,31-34]</sup> However, consistent with some previous studies,<sup>[29,30]</sup> the results of the present study show that the third-person approach and changing the pronoun "I" to "they" have no impact on self-reflection, self-assurance components, and overall cognitive insight of psychotic patients.

Therefore, according to the study results, although the mean of the patients' cognitive insight (evaluated using the BCIS) in the third-person group was slightly higher than that of the patients in clinical diagnostic interview group (36.13 > 34.95), this difference was not statistically significant. Therefore, the third-person

interview compared to the first-person interview has no impact on the improvement of the cognitive insight of psychotic patients with an insight at the denial level.

It seems this finding is in contrast with the former finding which indicated the effectiveness of the thirdperson interview on the insight level of psychotic patients with an insight at the denial level. However, with a short examination of the structure of cognitive insight and the nature of Beck's cognitive insight, we may reach a different conclusion. It is obvious that the determining cognitive problems in psychotic patients are not limited to the distortions congruent with experiences or awareness or unawareness about a psychological disorder. These patients have problems in detaching themselves from common distortions in psychotic disorders and show imperviousness to corrective feedbacks in the more complex levels of awareness. In fact, in more complex levels of awareness, psychotic patients suffer from different levels of impairment in the ability to reflect on experiences and identify incorrect abstractions. An impairment in realism and objectivity about cognitive distortions, lacking the ability to put the distortions in the center of attention, resistance against corrective information presented by others, excessive confidence, and relying too much on personal experiences, [23] are some of the important characteristics of insight impairment in the higher levels. Therefore, unawareness of a psychotic illness that needs primary interventions may be a sign of clinical insight problems. This kind of insight is focused on some aspects of clinical insight of patients, and it is of high importance during the early phases of diagnosis and treatment. In contrast, the cognitive insight that includes higher levels of self-reflective cognitive awareness refers to evaluation and correction of distorted beliefs and incorrect interpretations.<sup>[23]</sup> These evaluations are based on higher levels of cognitive processes and reevaluation of them. In fact, BCIS is based on evaluation of psychotic

Table 3: The independent *t*-test to examine the significance of difference between the means of the two groups for "self-assurance component of cognitive insight"

Group	Mean	SD	n	Leven's test				t-test		
				Homogeneity of variance	F	Significant	t	df	Significant	
Clinical diagnostic	15.52	3.64	21	Equality of variances	0.493	0.486	0.703	42	0.486	
Third-person	14.69	4.12	23	Inequality of variances			0.707	41.957	0.484	

SD - Standard deviation

Table 4: The independent t-test to examine the significance of difference between the means of the two groups for "cognitive insight"

Group	Mean	SD	n	Leven's test			t-test		
				Homogeneity of variance	F	Significant	t	df	Significant
Clinical diagnostic	34.95	3.33	21	Equality of variances	2.042	0.160	0.726	42	0.472
Third-person	36.13	6.71	23	Inequality of variances			0.746	32.870	0.461

SD - Standard deviation

patients' reports on objectivity and realism related to the current psychotic thinking, their view on former mistakes, their ability to reattribute false explanations, and also the ability to accept corrective information presented by others. Therefore, the study findings confirm the previous findings, [25,30] showing clinical insight is different from the cognitive insight.

In addition to aforementioned factors, we should point out that an intervention based on the third-person interview is short and we need long interventions to affect the cognitive insight of patients. It also seems that BCIS is not appropriate for psychotic patients. Therefore, we need to use factors other than interview to help a patient reach the third-person level. For example, we can get help from family relationships of a patient, social environment, and other factors in a third-person manner. Hence, the improvement of the patient's insight in their psychotic disorder is different from the improvement of insight in the higher levels. Therefore, although the third-person interview may have impacts on the improvement of patients' awareness about their mental disorder, it has no positive effect on the improvement of the more complex levels of awareness in psychotic patients with an insight at the denial level.

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#### Conflicts of interest

There are no conflicts of interest.

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