

Research Article

Sexual Indicators of Draw a Person Test in Iranian Schizophrenic Female Patients

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Received: May 06, 2020; **Accepted:** October 17, 2020;**Published:** October 24, 2020**Abstract**

Aim: Schizophrenia is a chronic psychiatric disorder and its effects on brain and behavior of patient may cause changes in normal sexual function. Draw A Person (DAP) test is a rapid and effective projective test to evaluate the personality characters in psychiatric patients. The aim of this study was to investigate the symptoms of sexual dysfunction (sexual indicators) in the DAP in female schizophrenic patients.

Methodology: Fifteen female patients with schizophrenia was randomly selected from Iranian patients hospitalized in Psychiatric Hospital and Draw A Person test was performed individually for each participant. Frequencies of sexual indicators including of genital drawing, draw a belt with pinholes, drawing quite large hips and thighs and cross feet were analyzed using χ^2 test.

Findings: According to the findings, observed frequency of genital drawing ($\chi^2=40.5$, $df=14$, $p<0.001$) and draw large hips and thighs ($\chi^2=40.5$, $df=14$, $p<0.001$) were statistically significant whereas draw a belt with pinholes ($\chi^2=12.5$, $df=14$, $p>0.05$) and cross feet ($\chi^2=0.5$, $df=14$, $p>0.05$) were not statistically significant.

Discussion: As proposed in psychoanalytic theories and projective tests of personality, it can be stated that drawing genital as a sign of non-controlled drives and draw large hips and thighs may be related to abnormality in personality traits in schizophrenic patients. Cross feet are described as the signs of anxiety in sexual functions. In schizophrenia, abnormalities in the functions of frontal lobe changes moral controlled behaviors and sociability. It seems that for more information about details in drawings in schizophrenic patients, studies on cognitive, moral and projective processes are needed.

Keywords: Sexual indicators; Draw a person test; Schizophrenia

Introduction

Schizophrenia is one of the severest psychiatric disorders, occurring in approximately one percent of people in the community, and its process affects patients' personal, family, and social life [1]. Although schizophrenia has been described as a single disorder, it is likely to be composed of a group of different signs and includes patients whose clinical manifestations and their responses to treatments are not the same. In addition to different types of delusions and hallucinations, the disease is usually associated with impaired in social or occupational functions. These patients may spend a lot of time without doing anything or they may spend a lot of time for doing repetitive activities. In other words, schizophrenia affects all aspects of a patient's cognitive, behavioral, and emotional functions [2,3].

Whereas normal sexual function is one of the most important determinants of life satisfaction, in psychiatric patients, sexual functions are often damaged and dysfunctions of sexual behaviors in men and women with psychiatric disorders are reported [4,5].

Schizophrenia as a chronic psychiatric disorder has two categories of positive and negative symptoms and based on studies its positive symptoms such as hallucinations and delusions, and negative symptoms such as the lack of pleasure and flat emotions, both cause

damage in normal sexual function. Sexual dysfunction is considered as part of the nature of schizophrenia disorder [6]. The pre-morbid personality in schizophrenia is often schizoid personality disorder and schizotypal personality disorder. Both of them are with limited interpersonal relationships and a lack of sexual experiences. Lack of pleasure, decreased motivation and reduced emotional responses that reduce the activity of dopamine in the anterior cortex, leads to a failure to enjoy sexual life [7].

The studies in this area often focus on the effects of anti-psychosis drugs and the total number of studies in this area is limited. Antipsychotic drugs are thought to cause sexual dysfunction, but the main mechanism of their effects on sexual functions have not been well described. Some studies have shown that there is a link between neuroleptic drugs and sexual dysfunction. The incidence of sexual disorders in schizophrenic patients treated with antipsychotic drugs is reported higher than the control group. In a study on sexual functioning, psychopathology and quality of life in patients with schizophrenia, higher scores on positive subscale in the Positive and Negative Symptoms Scale for males were associated with a lower frequency of sexual activity and for female patients, higher scores on the positive subscale and general psychopathology subscale of Positive and Negative Symptoms Scale were significantly associated

with more difficulty in both sexual arousal and orgasm [8].

Draw A Person (DAP) is one of the tests that are used to evaluate intelligence in children and personality traits, dysfunctions and mental disorders in adults using a projective method. Drawing tests are projective diagnostic methods in which the individual is asked to draw a subject or situation so that his or her cognitive, interpersonal, and behavioral functions can be assessed. Drawing tests are used as a criterion for measuring the performance of mental functions, personality assessment and family functions, emotional assessment, identification and needs of sex roles. The Draw-A-Person test was originally developed to evaluate the intelligence, cognitive abilities and IQ by Florence Goodenough, a psychologist at the University of Minnesota. Based on her studies, she suggested that it is possible to predict the child's IQ based on the number of details that the child draws. After the DAP test became known as an intelligence test in the psychological community, it gradually became clear how it could be used as a tool for assessing personality and emotional traits. In 1949, Karen Machover developed the first measure of figure drawing as a personality assessment with the Draw A Person Test [9]. Later it was used as a rapid and effective projective test to evaluate the personality characters in adulthood. Confusion in drawing a person test can actually be a response to internal conflicts. It is assumed Theoretically that people with mental disorders have immature and maladapted defensive styles and these immature defense mechanisms help patients to distort reality in order to defend themselves against the realities of the world around them. Accordingly, the greater amount of distortion of reality leads to more inconsistent defenses mechanisms in patient. According to Iqbal, Shah and Iqbal [10] ten significantly indicators of schizophrenia in comparison with normal adults in emotional dimensions based on DAP are: Poor Integration, Gross disproportion, Monsters or grotesque figures, Vacant Eyes, Dot eyes, Omission of Mouth, Omission of Nose, Omission of Eyes, Genitals, Shading of Hand and Neck. About genitals Iqbal, Shah and Iqbal [10] wrote: "Genitals were found exclusively and very significantly more on HFD of Schizophrenic patients than the drawings of normal (non psychotic) population. Koppitz (1968) found that genitals were occurred more often on the HFD of clinical patients who were extremely disturbed and overtly aggressive. The occurrence of genitals on HFD must be considered a sign of serious psychopathology" (10, Page 64).

Based on the above, there are few studies on sexual dysfunction in schizophrenia and the study of the symptoms of these disorders in DAP Test. Therefore, the aim of this study was to investigate the symptoms of sexual dysfunction (sexual indicators) in the DAP.

Methodology

Participants

A sample group of 15 female patients with schizophrenia was randomly selected from patients hospitalized in Isfahan Psychiatric Hospital, Iran. These patients were men between the ages of 20 and 30 who had education of 5 years or more. All of them were received drugs by psychiatrists but None of the subjects had received an Electro-Convulsive Therapy (ECT) in the past 10 days. The test was performed individually for each participant.

Materials

In order to coordinate and uniform in the performance of the

test, the instruction given by Koppitz (1971) was used. The test was administered on plain sheet of white paper (A4 size: 29 cm X 21 cm). All of the participants were received sharpened HB pencils and Persian instruction on a piece of paper. The standard instruction (Koppitz, 1971) was: "I would like you to draw a whole person. It can be any kind of person you want to draw. Just make sure that it is a whole person and not a stick figure or a cartoon figure. you may draw a man, or a woman or boy or a girl, whichever you want to draw" that was translated to Persian.

Based on the background, four clearly distinct criteria for sexual dysfunctions were selected in the DAP test, which include:

1. Genital drawing
2. Draw a belt with pinholes, which is a sign of sexual demands
3. Drawing the hips and thighs quite large in comparison to the other parts of the picture
4. Cross feet that are signs of sexual inhibition and excessive anxiety in sex

After drawing, the above four indicators were checked in the drawings and their frequency was analyzed. Chi-square test was used to analyze the data and evaluate the observed frequency and expected frequency.

Findings

Human Figure Drawings (HFD)

Table 1 shows the observed frequencies of indicators. The expected frequencies were 0.0 in the indicators.

The calculations of χ^2 are presented in Table 2,3,4 and 5 for each sexual indicator. Because of theoretical base of the study, the expected frequency was considered zero for the indicators, for example in normal participant it is not expected to draw genital. In statistical calculation, using 0.5 instead of 0.0, in χ^2 formula ($\chi^2 = \sum \frac{(O-E)^2}{E}$) is common.

According to Tables 2 and 4, observed frequency of genital drawing ($\chi^2=40.5$, $df=14$, $p<0.001$) and draw large hips and thighs ($\chi^2=40.5$, $df=14$, $p<0.001$) are statistically significant whereas draw a belt with pinholes ($\chi^2=12.5$, $df=14$, $p>0.05$) and cross feet ($\chi^2=0.5$, $df=14$, $p>0.05$) are not statistically significant.

Discussion

The purpose of this study was to investigate the indicators of sexual dysfunction in draw a person test of schizophrenia. This study was a pilot study and 15 patients with schizophrenia were tested. For evaluation, four distinct indicators that were related to sexual disorders or dysfunctions were selected.

In the previous studies like Huang et al. [11] the dysfunction of

Table 1: Observed frequencies of indicators.

| | Indicator | Observed frequency | N |
|---|----------------------------------|--------------------|----|
| 1 | Genital drawing | 5 | 15 |
| 2 | Draw a belt with pinholes | 3 | 15 |
| 3 | Draw quite large hips and thighs | 5 | 15 |
| 4 | Cross feet | 1 | 15 |

Table 2: χ^2 for genital drawing.

| Observed frequency | Expected frequency | χ^2 | df | Critical χ^2 | Sig |
|--------------------|--------------------|-------------------------------------|----|-------------------|-------|
| 5 | 0.5 | $\sum \frac{(5-0.5)^2}{0.5} = 40.5$ | 14 | 36.12 | 0.001 |

Table 3: χ^2 for draw a belt with pinholes.

| Observed frequency | Expected frequency | χ^2 | df | Critical χ^2 | Sig |
|--------------------|--------------------|-------------------------------------|----|-------------------|-------|
| 3 | 0.5 | $\sum \frac{(3-0.5)^2}{0.5} = 12.5$ | 14 | 23.68 | >0.05 |

Table 4: χ^2 for draw quite large hips and thighs.

| Observed frequency | Expected frequency | χ^2 | df | Critical χ^2 | Sig |
|--------------------|--------------------|-------------------------------------|----|-------------------|-------|
| 5 | 0.5 | $\sum \frac{(5-0.5)^2}{0.5} = 40.5$ | 14 | 36.12 | 0.001 |

Table 5: χ^2 for cross feet.

| Observed frequency | Expected frequency | χ^2 | df | Critical χ^2 | Sig |
|--------------------|--------------------|------------------------------------|----|-------------------|-------|
| 1 | 0.5 | $\sum \frac{(1-0.5)^2}{0.5} = 0.5$ | 14 | 23.68 | >0.05 |

sexual behaviors in rural patients with schizophrenia is reported. The findings of current study is in line with Huang et al. [11], Iqbal, Shah and Iqbal [10] and Blom and Mangoenkarso [12]. The first indicator was genital drawing and Table 2 showed that 5 drawings out of 15 drawings as observed frequency in schizophrenia patients was statistically significant result and could indicate a sexual dysfunction in the sample. In fact it approved that genital drawing was a noticeable index in DAP, which not be considered as a random sign in drawings. According to Blom and Mangoenkarso [12] in schizophrenia and its spectrum disorders sexual hallucinations may related with childhood trauma. In this study it may be stated that the index of genital drawing is related to the schizophrenic cognitive dysfunctions included of sexual hallucinations and drawing genital may represent a sign of sexual dysfunctions in schizophrenic patients or probability traumatic events in childhood of patients. Based on the previous studies, DAP show cognitive dysfunctions and mental health [13] and the cognitive impairments in schizophrenia could be related to the sexual indicators especially genital drawings. On the other hand, drug therapy as the first line treatment in schizophrenia may change the normal sexual functions [7,14]. The other reason is related to the abnormality in brain function schizophrenia as a serious cognitive disorder that has harmful effects on the frontal lobe and its executive functions in a variety of cognitive tasks [15]. Abnormalities in the functions of frontal lobe changes moral behaviors and sociability [16]. It can be stated that drawing genital as a sign of non-controlled drives may be related to abnormality in the pre-frontal part of schizophrenic brain.

In Iranian female sample as a sample with religious believes, under-control sexual behaviors, limited freedom for sexual needs and strong social forces for sexual desires suppression, the indices like draw quite large hips and thighs and draw a belt with a pinholes may be considered as mild signs of sexual disorders. Frequency of drawing quite large hips and thighs based on Table 4 was statistically significant but about drawing a belt and its details, more researches are need. The belt and pinholes are indicators of sexual demands and the low frequency of these indicators may be related to the small size of the sample. The other reason may be related to the sex of the participants. These signs as the suppressed needs in sexual field may be probably seen in female subjects.

Cross feet are described as signs of anxiety in sexual functions. It

can be stated that dissociations in schizophrenia cause low anxieties especially sexual anxiety. When a patient with schizophrenia encounters to sexual issues, the separations of thoughts, feelings and emotions may be considered as a defense mechanism or a psychological strategy to decrease the anxiety. So cross feet drawing may be seen with a minimum frequency in DAP of schizophrenia.

The small size of sample, non control on types of drugs used by patients, and also varieties in education of subjects were the limitation of this study.

The suggestions are include of performance of DAP test on a large sample, with male and female subjects and determination the sexual indicators in both sex.

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