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RESEARCH ARTICLE

How Do Poles Perceive Schizophrenia? Furnham and Chan's Questionnaire in Poland

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Introduction: Individuals with psychosis spectrum disorders may be negatively affected by exclusion and rejection. It is important to answer "why"? This article presents social representations of schizophrenia in Polish society.
Aims: The study's aim was to examine the properties of the sixty-item questionnaire on attitudes, attribution and beliefs about schizophrenia in the Polish sample and to compare the results with the results obtained in the English-Chinese sample.
Methods: The study included 398 participants (aged 19–74); all were working persons. Furnham and Chan created the questionnaire, a tool containing 60 items describing general beliefs about schizophrenia, causal explanations in the etiology of schizophrenia, as well as beliefs about the role of hospitals and society in the treatment of schizophrenia. Factor analysis (PAF) was carried out separately for three parts of the tool.
Results: The structure of the questionnaire that was obtained on the Polish sample differs from that obtained on the English-Chinese sample. Some factors remain similar. Reliability analysis based on Cronbach's Alpha values reached satisfactory levels in most of the factors revealed.
Conclusions: The questionnaire is a reliable tool for examining social representations of schizophrenia. The Polish sample does not show punitive inclinations, does not attribute negative traits to schizophrenics, and does not agree to creating social distance.

Keywords: schizophrenia, Poland, mental illness, social representations, lay knowledge

Introduction

According to statistics published by the World Health Organization, in Europe 110 million people suffer from mental illness (World Health Organization Regional Office for Europe, 2018). Psychiatric patients suffer not only from mental illness, but also from stigma. The stigma of mental illness is strong and ubiquitous in society. It has a harmful effect on people with mental illness. It hinders the healing process because it places a huge burden on patients (Link et al., 2001).

People with mental illness experience stigma from a variety of sources: society, family, colleagues, healthcare professionals. Most stigmas are associated with the anxiety and misperception of others. Perception and negative images of people with mental illness can be rooted in the lack of knowledge about the nature of mental illness in society. Mass media can also contribute to promoting the wrong perception of patients as violent persons with criminal tendencies, especially so, when providing information about a committed crime, they state that the perpetrator was undergoing psychiatric treatment. This associates mental illness with crime, even though research actually indicates that mental

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illness does not determine the commission of a crime (Vogel, 2014). The media omits other important motivational factors, e.g., personality. Such images lead to the greater isolation of patients and their families in society, especially in the case of schizophrenia (Reavley et al., 2016). This is an important problem, all the more so because, according to the CBOS (Centrum Badania Opinii Społecznej [Public Opinion Research Center]) survey (Wciórka & Wciórka, 2002), Poles encounter mental illness mainly through the media – television, radio, books, magazines – and rarely through personal contacts that could promote destigmatization. It has been proven that with increasing contact with mentally ill people, perception of danger and the desired social distance decreases (Alexander & Link, 2003).

The stigmatizing etiquette of mental illness provides its external effects on opportunities in areas such as wages, housing, health and life (Link & Phelan, 2001). At the same time, stigmatization has subjective internal effects, such as lowering self-esteem and social withdrawal as a way of dealing with the possibility of being rejected (Link et al., 2001).

Research indicates a mismatch of attitude components towards the mentally ill. Most of the respondents accept the participation and active presence of patients in public space, and their functioning in social and professional roles. However, in relation to their own personal space, they do not agree to cooperate with a mentally ill person in a common workplace (66.7%). The respondents reveal a strongly negative affective component of attitudes towards the mentally ill (anxiety -52%), which can be considered as a factor blocking the implementation of the presented views, and under unfavourable conditions it can lead to opposite discriminatory behaviour (Gzocha & Kurpas, 2011). Research by Bożena Mroczek, Izabela Wróblewska, Anna Kędzierska and Donata Kurpas (2014) showed that mentally ill people are perceived as dangerous (70%), aggressive (61%), unpredictable (85%) and according to respondents, they should be isolated from society (31%). The feelings that they most often evoke are: fear, compassion, and helplessness. The following terms are used in the respondents' environment: *crazy, psycho, nuts*. 96% avoid mentally ill people and 65% will not offer help to a sick person.

The CBOS study (Wciórka & Wciórka, 2002) says that 26% of Poles say they have never heard of schizophrenia, 62% admit that they know very little about it, and only 11% say they have a good deal of knowledge about this disease. Half of the respondents have an idea of schizophrenia as a mental illness, and 27% mention interpersonal, individual, and social problems of patients. However, 15% of respondents include schizophrenia in the general category of diseases, without indicating their relationship with the psyche. People with a higher social status defined schizophrenia more accurately and better assessed their knowledge about it. Lower social position was associated with poor familiarization or a complete lack of knowledge in this area. In addition, respondents from small towns showed a lower level of knowledge than people from large cities.

This study deals with lay knowledge, intuitive, abstract representations of mental illnesses, which people rely on to understand, interpret, and predict their social world. Lay knowledge can be very different from scientific knowledge, but it provides a cognitive framework for perceiving groups and also it could be related to prejudiced processes and practices (Hong et al., 2001).

The study aims to develop a Polish version of Furnham and Chan's tool and describe the views of Polish society on schizophrenia. The theory of social representations is one of the concepts falling within the sphere of lay knowledge (Borowiec & Lignowska, 2015). The article presents social representations of schizophrenia including, as Furnham and Cheng (2000) suggest, the causes of the problem (mental illness), behavioral manifestations, and optimal treatment.

Methods

Material

The study included metric variables such as age, gender, education, occupation, level of knowledge about schizophrenia (7-grade scale, where: 1 means – I do not have any knowledge, and 7 – I have a very extensive knowledge) and the psychiatric treatment history of examined individuals, their friends and family (contact with a mental illness).

Questionnaire on Views on Schizophrenia

The questionnaire on views on schizophrenia comes from a tool used by Furnham and Chan (2004) for studying views on schizophrenia. The questionnaire questions used by the authors were taken from earlier research (Furnham & Bower, 1992) on laical and academic theories of schizophrenia. However, the tool's authors have added a few questions regarding superstitious beliefs about schizophrenia. The questionnaire's items cover areas such as attitudes towards treatment, preferred social distance, or general beliefs about people with schizophrenia.

The questionnaire was divided into three sections. The first section includes 21 questions on beliefs about people with schizophrenia. The second section includes 16 questions on the causes of schizophrenia. The third section, consisting of 23 questions, deals with what people think about the role of psychiatric hospitals and society in the treatment of schizophrenia. Due to the possibility of giving a neutral response, the original 6-point scale was changed to a 7-point scale (1 – completely disagree; 7 – completely agree).

The reason for choosing the tool was an attempt to examine a wide range of views on schizophrenia, in particular the fact that the tool includes questions about spirituality, which may be significant in the Polish population, as 94% declare a religious affiliation (GUS, 2018).

Surveyed Persons

The sample included 398 people aged 19 to 74 (M = 36.14; SD = 11.10). 71.1% (n = 283) of the examined group were women and 28.9% (n = 115) were men. The respondents were employed people with a secondary (15.8%; n = 63) or higher education (84.2%; n = 335). The group was diverse in terms of their professions. The level of knowledge about schizophrenia was rated (on a 7-point scale) as 4.00 on average (SD = 1.68), so this suggests an average level of knowledge about the disease in question. 5.3% of the group (n = 21) has been or is undergoing psychiatric treatment, and 28.4% (n = 113) have in their family a person who is suffering from a mental disorder. In addition, 42.7% of respondents (n = 170) have a mentally ill person among their friends.

The Procedure of Developing the Polish Version of the Questionnaire on Views on Schizophrenia

First, we obtained the consent of Furnham, the author for using his questionnaire. A psychologist with a fluent English knowledge translated the questionnaire's original English version into Polish. The tool was subjected to the *back–translation* procedure with the participation of an independent English speaker. The final version underwent a language correction by a Polish philologist.

We posted the survey on MySurveyLab; information about the survey was posted on Facebook accounts and sent to email addresses. In this way, 251 people filled the questionnaire. Additionally, in order to reach a wider group including those who do not use Facebook, we asked students of pedagogy to distribute the questionnaire in paper form, and 147 people completed this paper version of the tool.

Statistical Analysis

Data analysis was conducted using the procedures available in the SPSS 25 Package. First, we exploratory factor analysis was conducted using the Principal Axis Factoring (PAF) method – separately for each section of questions, which means that three analyses were performed (similar to the original study by Furnham and Chan). KMO and Bartlett's sphericity test were calculated via factor analysis and descriptive statistics of questions. For identifying the number of factors included in each section of the tool, Henry Kaiser's eigenvalue criterion was used. In all three cases of factor analysis, we used *Oblimin* rotation.

After conducting the factor analyses, we carried out the contents analysis of the factors and distinguished components were named, and then initiated the reliability analysis of these scales. The reliability analysis was carried out using the Cronbach's Alpha method. Alpha statistics were calculated separately for all subscales identified in the factor analysis. The scales for which the Alpha statistics stood at least .7 were considered reliable (Badyńska & Brzezicka, 2007).

Results

Factor analysis of the questionnaire's first part

In order to examine the structure of beliefs about people with schizophrenia, we initiated a factor analysis of the questionnaire's first 21 questions. The KMO Sampling Adequacy Measurement of 0.865, and Bartlett's sphericity test, which proved to be statistically significant (χ^2 = 2415.507, df = 210, p < .001), showed that it is possible to perform factor analysis on the data obtained. Five eigenvalues have exceeded the value of 1, which means that five factors are distinguished. Components with factor loadings are shown in Table 1. A 55.03% variability of all questions can be explained by five distinguished factors.

Table 1. Model Matrix – Beliefs About People Suffering From Schizophrenia

Questions of the questionnaire	Factor				
	1	2	3	4	5
17. People who suffer from schizophrenia are mostly from the lower socioeconomic class	.705	.027	.147	–.111	.026
10. Once individuals have been diagnosed as schizophrenic, they should spend the rest of their lives in an institution or be 'locked up'	.640	–.171	.074	.061	.062
8. Many schizophrenics are the vagrants and 'drop-outs' of our society	.624	.074	–.035	.096	–.027
5. The term 'psychopath' is the best way to describe a schizophrenic	.403	–.062	.072	.291	–.154
15. Society has the right to punish or imprison people like schizophrenics, whose behavior breaks moral standards even if they do not break the law	.403	–.104	.176	.077	.266
2. It would not be wise to show any favors to a person who is schizophrenic	.353	–.044	.064	.294	–.176
12. It is possible to treat schizophrenics with surgery	.323	.056	.009	.047	–.014
9. Schizophrenics have the right to be released when their behavior is acceptable to society	–.056	.584	–.011	.145	–.057
14. Schizophrenics have the right to be treated sympathetically	–.074	.561	–.020	.039	.227
11. Schizophrenics have the right to be left alone as long as they do not break the law	.205	.473	–.007	–.125	.019
6. Schizophrenics have the right to be treated as responsible adults	–.008	.435	–.012	–.188	–.068
19. Schizophrenia may not be an illness because the patient may be controlled by evil spirits	–.053	–.031	.812	.053	–.061
20. Schizophrenia can be treated by seeking help from God or other spirits	–.056	.063	.790	.016	–.012
21. When patients report that they have delusions, what they see or hear are ghosts	.314	–.086	.615	–.119	.073
3. Schizophrenic behavior is nearly always bad and wrong	.209	–.062	–.008	.587	–.158
1. It would be impossible for schizophrenics to be employed as they cannot be trusted	.011	–.128	.118	.571	.052
4. Being schizophrenic is an 'escape' from the pressure of society	.153	.206	.182	.543	–.192
7. At any time, a schizophrenic may 'lose control'	–.058	–.038	.106	.526	.221
13. Many schizophrenics commit outrageous acts in public places (e. g. shouting in the street)	.233	–.005	–.083	.430	.181
16. Schizophrenia cannot be cured completely	–.005	.052	–.026	.009	.418
18. I will choose not to be friends with people suffering from schizophrenia	.196	–.099	.130	.249	.253

The first factor consists of the following items: 17, 10, 8, 5, 15, 2, 12. This factor can be called: *Low social status of people suffering from schizophrenia.* This factor also includes two items indicating high punitiveness towards schizophrenics. It explains 27.42% of the total variance, and its reliability measured by the Cronbach's Alpha method is .779. All items in this factor have an average below 2 (except for items 12 – M = 2.11), which indicates that respondents neither attribute a lower socio-economic status nor show punitive attitudes toward schizophrenics.

The second factor (including items: 9, 14, 11, 6) was named: *Rights of people suffering from schizophrenia.* This factor explains 8.98% of the variance and its reliability is 0.585. Average scores above 4.00 indicate that participants generally agree with the right of people suffering from schizophrenia to be released, treated as responsible adults, and with the right to compassion and the right to be left in peace until they break the law.

The third factor (items 19–21) is named: *Superstitious beliefs.* It explains 7.17% of the variance and its reliability is .806 (Cronbach's Alpha). The average results within the items included in the discussed factor (< 2.00) suggest that the study participants do not have superstitious beliefs about schizophrenia and are not inclined to claim that it can be treated by seeking help from God or ghosts.

The fourth factor contains the items: 3, 1, 4, 7, 13 and explains 6.1% of the variance. It has been named: *Negative features of people suffering from schizophrenia.* The reliability of the second factor is .743. All items within

Table 2. Model Matrix – Causes of Schizophrenia

Questions of the questionnaire	Factor		
	1	2	3
29. Traumatic experiences in early childhood can cause schizophrenia	.833	.232	.103
25. Having parents who are inconsistent in their behavior towards the child leads one to become schizophrenic	.724	–.080	.067
31. Schizophrenia is caused by patients' parents manifesting extreme emotions and giving them contradictory messages	.682	–.075	.139
24. Sexual and/or physical abuse in childhood is the cause of schizophrenia	.679	–.005	.138
30. Stressful life events such as losing one's job can lead to schizophrenic behavior	.641	.120	.036
36. Having too much social pressure on people to behave properly causes people to be schizophrenic	.619	–.245	–.109
22. Strong rejection from family or close friends at an early age causes one to become schizophrenic	.583	–.155	.048
27. The cause of schizophrenia is the 'sick' society in which we live	.527	–.392	–.183
28. Schizophrenia is caused by possessing low intelligence	–.040	–.829	.046
32. Schizophrenia is caused by having a low birth weight	–.064	–.751	.180
37. Schizophrenia is infectious	.023	–.676	–.017
26. Schizophrenia is caused by learning strange and bizarre behaviors from others	.331	–.604	–.038
34. Schizophrenia is caused by having a parent or both parents who are schizophrenic	–.007	–.019	.792
23. Schizophrenia is caused by having blood relatives who are schizophrenic	.057	–.123	.621
33. Brain damage in a serious accident can result in schizophrenia	.203	–.220	.307
35. Schizophrenia is caused by an imbalance of chemicals in the body	.034	.024	.298

this factor have an average below 4.00, indicating that the subjects are not willing to attribute negative traits to people suffering from schizophrenia.

The fifth factor includes the items 16 and 18. It explains 5.37% variance and can be named: *Incurableness and aversion.* The reliability measured by the Cronbach's Alpha coefficient is very low (.262). Within this factor, the respondents tend to agree with the view that schizophrenia cannot be cured completely (M = 5.94) and to disagree with the statement suggesting a reluctance to maintain friendship with a sick person (M = 2.40).

Factor Analysis of the Second Part of the Questionnaire

In order to examine the structure of perception regarding the causes of schizophrenia, a factor analysis of the items 22–37 was initiated. The KMO Sampling Adequacy Measurement of 0.883, and Bartlett's sphericity test, which proved to be statistically significant (χ^2 = 3018.668, df = 120, p < .001), showed that it is possible to perform a factor analysis on the data obtained. Similarly to the first part of the questionnaire, we used Kaiser's method to determine the number of factors. Three eigenvalues exceeded the value of 1, which means that three factors are distinguished. Components with factor loadings are shown in Table 2. The three identified factors can explain 60.15% of the variance.

The first factor included the following items: 29, 25, 31, 24, 30, 36, 22, 27. Named S*ocial factors,* this factor explains 39.88% of the total variance, and its reliability measured by the Cronbach's Alpha coefficient is .888. The average results in all items of the questionnaire listed here amount to less than 4.00, which means that the subjects are inclined to disagree with the given social causes of schizophrenia.

The second factor consists of the following items: 28, 32, 37, 26. This factor has been named *Biological and behavioral factors.* It explains 12.02% of the variance. The reliability of the second factor is .835 (Cronbach's Alpha). The average results of the items listed are less than 2.00, which means that the subjects do not agree with the causes of the disease listed here.

Within the third factor, which was named *Genetic, chemical and mechanical factors,* the items included are: 34, 23, 33, 35. This factor explains 8.25% of the variance. Its reliability is .614 (Cronbach's Alpha). The average results in all items of the questionnaire listed here amount to less than 4.00, which means that the subjects are inclined to disagree with genetic, chemical and mechanical causes.

Factor Analysis of the Questionnaire's Third Part

In order to examine the structure of views on the role of psychiatric hospitals and society in the treatment of schizophrenia, we initiated a factor analysis of the items 38–60. The KMO Sampling Adequacy Measurement of 0.851, and Bartlett's sphericity test, which proved to be statistically significant ($\chi^2 = 3552.684$, $df = 253$, $p < .001$), showed that it is possible to perform a factor analysis on the data obtained. Kaiser's method was used to determine the number of factors. Five eigenvalues have exceeded the value of 1, which means that five factors are distinguished that together explain 59.43% of the variance. Components with factor loadings are shown in Table 3.

The first factor included the following items: 46, 47, 43, 51, 48, 45. We named this factor: *Obligations of society.* It explains 21.81% of the variance and its reliability is .834 (Cronbach's Alpha). All items obtained an average above 4.20, which means that the respondents agree with social obligations related to providing care to people suffering from schizophrenia.

The second factor consists of the following items: 42, 53, 41, 39, 50, 40. It was named: *Functions of psychiatric hospitals.* This factor explains 19.83% of the variance. The factor's reliability was .794 (Cronbach's Alpha). All items included in the discussed factor obtained an average below 3.00 (except for item 53 – $M = 3.10$ and item 40 – $M = 3.43$). Such results suggest that the subjects do not agree with the listed functions of psychiatric hospitals.

The third factor is called: *Distance and protective function of psychiatric hospitals.* It includes the following items: 59, 58, 60, 38, 49, 44. This factor explains 7.13% of the variance and its reliability is 0.746. The average values of the items listed here stand at less than 3.00, which suggests that the respondents do not agree with creating a distance between society and people suffering from schizophrenia and eliminating them from social life.

Within the fourth factor, the following items can be found: 52, 57. It was named: *Respect for freedom.* This factor explains 5.79% of the variance. The factor reliability measured by the Cronbach's alpha coefficient was .803. The average values of the items included in the fourth factor range from 4.15 to 4.23, which means that the respondents take a neutral attitude towards them.

The fifth factor consists of the following items: 54–56. It was named: *Treatment.* It explains 4.87% of the variance and its reliability is .665 (Cronbach's Alpha). The averages of the three items mentioned above assume values higher than 4.00, which suggests that the respondents tend to agree with conventional (therapy, social skills training, hospitalization) treatments for people suffering from schizophrenia.

Discussion

In no part of the questionnaire did the factor structure reflect the structures obtained by Furnham and Chan (2004). The authors in the first part list as many as seven factors: danger, superstition, abnormality, norms, rights, social status, and morality. In the Polish version, on the other hand, only five factors appeared, which we named: low social status of people suffering from schizophrenia and severity of society's punishment, rights of people suffering from schizophrenia, superstitious beliefs, negative features of people suffering from schizophrenia, incurableness and aversion. Only two factors are similar: the rights of people suffering from schizophrenia in the Polish version to those rights in the English-Chinese version, and superstitions in the English-Chinese version to superstitious beliefs in the Polish version.

In the second part, concerning the determinants of the disease, both versions of the tool reveal three factors. The first factor in the Polish version (social factors) is analogous to the first factor in the English-Chinese version (sociological explanations). The other two factors differ in content. The original version of the tool highlights biological and cognitive causes. In the Polish version, however, biological and behavioral factors constitute the second factor, while genetic, chemical, and mechanical causes constitute the third factor.

In the third part, regarding the opinion on the role of psychiatric hospitals and society in the treatment of schizophrenia, the original version of the tool included six factors: functions of hospitals, care, society's duty, respect, acceptability, treatment. Five factors appeared in the Polish version. The first, second, fourth and fifth factors (obligations of society, functions of psychiatric hospitals, respect for freedom, treatment) are analogous to the factors from the original version. The third factor, however, contains different items, such as distance and the protective function of psychiatric hospitals.

The authors of the original did not provide reliability analysis, so there is nothing to compare to the Polish version. In the Polish version, the Cronbach's Alpha coefficients display a wide range (from .262 to .888). Most scales have exceeded the value of .7, so they can be considered reliable (in terms of general views on schizophrenia:

Table 3. Model Matrix – Views on the Role of Psychiatric Hospitals and Society in the Treatment of Schizophrenia

Questions of the questionnaire	Factor				
	1	2	3	4	5
46. It is society's duty to provide people and places to treat schizophrenics	.807	.015	–.045	.212	–.078
47. The duty of society is to change and reduce the stresses and strains on schizophrenics and others	.782	–.022	.224	–.131	.029
43.Society has a duty to provide places where schizophrenics can go for help with their problems	.650	.093	–.130	.275	–.176
51. It is the right of the schizophrenic to be cared for by society	.630	–.080	–.117	–.058	.011
48. The most effective way of helping schizophrenics is to create a society which is truly fit for them to live in	.511	.078	.160	–.343	–.025
45. Society has a duty to respect the liberty of the schizophrenic	.493	–.027	–.211	–.226	–.087
42. Mental hospitals sometimes end up simply providing shelter for the poor and other unfortunates while doing little to get these people out of the hospital and back into society	.002	.854	–.001	.164	–.110
53. Mental hospitals are often used to remove troublemakers from society	–.019	.725	–.034	–.043	–.013
41. Whatever the aim of a mental hospital, it often ends up becoming a dumping ground for the poor and disadvantaged	.078	.702	–.055	.090	.003
39. Mental hospitals are used to keep schizophrenics away from society, and they have little interest in cure	–.071	.560	.128	–.153	.079
50. A mental hospital is a kind of concentration camp, where people are subdued and degraded in order to make them easier to control	–.136	.524	.120	–.185	.124
40. Producing a more comfortable and less stressful society is the best way to treat schizophrenics	.140	.206	.182	–.178	–.153
59. Psychiatric patients' rehabilitation facilities should be far from their community	–.007	.010	.707	.008	.102
58. Schizophrenic patients should best be kept in mental hospitals until they completely recover	–.036	–.067	.644	–.019	–.172
60. I prefer not to live near any psychiatric rehabilitation facilities	.038	.102	.619	.182	.116
38. Society has the right to protect its people from schizophrenics	–.057	.103	.476	.059	–.110
49. Mental hospitals are best used to remove schizophrenics from stressful homes to quieter settings	.009	.096	.410	–.171	–.210
44. The function of the hospital is to rid society of those who threaten it	–.009	.235	.355	–.232	.200
52. The best way to treat schizophrenics is to respect their right to lead their own lives	.200	.136	–.272	–.574	–.234
57. The best way to treat schizophrenics is to respect their liberty and right to lead their own life	.109	.031	–.123	–.509	–.424
55. Mental hospitals should be used to teach schizophrenics to act responsibly so they can fit in with society	.040	–.025	.149	.001	–.654
54. The main function of the mental hospital is to provide an atmosphere for care and cure	.181	–.063	–.100	.081	–.594
56. A one-to-one relationship with a skilled therapist is the best way to treat schizophrenics	–.011	.076	.071	–.109	–.574

low status of people suffering from schizophrenia and the severity of society's punishment, negative features of people suffering from schizophrenia, superstitious beliefs; in terms of the disease's causes: social factors, biological and behavioral factors; in the scope of views on the role of hospitals and society: obligations of society, functions of psychiatric hospitals, distance and protective function of psychiatric hospitals, as well as respect for freedom). Other factors possess lower reliability ratios; however, these factors often appear in research rights of people suffering from schizophrenia (.585), genetic, chemical and mechanical factors (.614) and treatment (.665). The

factor of incurableness and resentment (.262) was unreliable, which may be caused first of all by a small number of items comprising it (two items). A small number of questions, even with the questionnaire's good consistency, goes along with smaller values of Cronbach's α statistics. Secondly, this factor is heterogeneous – one item relates to assessing the cure rate of schizophrenia, the other refers to the possibility of establishing and maintaining friendship with a sick person – which may also result in lower reliability (Tavakol & Dennick, 2011). In general, however, we find the results of the reliability analysis satisfactory.

The obtained results indicate that the respondents do not attribute a lower socio-economic status to people suffering from schizophrenia, nor do they show punitive attitudes (average < 2), are not inclined to attribute negative traits to them (average < 4) and do not have superstitious beliefs about schizophrenia (average < 2). They do not agree with the social (average < 4), biological, behavioral (average < 2), genetic, chemical or mechanical (average < 4) reasons given. In addition, they do not equate the functions of psychiatric hospitals with negative connotations (average < 3.5), and they do not agree with creating a distance between society and people suffering from schizophrenia and eliminating them from social life (average < 3).

Respondents showed a neutral attitude (average range from 4.15 to 4.23) regarding respect for the freedom of people suffering from schizophrenia, but they tend to agree with the right of schizophrenics to be released, treated as responsible adults, with the right to compassion and the right to remain in peace until they break the law (average > 4) and agree with social obligations (average > 4,5) related to providing people suffering from schizophrenia with care and recognizing the effectiveness of conventional treatment for them (average > 4.20).

Strength and Limitations

The study demonstrated positive or neutral attitudes of Polish society towards schizophrenics. One of the strengths of the study lies in the differentiation of the sample due to the occupation and in the method of conducting the survey (paper and internet), which increases the ecological validity of the study.

Besides its strengths, this study also has some limitations which should be discussed. The main limitation lies in the sample size. The sample size was too small to perform a confirmatory factor analysis. Without the CFA, we cannot talk about full validation of the tool in Poland.

The second limitation of the presented study is that it was carried out using the self-report method, which indicates the cognitive aspects of attitudes. However, attitudes may differ in natural situations in which the behavioral component of attitudes will be revealed.

Conclusions, Implications and Future Directions

Based on the results obtained, the Polish version of The Questionnaire on Views on Schizophrenia can be considered a reliable tool for studying general beliefs about this disease, its causes as well as views on the role of hospitals and society in the treatment of schizophrenia. Developing the Polish version of this tool offers an introduction to further research on attitudes towards schizophrenia in Polish society.

Prior research suggests that individuals with psychosis spectrum disorders may be negatively affected by exclusion and rejection (Lincoln et al., 2021). According to the results of the presented research, this risk is low in Polish society. The Polish sample does not show punitive inclinations, does not attribute negative traits to schizophrenics, and does not agree to creating social distance.

The article provides practitioners (psychiatrists, psychotherapists, psychologists) with the knowledge about social representations of schizophrenia in Polish society. This knowledge can be used in their work with suffering from schizophrenia, as proof of undermining concerns related to negative social beliefs against the disease.

However, the cognitive and behavioral components of attitudes towards schizophrenia may differ. Therefore, it is important to examine attitudes (behavioral component) in real situations in the future.

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Author contribution
Joanna Góźdź: conceptualization, design, investigation, project administration, data management, formal analysis, interpretation, writing the original draft, reviewing and editing.
The author gave final approval of the version to be published and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Declaration of interest statement
The author is an employee of University of Silesia in Katowice.

Ethical statement
This manuscript is the author's original work.
The author declares that all participants in the research completed the questionnaire voluntarily and anonymously, which was their consent to participate in the study. Data are stored in coded materials and databases without personal data, and she has policies in place to manage and keep data secure.

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References

Alexander, L. A., & Link, B. G. (2003). The impact of contact on stigmatizing attitudes toward people with mental illness. *Journal of Mental Health, 12*(3), 271–289. https://doi.org/10.1080/0963823031000118267

Badyńska, S., & Brzezicka, A. (2007). *Statystyczny drogowskaz. Praktyczny poradnik analizy danych w naukach społecznych na przykładach z psychologii* (1st ed.) [Statistical Signpost: A practical guide to data analysis in social sciences based on examples from psychology]. Academica Wydawnictwo SWPS.

Borowiec, A. A., & Lignowska, I. (2015). How do Poles perceive health? The social representation of health and its importance for the social order. *Polish Sociological Review, 192*(4), 511–528.

Furnham, A., & Bower, P. (1992). A comparison of academic and lay theories of schizophrenia. *British Journal of Psychiatry, 161*(2), 201–210. https://doi.org/10.1192/bjp.161.2.201

Furnham, A., & Chan, E. (2004). Lay theories of schizophrenia. A cross-cultural comparison of British and Hong Kong Chinese attitudes, attributions and beliefs. *Social Psychiatry and Psychiatric Epidemiology, 39*, 543–552. https:/doi.org/10.1007/s00127-004-0787-8

Furnham, A., & Cheng, H. (2000). Lay Theories of Happiness. *Journal of Happiness Studies, 1*, 227–246. https://doi.org/10.1023/A:1010027611587

GUS (2018). (Central Statistical Office). https://stat.gov.pl/files/gfx/portalinformacyjny/pl/defaultaktualnosci/5500/8/1/1/zycie_religijne_w_polsce_wyniki_badania_spojnosci_spolecznej_2018.pdf

Gzocha, P., & Kurpas, D. (2011). Chorzy psychicznie w odbiorze społecznym – wyniki badania pilotażowego [Mentally ill people as perceived by society – Results of a pilot study]. *Family Medicine & Primary Care Review, 13*(2), 147–150.

Hong, Y., Levy, S. R., & Chiu., C. (2001). The contribution of lay theories approach to the study of groups. *Personality and Social Psychology Review, 5*(2), 98–106. https://doi.org/10.1207/S15327957PSPR0502_1

Lincoln, S. H., Johnson, T., Winters, A., & Laquidera, J. (2021). Social exclusion and rejection across the psychosis spectrum: A systematic review of empirical research. *Schizophrenia Research, 228*, 43–50. https://doi.org/10.1016/j.schres.2020.11.056

Link, B. G., & Phelan, J. C. (2001). Conceptualizing Stigma. *Annual Review of Sociology*, *27*, 363–385. https://doi.org/10.1146/annurev.soc.27.1.363

Link, B. G., Struening, E. L., Neese-Todd, S., Asmussen, S., & Phelan, J. C. (2001). Stigma as a barrier to recovery: the consequences of stigma for the self-esteem of people with mental illnesses. *Psychiatric Services*, *52*(12), 1621–1626. https:/doi.org/10.1176/appi.ps.52.12.1621

Mroczek, B., Wróblewska, I., Kędzierska, A., & Kurpas, D. (2014). Postawy dorosłych Polaków wobec osób chorych psychicznie. *Family Medicine & Primary Care Review*, *16*(3), 263–265.

Reavley, N. J., Jorm, A. F., & Morgan, A. J. (2016). Beliefs about the dangerousness of people with mental health problems: The role of media reports and personal exposure to threat or harm. *Social Psychiatry and Psychiatric Epidemiology*, *51*, 1257–1264. https:/doi.org/10.1007/s00127-016-1215-6

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach`s alpha. *International Journal of Medical Education*, *2*, 53–55. https:/doi.org/10.5116/ijme.4dfb.8dfd

Vogel, M. (2014). Mental illness and criminal behaviour. *Sociology Compass 8*(4), 337–346.

Wciórka, B., & Wciórka, J. (2002). *Polacy o schizofrenii i chorych na schizofrenię (1). Społeczne rozumienie słowa "schizofrenia". Komunikat z badań* [Polish people about schizophrenia and people suffering from schizophrenia (1). Social understanding of the word "schizophrenia". Research communication]. https://cbos.pl/SPISKOM.POL/2002/K_009_02.PDF

World Health Organization Regional Office for Europe. (2018). *Fact sheets on sustainable development goals: health targets. Mental Health.* http://www.euro.who.int/__data/assets/pdf_file/0017/348011/Fact-sheet-SDG-Mental-health-UPDATE-02-05-2018.pdf