Relationship between Communication Skills and Positive, Negative Symptoms among Patients with Schizophrenia

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Received: 08/03/2025

Revised:27/03/2025

Accepted:31/03/2025

ABSTRACT

Background: Schizophrenia is a mental illness characterized by both positive and negative symptoms, which can affect patients' communication abilities. **Aim of the study**: to explore the relationship between communication skills and positive, negative symptoms among patients with schizophrenia. **Research** design: A descriptive correlational research design was conducted. Setting: was carried out in the inpatients' departments of Psychiatric Health and Addiction Treatment Hospital. **Subjects and Methods:** A purposive sample of 66 patients with schizophrenia participated in the study. Tools of data collection: data was collected using (A socio-demographic interviewing sheet, The Communication Skills Questionnaire, and Positive and Negative Syndrome Scale (PANSS)). **Results:** the finding indicated a statistically significant relationship between levels of communication skills and positive, negative symptoms among patients with schizophrenia. Conclusion: There was statistically significant negative correlation between communication skills and PANSS of schizophrenia. **Recommendation:** Educational program should be designed and implemented to improve communication skills, enhance social function and involve family members in treatment process

Keywords: Communication skills, Positive and negative symptoms a patients with schizophrenia.

INTRODUCTION

Schizophrenia is a serious mental disorder that affects how a person thinks, feels and act. it can be highly disabling patients with the disorder may experience hallucination such as hear voices or seeing things that are not actually present and may have delusions including beliefs that others can read their minds, control their thoughts, or intend to harm them (Cakici, Beveren, Hundal, Koola, & Sommer, 2019). People with schizophrenia often express unusual ideas, making it challenging for them to engage in conversations with others. Families and society were impacted by schizophrenia too (Abd-Elhameed, Amin, Abdel-Rahman & Elghiet, 2020).

Research indicates that individuals with schizophrenia commonly experience cognitive impairments related to attention, memory and language processing. These impairments contribute to communication difficulties. People with chronic schizophrenia may use disorganized speech and struggle to convey their thoughts in a clear and logical manner. As a result, they often face challenges in communicating accurately and effectively with others (Abd-Elhamid, Gafaar & Abdelaal, 2022). Individuals diagnosed with chronic schizophrenia struggled to assess the suitability of both verbal and non-verbal forms of communication, which encompass posture, eye contact, physical proximity, gestures, and facial expressions (Abdelgelil, Elyazal, Mubarak & Elsherif, 2022).

Positive, negative, and cognitive symptoms are the three broad categories into which the symptoms of schizophrenia can be divided. Positive symptoms included psychotic actions that are uncommon in healthy persons. Positive symptoms may cause some people to lose contact with reality (Yuksel & Bahadır, 2021). The presence or absence of treatment may have an impact on the intensity of positive symptoms (Ahmed, Elmaleky, & Zaki, 2022). Disruptions to typical behaviors and emotions, including diminished pleasure in daily life, flat affect, and trouble starting and maintaining activities, were linked to negative symptoms (Elghamry, Mohammed, Ali & El Hawary, 2022). Some individuals experienced mild cognitive symptoms of schizophrenia, whereas others experienced more severe symptoms, such as impairments in memory or other cognitive processes (Abd-Elhameed et al., 2020).

Significance of the study:

Schizophrenia is a chronic disease associated with impairments in the functional, social, family, and working life of individuals. In particular, negative symptoms and positive symptoms of the disease lead to social-emotional withdrawal, diminished activity/expressiveness, and move away from the community. Individuals with schizophrenia experience negative symptoms like poor eye contact, inappropriate facial expressions, limited intonation, speech with low voice volume, reduced spontaneous social interaction, abnormalities in the timing and synchronization of responses in speech. They have difficulty understanding others' feelings and expressing themselves to others. Also, they have to deal with the stigma and prejudices. In general, all of them reduce the quality of life by causing difficulties in social skills and social inclusion (Saris et al., 2022). So, this study was done to explore the relationship between communication skills and positive, negative symptoms of patients with schizophrenia.

AIM OF THE STUDY

This study aimed:

To explore the relationship between communication skills and positive, negative symptoms among patients with schizophrenia.

Research Objectives of the study:

- 1. Assess characteristics of communication skills among individual with schizophrenia
- 2. Assess severity of positive and negative symptoms among the patients with schizophrenia.
- 3. Assess relationship between communication skills and positive and negative symptoms among the schizophrenic patients.

SUBJECTS AND METHOD

Research design: A descriptive correlational design was employed.

Research setting

The study was conducted in the inpatient departments of Psychiatric Health and Addiction Treatment Hospital in Egypt governed by the General Secretarial of Mental Health and Addiction Treatment under the Ministry of Health.

Subject of the study

A purposive sample of 66 patients diagnosed by schizophrenia were selected from psychiatric inpatient.

Inclusion Criteria:

- 1. Both sex
- 2. Willing to take part in the study
- 3. Older than 18
- 4. Free of comorbid mental disorders,
- 5. Without a history of neurological issues or unconsciousness
- 6. Without a mental retardation diagnosis
- 7. Without a history of severe suicidal or aggressive behavior in the recent past.

Sample size

The sample size was determined by using (Dawson & Trapp, 2004) formula as the following:

$$n = 2\left[\frac{\left(Z_{\frac{\alpha}{2}} + Z_{\beta}\right) * \sigma}{\mu_1 - \mu_2}\right]^2$$

Where:

n: Sample size

 $\mathbf{Z}_{\frac{\alpha}{2}} = 1.96$ (The critical value that divides the central 95% of the Z distribution from the 5% in the tail)

 $\mathbf{Z}_{\beta} = 0.80$ (The critical value that separates the lower 20% of the Z distribution from the upper 80%)

 $\sigma = 4.65$ the estimate of the standard deviation

 μ_1 = 18.85 (mean pre-intervention based on the study result of Uzun, 2022

 μ_2 = 20.57 (mean post intervention based on the study result of Uzun, 2022)

n = 60

Dropout rate is 10% of the total sample =6

The total sample was 66 after adding dropout rate

Based on the study result of (*Usen & Lok*, 2022), the power analysis was obtained from the means differences between pre-program and post-program measures. The equation calculated sample size included sixty (60) patients.

Tools of data collection

Tool I: Communication Skills Questionnaire (CSQ)

Developed by Takahashi, Tanaka, and Miyaoka (2006) created the communication skills questionnaire in English, and the researcher translated it into Arabic. The questionnaire

used for investigating subjective communication skills of the patient. It included items about interpersonal communication skills and selected basic social skills items.

Scoring system:

The two subscales consisted of 29 items.

- 1. The general communication skills: Included 6 items; each of which is scored from one to five; one referred to the lowest severity while five indicated the highest severity. Therefore, the general communication skills levels score ranged from 1 to 30. The levels of General communication skills were categorized according to the following scores; ≤ 10.2 indicated lower general communication skills level, and ≥ 10.2 indicated higher general communication skills level.
- 2. Interpersonal communication skills: It included 23 items; each of which is scored from zero to two; zero referred to the lowest severity while two indicated the highest severity. Therefore, the interpersonal communication skills levels score ranged from 0 to 46. The levels of interpersonal communication skills were categorized according to the following scores; ≤41.4 indicated lower interpersonal communication skills level, and >41.4 indicated higher interpersonal communication skills level. Total subjective communication skills level indicated lower at ≤54, and indicated higher at >54.

Tool II: Positive and Negative Syndrome Scale (PANSS):

This semi-structured seven-point Likert-type scale was created by Kay, Fiszbein, and Opler (1987) in English and translated into Arabic by Yehya et al. (2016). It is used to evaluate the kind and intensity of symptoms in individuals with schizophrenia.

Scoring system:

Subscales	Number of	Range of	Categories of total scores				
	items	scores					
Positive symptoms	7	7-49	<20 indicated mild level				
			20-25 indicated moderate level				
			>25 indicated sever level				
Negative symptoms	7	7-49	<24 indicated mild level				
			24-31 indicated moderate level				
			>31 indicated sever level				
Psychopathological	16	16-112	<40 indicated mild level				
syndrome			40-50 indicated moderate level				
			>50 indicated sever level				

In addition a socio-demographic interviewing sheet, was designed in Arabic language by the researcher. It included the following: Demographic characteristics (It included; gender, age, residence, marital status, living status, housing condition, working status, occupation and educational level) and Clinical Characteristics: It included; diagnosis, illness duration, previous hospitalization and duration of the currant hospitalization.

C. Tools validity:

The validity was tested by five specialists in psychiatric nursing at faculty of nursing at Port Said and Suez Canal University who decided that the tools were valid.

D. Reliability:

Items	Reliability					
Tool I: The Communication	Showed a range of 0.91 to 0.97 Cronbach's alphas					
Skills Questionnaire (CSQ)						
Tool III: Positive and Negative	Cronbach's α for the scale's total score was 0.92.					
Syndrome Scale (PANSS)						

Pilot study

A pilot research was conducted from July 17 to July 30, 2023. Involving 10% of the total sample (6) patients who met the inclusion criteria. It was carried out to assess the tool's practicability, legibility, understandability, feasibility, validity, simplicity, and reliability. It was also used to identify potential issues that could arise for the researcher and impede data collection. Finally, it was used to estimate the time required to complete the forms, which came out to be roughly 30 minutes. The pilot study's findings indicate that no changes were made to the instruments. Participants in the pilot study were not included in the study's main sample.

Field work

The researcher reviewed all patients' records and nurses were asked in each ward about the patients who were able to communicate effectively. The researcher met the studied patients and clarified to them the purpose of the study and oral consent of each patient was taken with assistance from administrative officials. The researcher began to fill in the written pre mentioned tools individually. The time needed for filling each one extended from 30 to 45 minutes depending on the response of each patient. The researcher went to psychiatric hospital twice every week and collected data from 3-5 patients daily, duration of data collection was about three months.

Ethical Considerations

The Scientific Research Ethics Committee of Port-Said University's Faculty of Nursing granted the researcher a written approval, "NUR (4\5\2025) (49)". Additionally, the researcher received a written consent to do study in any psychiatric hospital in Egypt from the Ministry of Health's Genera Secretariat of Mental Health and Addiction Treatment (GSMHAT) ethical committee. With the assistance of administrative officials, the researcher explained the goal and significance of the study to the patients being studied before obtaining their oral agreement. Patients received assurances that the data collected from them would be kept private and utilized exclusively for the study.

Statistical design:

Data analysis:

The gathered data were coded, processed, and analyzed using the SPSS (Statistical Package for Social Sciences) version 22 (SPSS Inc., Chicago, IL, USA) by the researcher. Numbers and percentages were used to display the qualitative data. The Kolmogrov-Smirnov test was used to check the normality of quantitative data. Data with a normal distribution is shown as mean \pm SD. Two variables were tested for correlation using Pearson's correlation coefficient. P values \leq 0.05 were statistically significant, and P values \leq 0.01 were extremely significant.

RESULTS:

Table 1: Distribution of the schizophrenic patients' according to individual characteristics.

Personal characteristics	Schizophrenic patients' n=60			
1 CISOIMI CIMI ACCOLISICES	No.	%		
Age/ years:				
<30	11	18.3		
30 -<40	19	31.7		
40 -<50	20	33.3		
50 -<60	7	11.7		
≥60	3	5.0		
Range	2	23-62		
Mean ± SD	38	.5±9.76		
Gender:				
Male	36	60.0		
Female	24	40.0		
Marital status:				
Single	42	70.0		
Married	7	11.7		
Widow	11	18.3		
Educational levels:				
Not read and write	17	28.3		
read and write	16	26.7		
Basic education	23	38.3		
Secondary	3	5.0		
University	1	1.7		
Residence:				
Urban	49	81.7		
Rural	11	18.3		
Working status:				
Working	49	81.7		
Not working	11	18.3		
Family income (as reported by patient):				
Enough	31	51.7		
Not enough	29	48.3		
Housing condition (as reported by patient):				
Bad	31	51.7		
Middle	28	46.7		
Good	1	1.7		

The table represents that patients' ages range from 23 to 62 years old, with a mean age of 38.5; one-third (33.3%) were aged between 40 and less than 50 years old; nearly two-thirds (60.0%) were male; 70.0% of the schizophrenic patients in the study

were unmarried; more than one-third (38.3%) had only a basic level of education; more than three-quarters (81.7%) lived in urban areas; 81.7% of them were employed; and 51.7% reported sufficient monthly income.

Table 2: Distribution of the schizophrenic patients according to clinical characteristics.

Clinical characteristics	Schizophrenic patients n=60			
	No.	%		
Illness duration:				
<1 year	3	5.0		
1 - <3 years	6	10.0		
\geq 3 years	51	85.0		
Number of previous hospitalizations:				
One time	1	1.7		
2-4	41	68.3		
4-6	18	30.0		
Duration of current hospitalization:				
<1 month	10	16.7		
1<3 months	29	48.3		
≥3 months	21	35.0		

According to Table 2, two-thirds of the patients in the study (68.3%) had been admitted to a psychiatric hospital two or more times, and the largest percentage (85.0%) of the patients have been unwell for more than three years.

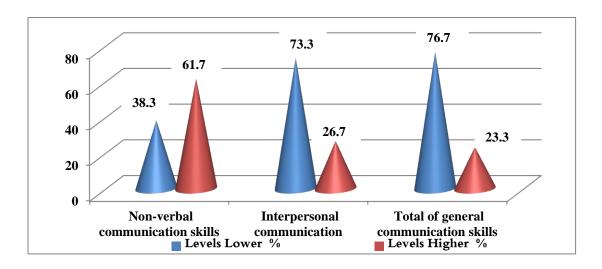


Figure 1: Distribution of the schizophrenic patients according to the communication skills categories levels (n=60)

Figure 1: Showed that less than two thirds of schizophrenic patients (61.7%) had high level of non-verbal communication skills, while only 26.7% had a high level of interpersonal communication skills.

Table 3: Relation between the schizophrenic patients personal characteristic and communication skills levels (n=60).

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		1	2.2	0	0		
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Table 3: The findings demonstrated statistically significant relationships between the schizophrenic patients' personal characteristics and their communication skill levels in the domains of working status (P = 0.014).

Table 4: Relation between the schizophrenic patients clinical characteristic and communication skills levels (n=60).

	Com	municat					
Clinical characteristics	Lowest N=46		Highest N=14		χ^2	р	
	No.	%	No.	%			
Illness duration:							
• 1>year	1	2.2	2	14.3	3.880 MC	.108	
• 3> - 1years	4	8.7	2	14.3			
• ≥ 3 years	41	89.1	10	71.4			
Number of previous							
hospitalizations:							
 One time 	0	0	1	7.1	3.342 MC	.310	
• 2-4	32	69.6	9	64.3			
• 4-6	14	30.4	4	28.6			
Duration of current							
hospitalization:							
• <1 month	7	15.2	3	21.4	.298	.585	
• 1<3 months	39	84.8	11	78.6			
*χ²: Is Chi square test MC	* χ^2 : Is Chi square test MC: Is Monte Carlo Significant at p < .05						

Table 4 describes that, there were no statistically significant relations between levels of communication skills and clinical characteristics of the schizophrenic patients' in the areas of illness duration, number of previous hospitalization and length of current hospitalization.

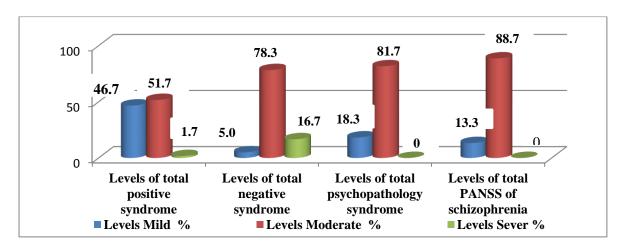


Figure 2: Distribution of the schizophrenic patients according to PANSS subscale levels (n=60).

Figure 2: It was discovered that 78.3% of patients had a moderate degree of total negative syndrome, while (51.7%) had a moderate degree of total positive syndrome.

Table 5: Relation between the schizophrenic patients communication skills categories levels and PANSS subscale levels (n=60).

PANSS subscale levels	Communication skills categories levels								
	Gene		mmuı kills	nicatio	Interpersonal communication				Test
		wer =46	Higher N=14		Lower N=44		Higher N=16		
	No	%	No	%	No %		No %		
Total positive syndrome subscale levels:	1.0	20.1	1.0		4.5	2.5.4			$\chi^2 = 4.589$
MildModerate	18 27	39.1 58.7	10 4	71. 4	27	36.4 61.4	4		P1=0.101 χ^2 =7.120
• Sever	1	2.2	0	28. 6 0	1	2.3	0	0	P2=.028*
Total negative syndrome subscale levels:									$\chi^2 = 3.702$
• Mild	2 34	7.4 37.9	1 13	7.1 92.	1 33	2.3 75.0	2 14	12.5	P1=.157 $\chi^2 = 6.325$
ModerateSever	10	21.7	0	9 0		22.7	0	0	χ =0.323 P2=.042*
Total psychopathology syndrome:									$\chi^2 = 3.685$
MildModerate	6 40	13.0 87.0	5 9	35. 7	4 40	9.1 90.9	7 9	43.8 56,3	P1=.055* $\chi^2=9.414$
• Sever	0	0	0	64. 3	0	0	0	0	P2=.005*
(*) Statistically significant				0					S cubcoolo

^(*) Statistically significant at P< 0.05 P1= Relation between PANSS subscale levels Non-verbal communication skills level

Table 6 describes that, there was statistically significant relations between total positive syndrome subscale levels, total negative syndrome subscale levels, total psychopathology syndrome and interpersonal communication levels (P2=.028*, P2=.042* and P2=.005* respectively). Also there were statistically significant relations between total psychopathology syndrome subscale levels and general communication skills levels (P1=.055*).

P2= Relation between PANSS subscale levels Interpersonal communication level

DISCUSSION

Communication disturbance is a common disturbance among persons with schizophrenia. Changes that are solely related to communication have been mentioned since its first descriptions. Different social function and social communication dysfunctions were implicated in all schizophrenia individuals. Notwithstanding the limitations imposed by the illness, patients and their families express a number of unmet information demands, a need for increased decision-making participation, a desire for improved diagnosis and prognostic information, and a desire for a response to their anguish. Persistent positive and negative syndrome can affect communication skills and can impair engaging in activities or jobs that require social communication skills (Pestana, 2019). So, the present study was conducted to investigate the relationship between communication skills and positive and negative symptoms in persons with schizophrenia.

Regarding distribution of communication skills, the result of the study demonstrated the total general communication skills among the schizophrenic patients; and showed that less than one quarter of the schizophrenic patients had a higher degree of general communication skills. This may be due to, the patients were busy with hallucinations and delusions and low self-esteem which affect negatively on ability to contact with others. Park (2018) agreed with that result, who reported that patients with schizophrenia suffered from communication disturbance and decrease in communication competence score.

Moreover, Bedel (2018) observed that interpersonal effectiveness in people with less severe issues was related to the communication skills deficiencies of people with schizophrenia, including the capacity to paraphrase, ask open-ended inquiries, and reflect feelings. This finding is supported by Prochwicz (2015), who showed in his research that individuals with schizophrenia have specific communication skills impairments, such as humor or metaphor understanding, as well as deficiencies in facial expression discrimination.

According to Uzun's (2022) research, the intervention group's overall score and the communication skills scale-adult form sub-dimensions of active listening,

caring communication, willingness to communicate, personal self-expression, and non-verbal communication were low in patients with schizophrenia. This result disagree with Zedan (2024) who reported in his study that, communication skills among schizophrenic patients affected negatively during acute phase but as a general communication skills improved after hospital treatment.

The study showed that, there were statistically significant relations between levels of communication skills and personal characteristics of the schizophrenic patients in the working status, and sex. Turner (2017) consistent with this result, who reported in his study that communication skills in the worked persons with schizophrenia was more than in the others. Lampropoulos (2017) reported in his study that female schizophrenic patients suffered from more communication impairments than male, disagreed with this result Kang (2019) reported in his study that the impairments of communication skills in schizophrenic patients more in male patients than female.

This study clarified that, with regard to the distribution of schizophrenic patients by PANSS subscale levels, the majority of patients had a moderate level of negative syndrome prior to the program, while over half of the patients had a moderate level of positive syndrome. This might be due to, the test was done after patient's admission 2 -3 weeks, so the positive symptoms of schizophrenia were still present. This finding was corroborated by Lui (2024), who found that the subgroup with the strongest social functioning and communication abilities also had the least negative symptoms, the highest experiential pleasure, and the highest emotion expressivity. Communication and social functioning were the lowest among the subgroups with the most negative symptoms and the lowest experiential pleasure. According to Murphy (2024), a patient's attention span, communication abilities, and overall quality of life all declined as a result of the intensity of psychopathological symptoms and their ongoing obsession with positive symptoms.

This study clarified that there was a statistically significant negative correlation between total general communication skills and total PANSS of schizophrenia (P= 0.000**). This might be due to, the negative symptoms of schizophrenia included poor communication and social withdrawal, this made

negative correlation between communication skills and PANSS and the high level of hallucinations and delusions of schizophrenia affect the attention levels and desire to communicate with other.

Shimada (2022) showed that, when negative symptoms were absent, positive symptoms of schizophrenia often enhanced the need for social isolation. Nevertheless, regardless of a diagnosis or negative symptoms, positive symptoms raised the need for social distance toward the person in the scenario particularly. According to Zedan (2024), awareness of a person's diagnosis of schizophrenia increased the desire for social distance towards that person when unfavorable symptoms were present. This conclusion is consistent with earlier research by Zahid (2021), which suggested that negative symptoms might be a particularly prominent cluster of socially relevant symptoms that influence a person's choice to engage with a person who has schizophrenia. Negative symptoms disturb interpersonal interactions and are among the best indicators of decreased interpersonal functioning.

As a result of these findings, it was considered that this was a negative relationship between communication skills and positive and negative symptoms among individual with schizophrenia.

CONCLUSION

Based on the study's findings, the study concluded that, there is a statistically significant negative relationship between communication skills and both positive, negative symptoms among patients with schizophrenia.

RECOMMENDATION

- Develop and implement educational program to improve communication skills among patients with schizophrenia, these by enhancing their social functioning and quality of life.
- Creating and carrying out an educational training program to enhance psychiatric nurses' understanding and proficiency in therapeutic partnerships, and communication skills to deal effectively with patients who suffer from symptoms of schizophrenia and encourage patients to verbalize if they feel unwell.

• Involve patients' families in treatment plan to provide contentious social support and reduce isolation.

References

- Abdelgelil, S., Elyazal, A., Mubarak, A. & Elsherif, Z., (2022). Effect of social skills enhancement training program on negative symptoms among patients with schizophrenia. *Tanta Scientific Nursing Journal*, 24(1), 35-73.
- Abd-Elhameed, N., Amin, R., Abdel-Rahman, A., & Elghiet, M., (2020). Assessment of psychosocial and demographic characteristics related to relapse in schizophrenic patients at psychiatric hospital of Assiut University. *Assiut Scientific Nursing Journal*, 8(21), 25-33.
- Abd-Elhamid, A., Gafaar, M., & Abdelaal, H., (2022). Interpersonal communication competence and ability of emotional recognition among patients with schizophrenia. *Alexandria Scientific Nursing Journal*, 24(1), 1-12.
- Ahmed, B., Elmaleky, M., & Zaki, M., (2022). Relationship between suicidal thoughts and positive symptoms among schizophrenic patients. *Journal of Nursing Science Benha University*, 3(1), 966-980.
- Bedel, J., Lennox, S., Smith, A., & Rabinowicz, E. (2018). Evaluation of problem solving and communication skills of persons with schizophrenia. *Psychiatry Research*, 78(3),197–206. https://doi.org/10.1016/S0165 1781(18)00018-3.
- Cakici, N., Beveren, N., Hundal, G., Koola, M., & Sommer, I., (2019). An update on the efficacy of anti-inflammatory agents for patients with schizophrenia: A meta-analysis. *Psychol. Med.* 49, 2307–2319.

https://doi.org/10.1017/S0033291719001995

- Elghamry, R., Mohammed, A., Ali, D., & El Hawary, Y., (2022). Effect of atypical antipsychotics on serum bdnf in an egyptian first samples of first episode schizophrenia patients. *Archives of Psychiatry Research: An International Journal of Psychiatry and Related Sciences*, 58(1), 13-22.
- Kang, S., MacDonald, A., Sponheim, S., (2019). Dysfunctional Neural Processes

 Underlying Context Processing Deficits in Schizophrenia. *Biol. Psychiatry*Cogn.

Neurosci. Neuroimaging, 4 (7), 644–654. https://doi.org/10.1016/j. bpsc.2019.03.012

- Kay, S., Fiszbein, A., & Opler, L. (1987). The positive and negative syndrome scale (PANSS) for schizophrenia. *Schizophrenia bulletin*, 13(2), 261–276. https://doi.org/10.1093/schbul/13.2.261
- Lampropoulos, D., Wolman, A., Apostolidis, T., (2017). Analyzing the presentation and the stigma of schizophrenia in French newspapers. *Social Psychiatry and Psychiatric*Epidemiology, 52, 1541–1547. https://doi.org/10.1007/s00127-017-1455-0.
- Lui, S., Elson, H., Ling, C., Perry, B. (2024). Leung a Negative symptoms in treatment-resistant schizophrenia and its relationship with functioning. *Schizophrenia Research*, 270, 459–464.
- Murphy, M., Flores, T, Wojtalik, C, Keshavan, S. & Eack, M. (2024). Symptom contributors to quality of life in schizophrenia: Exploratory factor and network analyses. *Schizophrenia Research*, 264, 494–501.

- Park, Y. & Han, K. (2018). Development and evaluation of a communication enhancement program for people with chronic schizophrenia: A quasi-experimental pretest-posttest design study. *Applied Nursing Research*, 42, 1–8. https://doi.org/
- Pestana, A., (2019). Communication Skills in Psychiatry. Patients with schizophrenia assessing Psychiatrists' communication skills.
- Prochwicz, K., Sulecka, A., Adamczyk, P., & Cechnicki, A. (2015). Facial affect recognition deficits in schizophrenia. Association with language and communication skills. *European Psychiatry*, 30(1), 391. https://doi.org/10.1016/S0924-9338 (15)31882-4.
- Shimada, T., Kobayashi, G., Saeki, Y., Mizukoshi, C. & Kawasaki, Y. (2022). A Retrospective Study on the Relationship between Cognitive Function and Social Function in Patients with Schizophrenia. *Journal of Clinical Medicine Research*, 14(9), 348-356.
- Takahashi, M., Tanaka, K. & Miyaoka, H., (2006). Reliability and validity of communication skills questionnaire (CSQ). *Psychiatry and clinical neuroscience*, 60, 211-218.
- Turner, N., Ferguson, L., Hill, M., Nesbitt, T., O'Callaghan, E., O'Mahony, P., & Clarke, M. (2017). An exploratory study of the extent of social inclusion among people with psychosis and psychotic-related conditions. *International*

Journal of Social Psychiatry, 63(3), 195–202. https://doi.org/10.1177/0020764017691551

- Uzun, G. & Lok, N. (2022). Effect of emotional awareness skills training on emotional awareness and communication skills in patients with schizophrenia:
 A Randomized
 Controlled Trial. Archives of Psychiatric Nursing, 38, 14–20.
- Yehya A, Ghuloum S, Mahfoud Z, Opler M, Khan A, Hammoudeh S, Al-Amin H., (2016). Validy and Reliability of the Arabic Version of the Positive and Negative Syndrome Scale. *Psychopathology*, 49(3), 181-187. Doi:10.1159/000447328.
- Yuksel, A., & Bahadır, E. (2021). The effect of mindfulness-based psychosocial skills training on functioning and insight level in patients with schizophrenia. Community mental health journal, 57(2), 365-371.
- Zahid, A. & Best, M. (2021). Stigma towards individuals with schizophrenia: Examining the effects of negative symptoms and diagnosis awareness on preference for social distance. *Psychiatry Research*, 297.
- Zedan, S., Zahid, A., Best, M. (2024). Examining the effects of diagnostic awareness, positive symptoms, and negative symptoms on stigmatizing attitudes and social exclusion towards schizophrenia. *Schizophrenia Research*, 264, 482-490.

العلاقة بين مهارات التواصل والأعراض الإيجابية والسلبية لدى مرضى الفصام

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الخلاصة

إن الفصام هو اضطراب مزمن و شديد يؤثر علي قدرة الفرد على التفكير و الشعور و التصرف و يسبب هذا الاضطراب عددا من الاعراض تشمل الهلاوس مثل يسمعون أصوات و يرون أشياء غير موجودة و قد يعتقدون أن الأخرين يمكنهم قراءة أفكار ههم و يستطيعون السيطرة عليه كما قد تؤثر هذه الأعراض علي قدرة المريض علي التواصل مع الأخرين و بناء علاقات أجتماعية ناجحة. هدف البحث: تهدف هذه الدراسة الي إكتشاف العلاقة بين مهارات التواصل و الاعراض الايجابية و السلبية لدي مرض الفصام. طرق و أدوات البحث: استخدمت الدراسه الحالية التصميم الوصفي الترابطي و قد أجريت هذه الدراسة في أحدى مستشفيات الصحة النفسية و علاج الادمان. و تم أخذ عينه هادفة لاختيار 60 مريض فصام و الي جانب استبيان العوامل الشخصية و الاكلينيكية ، تم استخدام الأدوات الأتية لجمع البيانات: استبيان تقييم مهارات التواصل، مقياس الأعراض الايجابية و السلبية و مهارات التواصل الأعراض الايجابية و السلبية لمريض الفصام . التوصيات توجد أحصائيا علاقة سلبية بين مهارات التواصل و الأعراض الأيجابية و السلبية لمريض الفصام . التوصيات تصميم و تطبيق برنامج تدريبي لمرضي الفصام لتحسين مهارات التواصل و تطوير مستواهم الاجتماعي و تصميم و تطبيق برنامج تدريبي لمرضي الفصام لتحسين مهارات التواصل و تطوير مستواهم الاجتماعي و تعيير جودة الحياة لديهم، بالاضافة الي مشاركة عائلات المرضي في خطة علاج مرضاهم.

الكلمات المرشدة: الأعراض الايجابية ، الاعراض السلبية لمرض الفصام، مهارات التواصل.