
RELATIONSHIP OF ALEXITHYMIA WITH EMOTION REGULATION STRATEGIES AND MENTAL HEALTH IN SCHIZOPHRENIC PATIENTS

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Abstract

The main aim of the study is to analyze the emotional aspects of mental health in schizophrenia. We examined the relationship between levels of alexithymia, different strategies for emotion regulation, levels of stress and subjective well-being. Different studies show that in general people with high levels of alexithymia tend to exhibit a less adaptive profile of emotion regulation. Research on schizophrenia and emotions has revealed that schizophrenic patients lack the ability to recognize and express emotion, as well as understanding emotions in social context.

We focus on difficulties processing emotional experiences in schizophrenic disorder and how it is related to the functional difficulties patients experience. In addition we proposed that patients with high levels of alexithymia and poorer coping strategies will be less willing to seek help from professionals. Questions about attitudes toward health specialists were constructed. 30 patients with schizophrenia and 39 healthy controls completed the survey. Patients with higher levels of alexithymia had tendency to use strategies as expressive suppression, which was linked with higher levels of stress. High levels of alexithymia were linked with poorer quality of life and lower life satisfaction. The results will be used for improving therapeutic psychological approaches when working with patients, recommendations for psychological work were given.

Keywords: alexithymia, schizophrenia, emotion regulation strategies, mental health.

Severe mental disorders are associated with significant suffering for patients diagnosed with them. Compared to the other mental disorders, they are mostly associated with a deteriorated quality of life, disorders in interpersonal

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relationships, social isolation, suicidal risk, etc. In general severe mental disorders have lower rates of well-being compared to controls (Stanga et al., 2019). Schizophrenic disorder is one of the most commonly diagnosed severe mental disorders. Schizophrenia is a mental disorder often associated with high distress and impairment in the patient's social, personal, educational, work, and other areas of life. Statistics show that the probability of premature death among schizophrenics is 2 to 3 times higher than in the general population (Laursen et al., 2014). Most of the research focuses on cognitive deficits in schizophrenia, even though negative symptoms and emotion deficits have a higher impact on quality of life. Research on schizophrenia and emotions has revealed that schizophrenic patients lack the ability to recognize and express emotion, as well as understanding emotions in social context (Kring & Elis, 2013). Patients cannot maintain their emotional experiences and have flat affect, which means they do not express emotions. Despite that they share that they feel emotions of the same or even higher intensity than healthy controls. Difficulty processing emotional experiences is a key component of schizophrenic disorder and is related to the functional difficulties patients experience (Kohler & Martin, 2006). Research has generally found higher levels of alexithymia in schizophrenic disorder compared to healthy controls, and in recent years there has also been evidence that alexithymia can predict patients' level of psychosocial functioning (Kimhy et al., 2012), as well as in people who are at risk for developing psychosis (Kimhy et al., 2016). Studies found that negative symptoms (affect flattening, poor cognition, apathy, social isolation) have more predictive value than positive symptoms (hallucinations and delusions) for the quality of life and functionality of the patients (Leucht et al. 2018). In the study of Yi et al. (2023) researchers found that patient with higher scores of alexithymia had higher general PANSS score, negative, depressive, and cognitive PANSS subscores. Although schizophrenic patients have reduced expression of their emotional experiences and difficulties in understanding their and other's emotions, they do not experience fewer emotions compared to other people. Their difficulties are mainly related to their ability to understand and regulate their emotions. Meta-analyses have found that although patients do not report a reduction in positive experiences or activation to emotionally meaningful pleasurable stimuli, they do report experiencing more negative emotions in response to neutral and positive stimuli (Cohen & Minor, 2010). In addition, schizophrenic patients display substantial emotion regulation difficulties (Kimhy et al., 2020). According to a study by Strauss et al. (2013) schizophrenic patients fail to apply the cognitive reappraisal strategy when exposed to negative stimuli, resulting in them more often reporting experiencing negative emotions. Research has found that schizophrenics are more likely to use the emotional suppression strategy to regulate their emotions and less frequently cognitive reappraisal (van der Meer et al., 2009). Also, patients are less likely to engage in pleasure-seeking behaviors (Strauss et al., 2013). Emotion regulation involves the processes that people apply to influence their emotional state. Various studies have found that effective emotion regulation is associated with better psychosocial functioning

(Gross & Muñoz, 1995) and alexithymic traits are linked with lower willingness for seeking help from others (Haimadeh, 2018). The main aim of the present study is to analyze the emotional aspects of mental health in patients with schizophrenic disorder. The study will focus on the impact of affect regulation and subjective emotional experience of the patients. Willingness seeking for professional help will be also examined. The main aspects which were examined are alexithymia traits and coping strategies for emotional regulation. The hypotheses of the study were: Schizophrenic patients will have higher levels of alexithymia than healthy controls; Schizophrenic patients will report higher scores on the strategy “expression suppression” and lower scores on the strategy “cognitive reappraisal”; Schizophrenic patients will have lower scores on subjective well-being; Patients will have more negative attitudes toward health professionals.

Method

Participants

We examined 30 patients with schizophrenia (F.20) – 8 women and 22 men and 39 healthy controls – 33 women and 6 men. The age is between 20 and 64 years old. The schizophrenic patients were on medical treatment at “St. Naum” hospital, diagnosed by a psychiatrist.

Measures

In the study we used the Bulgarian version of TAS 20 (Popov et al., 2016). The Bulgarian version of TAS 20 has two subscales: *Difficulties identifying and describing feelings* and *Externally oriented thinking*. It includes 20 self-report questions. We included also the Emotion regulation questionnaire (ERQ), which was not adapted for Bulgarian social context. In the pilot study we made a factor analysis of ERQ with 120 participants and the Cronbach’s α was

0.8. We included it in the main study, but it requires future validation. For subjective well-being we used the Bulgarian version of SWLS scale which includes 5 general questions about global cognitive judgments of satisfaction with one's life (Ivanova et al., 2013). We also constructed questions about attitudes toward health specialists. The questions were about tendencies to seek a psychiatrist or a psychologist and importance of working with them.

Design and procedure

All participants completed an online questionnaire that asked them to judge their own personal experience. Patients were asked for an interview before the research and after that the researcher gave them the instructions for the study. The assigned information agreement. The researcher was in the room in order to

help the patient if needed. Also some of the patients didn't know how to use the computer, so the researcher helped them with reading the questions. The healthy controls received a link for the study.

Results

Significant difference was found between TAS subscale scores between the two groups. Schizophrenic patients had higher scores on *Difficulties Describing and Identifying Feelings* subscale ($t(67) = 2,51; p < 0,05$) and on *Externally Oriented Thinking* subscale ($t(67) = 3,36; p < 0,01$). Schizophrenic patients also had higher scores on *General Alexithymia* ($t(67) = 3,01; p < 0,01$). For emotional regulation strategies, schizophrenic patients had higher scores on *Expression Suppression* subscale ($t(67) = 2,48; p < 0,01$). There was no significant difference between Cognitive reappraisal strategy.

In general, healthy controls had higher scores on *Subjective well-being* than schizophrenia patients ($t(67) = -2,07; p < 0,01$). Patients shared that they have poor life conditions and that they don't think that their life is good in general. Attitudes toward professional help were examined. We found that 13% of the patients see a psychologist regularly and 30% never worked with one. All of them work with a psychiatrist. 53% of them think that working with a psychologist is not important and 20% think that it is very important (Figure 1).

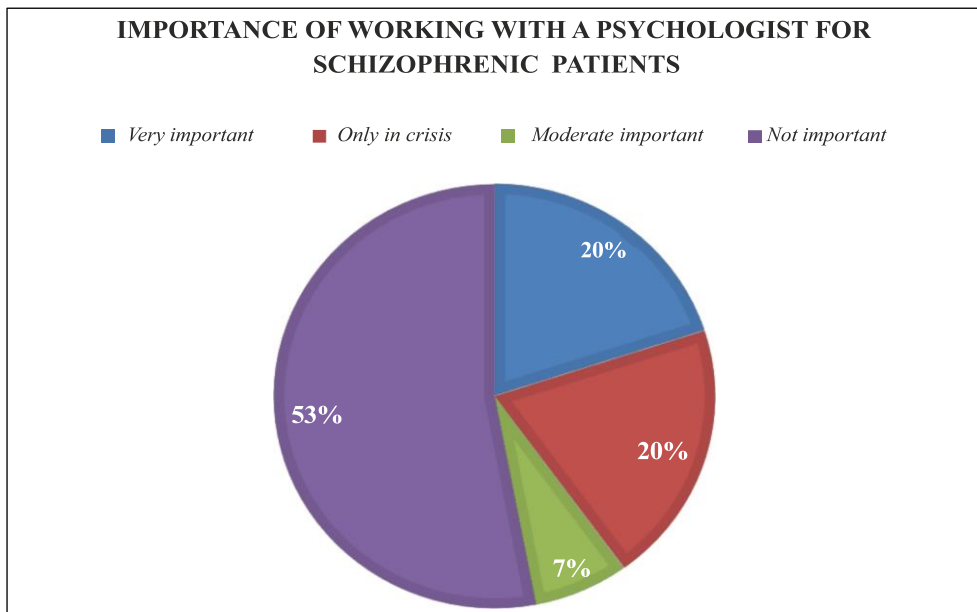


Figure 1. Attitudes towards psychologist

20% of patients say that the main aspect that helped them when visiting a psychologist is that there was someone to listen to them and understand them. Attitudes toward working with a psychiatrist were different (Figure 2). 18% thought that it is very important to visit a psychiatrist regularly and only 7% that it is not important at all. 50% will seek psychiatrist help only if they are in crisis.

IMPORTANCE OF WORKING WITH A PSYCHIATRIST FOR SCHIZOPHRENIC PATIENTS

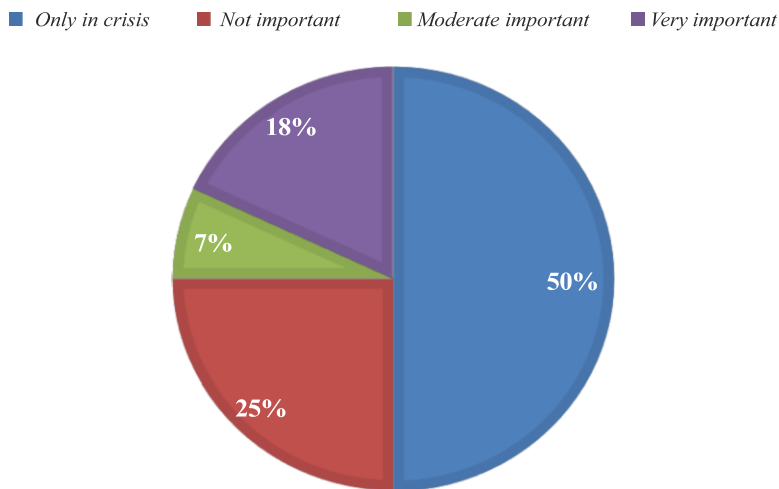


Figure 2. Attitudes towards psychiatrist

44% of healthy controls see a psychologist regularly and 23% have never worked with a psychologist or a psychotherapist. 72% think that it is very important to work with a psychologist and only no one thinks that it is not important at all.

Pearson correlations were utilized to test the potential relationships between alexithymia, coping strategies and levels of depression, anxiety, and stress among 69 participants – 30 patients and 39 healthy controls (Table 1). We made the correlations for the whole sample because of the small sample size of the patients and healthy controls. Difficulties describing and identifying feelings were positively correlated with expression suppression ($r = 0.62, p < 0.05$) and negatively with subjective well-being ($r = -0.44, p < 0.01$). Externally-oriented thinking was negatively related with cognitive reappraisal ($r = -0.3, p < 0.05$) and subjective well-being ($r = -0.45, p < 0.01$). General TAS score was positively related with expression suppression ($r = 0.58, p < 0.01$) and negatively with subjective well-being ($r = -0.48, p < 0.01$).

Table 1. Pearson correlations between alexithymia scores, emotion regulation strategies, anxiety, stress and subjective well-being (69 participants)

Variable	Difficulties describing and identifying feelings	Externally-oriented thinking	General TAS score
Expression suppression	.62*	.23	.58**
Cognitive reappraisal	.02	-.3*	-.01
Depression	.52**	.25*	.47**
Anxiety	.33**	-.02	.28*
Stress	.35**	.03	.3*
Subjective well-being	.44**	-.45**	-.48**

* $p < .05$. ** $p < .01$.

Discussion

Results confirm that schizophrenia patients tend to have higher levels of alexithymia than healthy controls. Higher levels of difficulties describing and identifying feelings are linked with using expression suppression as an emotional regulation strategy, with higher levels of depression, anxiety and stress and with lower subjective well-being. Externally oriented thinking is negatively related with cognitive reappraisal and with subjective well-being. In general, higher alexithymia scores are related with expression suppression. That confirms findings that alexithymia predicts poorer level of functioning in non-clinical samples as well (Ciarochi et al., 2008). The relationship between alexithymia and emotional regulation is explained by the deficit in cognitive modulation of emotions, which is a characteristic of alexithymia. Although schizophrenic patients have reduced expression of their emotional experiences and difficulties in understanding other people's emotions, they do not experience fewer emotions compared to other people. Flat affect could be linked with the strategy “expression suppression” not with lack of emotions. Their difficulties are probably related to their ability to understand and regulate their emotions. That highlights the importance of developing therapeutic interventions that focus on awareness of one's own emotions in general and learning more effective strategies for emotional regulation. Low percentages of working with a psychologist amongst patients could be linked with lack of understanding of the importance of psychological interventions. The results could be used for planning psychological interventions and setting therapeutic goals towards improving emotional regulation strategies. Levels of alexithymia could be a risk factor for patients and could predict their performance on the capacity for regulating negative and positive emotions. The main limitation of the study is that we used a scale that is not validated for Bulgaria – the ERQ scale. Also, the sample size is too small. Future research must include more participants and the ERQ scale must be validated. For the patients was difficult to use the computer for

answering the study and the researcher had to read the questions, which could have influenced their responses.

Authors' note

Declaration: The data was collected as a part of my PhD thesis. They are presented as a poster in EABCT 2023 conference “CBT in a Changing World: Migration and Cultural Diversity”. I am the only author.

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References

- Gross, J. J., & Muñoz, R. F. (1995). Emotion regulation and mental health. *Clinical psychology: Science and practice*, 2(2), 151.
- Ivanova, E. (2013). Internet addiction and cyberchondria-Their relationship with Well- Being. *The Journal of Education, Culture, and Society*, 4(1), 57-70.
- Ivanova, E., Mitev, K., & Karabeliova, S. (2016). Online social networking attitudes and health behaviour. *European Health Psychologist*, 987-987.
- Cohen, A. S., & Minor, K. S. (2010). Emotional experience in patients with schizophrenia revisited: meta-analysis of laboratory studies. *Schizophrenia bulletin*, 36(1), 143-150.
- Hamaideh, S. H. (2018). Alexithymia among Jordanian university students: Its prevalence and correlates with depression, anxiety, stress, and demographics. *Perspectives in psychiatric care*, 54(2).
- Kimhy, D., Gill, K. E., Brucato, G., Vakhrusheva, J., Arndt, L., Gross, J. J., & Girgis, R. R. (2016). The impact of emotion awareness and regulation on social functioning in individuals at clinical high risk for psychosis. *Psychological medicine*, 46(14), 2907-2918.
- Kimhy, D., Lister, A., Liu, Y., Vakhrusheva, J., Delespaul, P., Malaspina, D., ... & Wang, Y. (2020). The impact of emotion awareness and regulation on psychotic symptoms during daily functioning. *npj Schizophrenia*, 6(1), 7.
- Kimhy, D., Vakhrusheva, J., Jobson-Ahmed, L., TARRIER, N., Malaspina, D., & Gross, J. J. (2012). Emotion awareness and regulation in individuals with schizophrenia: Implications for social functioning. *Psychiatry research*, 200(2-3), 193-201.
- Kohler, C. G., & Martin, E. A. (2006). Emotional processing in schizophrenia. *Cognitive Neuropsychiatry*, 11(3), 250-271.
- Kring, A. M., & Elis, O. (2013). Emotion deficits in people with schizophrenia. *Annual review of clinical psychology*, 9, 409-433.

- Laursen, T. M., Nordentoft, M., & Mortensen, P. B. (2014). Excess early mortality in schizophrenia. *Annual review of clinical psychology, 10*, 425-448.
- Leucht, S., Barabáßy, Á., Laszlovszky, I., Szatmári, B., Acsai, K., Szalai, E., ... & Németh, G. (2019). Linking PANSS negative symptom scores with the Clinical Global Impressions Scale: understanding negative symptom scores in schizophrenia. *Neuropsychopharmacology, 44*(9), 1589-1596.
- Popov, V., Psederska, E., Peneva, E., Bozgunov, K., Vasilev, G., Nedelchev, D., & Vassileva, J. (2016). Psychometric characteristics of the Bulgarian version of the Toronto Alexithymia Scale (TAS-20). *Psychol. Res, 2*, 25-41.
- Stanga, V., Turrina, C., Valsecchi, P., Sacchetti, E., & Vita, A. (2019). Well-being in patients with schizophrenia, mood and personality disorders attending psychiatric services in the community. A controlled study. *Comprehensive Psychiatry, 91*, 1-5.
- Strauss, G. P., Horan, W. P., Kirkpatrick, B., Fischer, B. A., Keller, W. R., Miski, P., ... & Carpenter Jr, W. T. (2013). Deconstructing negative symptoms of schizophrenia: avolition–apathy and diminished expression clusters predict clinical presentation and functional outcome. *Journal of psychiatric research, 47*(6), 783-790.
- van der Meer, L., van't Wout, M., & Aleman, A. (2009). Emotion regulation strategies in patients with schizophrenia. *Psychiatry research, 170*(2-3), 108-113.
- Yi, Y., Huang, Y., Jiang, R., Chen, Q., Yang, M., Li, H., ... & Wu, F. (2023). The percentage and clinical correlates of alexithymia in stable patients with schizophrenia. *European Archives of Psychiatry and Clinical Neuroscience, 273*(3), 679-686.