Original paper

Archives of Psychiatry Research 2026;62:141-148

DOI:10.20471/sept.2026.62.02.04
Received June 22, 2025
Accepted after revision November 12, 2025

Effectiveness of Social Skill Training on Social Functioning, Symptom Profile, And Quality of Life in Patients With Schizophrenia Enrolled in a Rehabilitation Center – Perspectives From a Daycare Center

Yatheesh Bharadwaj[1], Ramachandra Manjunath Bajantri[2], Jeyaram Srinivasan[3], Sateesh Rangarao Koujalgi[4]

[1]Department of Psychiatric Social Work, National Institute of Mental Health and Neuro Science, Bengaluru, India, [2]Department of Psychiatry, Dharwad Institute of Mental Health and Neurosciences, Dharwad, India, [3]Department of Psychiatry Madha Medical College, Chennai, India, [4]Department of Psychiatric Social Work, Dharwad Institute of Mental Health and Neurosciences, Karnataka, India

Keywords

Schizophrenia; social skills; quality of life

Abstract

Aim: Social skills deficits and negative symptoms significantly impair functional outcomes in individuals with schizophrenia. Social skills training (SST) has emerged as an evidence-based psychosocial intervention to address these challenges. This study aimed to evaluate the effectiveness of a structured SST programme on social functioning. **Material and Methods:** This single-arm, quasi-experimental study was conducted at a psychiatric and neurological rehabilitation center in North Karnataka, India, from 2024-2025. Twenty-five participants with schizophrenia were enrolled using convenience sampling after institutional ethics clearance (DIMHANS/IEC/10/2024-25). The intervention consisted of a comprehensive 12-session SST programme delivered over 4 weeks, by trained mental health professionals. Outcome measures included the Vellore Assessment of Social Performance (VASP) as the primary outcome, and the Scale for Assessment of Negative Symptoms (SANS) and World Health Organization Quality of Life-Brief (WHOQOL-Bref) as secondary outcomes. Assessments were conducted at baseline, immediately post-intervention, and at two follow-up intervals using repeated measures analysis of variance. **Results:** Significant improvements were observed across all 5 VASP domains from baseline through follow-up assessments ($p < 0.001$). Quality of life showed statistically significant enhancement across all four WHOQOL-Bref domains ($p < 0.001$). Total SANS scores and all 5 domains demonstrated significant reduction post-intervention and sustained improvement at follow-up ($p < 0.001$). **Conclusions:** The structured 12-session SST programme demonstrated significant effectiveness in improving social functioning, reducing negative symptoms, and enhancing quality of life in patients with schizophrenia. These improvements were sustained at follow-up assessments, indicating durable therapeutic benefits. Future research should include control groups and comparative studies with other established interventions to further validate these promising results.

Copyright © 2026 KBCSM, Zagreb
e-mail: apr.kbcsm@gmail.com • www.http://apr.kbcsm.hr

Introduction

Recovery from schizophrenia is a complex process that involves medication management, psychological

Correspondence to:
Dr Jeyaram Srinivasan
Department of Psychiatry, Madha Medical College
Kovur, Chennai – 600128, Tamil Nadu, India
Phone:+ 91 9513426252
E-mail: jayaramsrini@gmail.com

support, and social factors [1] Research suggests that these three factors work in tandem, contributing to improved outcomes and overall recovery. Sheer absence of psychotic symptoms is not complete recovery from the illness. Anti-Psychotic medications are effective in reducing the positive symptoms. However, negative symptoms are associated with diminished functional outcomes, a phenomenon that has been extensively studied and documented [2].

Addressing negative symptoms has been a significant challenge in the field of mental health for years. It relies heavily on tailored psychological and social interventions to manage negative symptoms [3]. Quality of life (QoL) is a major indicator of mental health treatment outcomes and research, attainment of which for persons with schizophrenia has been elusive and hindered by persistent negative symptoms and significant social and functional deficits [4]. On the other hand research studies have shown that a reduction in the negative symptoms enhances the QoL of the persons with schizophrenia as well as for their caregivers [5]. Absence of stimulation, social isolation and living in institutional settings also can influence the onset of negative symptoms. Rehabilitation, social skills training, cognitive remediations, family support programmes, and physical activity are among the top sought out strategies to remedy the negative symptoms [6,7]. Positive symptoms such as delusions and hallucinations can be effectively managed by pharmacological management while negative symptoms such as affective flattening, anhedonia, and social withdrawal would not respond to the medications. Unaddressed negative symptoms may result in resistance to treatment and diminished QoL [8]. This highlights the need for a tailored and structured psychosocial interventions [9]. Social skills training (SST), has been shown to effectively address negative symptoms and improve social functioning [10].

In the early 21st century, Social Skills Training (SST) gained importance. It was used as an adjunct in different psychiatric disorders and conditions such as autism, attention deficit disorder, depression, social anxiety disorder, borderline personality disorder, intellectual disability, and post-traumatic stress disorder [11-13]. The importance of SST is particularly acknowledged in the context of schizophrenia [11,14,15] .

SST is a structured intervention strategy, usually offered in group format, designed to develop interpersonal skills required for social situation. More recently, there is a greater recognition for SST in the western countries for its behavioural and therapeutic approach to boost resilience, self-confidence, and social integration. Many research studies have examined the effects of SST on functional outcomes. However, research on SSTs impact on QoL are still in their infancy as it is an emerging area of interests. SST includes systematic, behavior-focused sessions that offer practical tools for effective social interaction and coping, targeting social impairments related to schizophrenia and promoting independence while easing the caregiving burden on families [16,17].

Key components of SST are non-verbal, verbal, receptive, processing, and expressive social competence skills which addressed social skills deficits which in turn reduce the negative symptoms in schizophrenia. Administering SST in group format is found to be cost-cutting as well as time saving. Peer support is an additional advantage in the group format. There are research studies that have shown that SST not only addresses the negative symptoms but also enhances the QoL. One of the key determinants of QoL is social relationships. Those with limited social skills are often left out, isolated and dissatisfied. This is evident particularly in persons with schizophrenia where social withdrawal heightens the challenges. SST has demonstrated in improving these negative symptoms and improves the QoL. The present study uses a pre and post intervention evaluation, along with 2 follow-ups to assess the lasting impact of SST on QoL.

Materials and Methods

The present study is a pilot investigation on the effectiveness of SST for persons diagnosed with schizophrenia. This was a single-arm, quasi-experimental pre-post study with repeated measures and no control group conducted in a psychiatric and neurological rehabilitation centre of tertiary care hospital located in North Karnataka, India. Participants of the study were chosen from the day care centre's registry. People with a diagnosis of schizophrenia were selected for the study. The rehabilitation registry contains about 140 mental health service seekers, both inpatients and outpatients, who have been diagnosed with various mental health issues ranging from organic to psychotic and neurotic disorders. Of these, approximately 43 individuals diagnosed with schizophrenia were enrolled in day care. Among them, 30 met the criteria of being currently asymptomatic, compliant with medication, and having a well-adjusted premorbid personality. Of these 30, five dropped out of the study: two at the time of recruitment, two during the second session, and one person who had to leave for another city. Institutional ethical clearance was obtained before the commencement of the study (DIMHANS/IEC/10/2024-25). Informed consent was obtained.

The SST was a four-week-long, structured programme consisting of three 90-minute sessions each week. The programme sessions were facilitated by mental health professionals who have good experiences in implementing SST. In the four weeks programme, 12 sessions were completed. The participants were selected using a convenience sampling method. We opted for a

convenient sampling method instead of a probability sampling method because of the limited number of individuals listed in the rehabilitation centre's registry. The registry contained a total of 140 individuals with mental illnesses ranging from organic mental illness, schizophrenia, bipolar affective disorder, anxiety and stress related disorders and intellectual disability. Of the 140 individuals, 43 had a diagnosis of schizophrenia. Out of 43 only 30 met the inclusion and exclusion criteria were recruited for the study. Among the remaining 13 individuals, 8 exhibited active psychotic symptoms and were requested to visit the rehabilitation centre as part of their activity schedule. The other 5 were on the verge of discharge when the study began, and they resided in distant locations that prevented them from becoming part of the study. Five of the 30 dropped out for various reasons making it 25 as final number participants who completed the study.

Assessments were conducted at four distinct time points: pretest, posttest, and the first and second follow-ups. The first follow-up was conducted two weeks post-discharge, while the second follow-up occurred one month after the first. All assessments were performed by three professionals, whose inter-rater reliability was evaluated at the study's outset. To prevent any potential bias, social skills trainees were randomly assigned to the raters during four time points of assessment. Additionally, all participants were accompanied by the same caregivers throughout the follow-up process. This approach enabled us to measure the changes in social skills from caregivers view point at the time of follow-up.

The sessions included various activities such as role-playing, modeling, behavioral rehearsal, group discussions, in vivo practices, feedback, and homework assignments.

The 12-session SST programme is detailed in Table 1. Initially, the participants were screened to assess their suitability for participation in the SST. Informed consent to engage in the programme was obtained. All programme trainees received a concise overview of the programme, including its intended outcomes and the probable benefits they would gain, among other details.

Our major focus was on communication skills, both verbal and non-verbal, which includes how to initiate, sustain, and conclude a conversation, how to decline requests, resolve conflicts, and maintain relationships. This was followed by in-vivo practice within the campus. Feedback was provided regarding their performance, which they subsequently applied in real-life situations.

The effectiveness of the training was evaluated using three outcome measures, one primary outcome measure, and two secondary outcome measures: the primary outcome was the Vellore Assessment of Social Performance (VASP). In contrast, the two secondary outcomes were the Scale for the Assessment of Negative Symptoms (SANS) and the Quality of Life assessment (WHOQOL-Bref).

VASP is a 20 item scale subdivided into 5 domains with inter-rater reliability (0.941; 95 % confidence interval [CI]: 0.914, 0.960) and test–retest reliability (0.928; 95 % CI: 0.810, 0.965) with Pearson's correlation coefficient = 0.696; P = 0.001.

Five domains were

1. Nonverbal social skills,
2. Verbal social skills,
3. Receptive social competency skills,
4. Processing social competency skills,
5. Expressive social competency skills.

Table 1. The Social Skill framework was adapted from the Vellore study [18]

Social Skills Training Content				
S. No	Session on	Activities	Duration	Frequency
1.	Eye Contact, Social Smile and Appearance	Warming Up Performance Winding Down	90 Minutes	3 Sessions/Week
2.	Facial Expression, Gestures & Posture			
3.	Proximity & Orientation			
4.	Initiating and terminating conversation			
5.	Maintaining conversation			
6.	Putting it all together			
7.	Turning Down Requests / Actions Role Play Group Discussion			
8.	Conflict Resolution	Role Play Group Discussion		
9.	Inspecting your Concerns			
10.	Session on Maintaining Relationships			
11.	In-Vivo Session			
12.	Real-life situation and feedback			

WHOQOL – Bref is 26 item scale developed by World Health Organisation. The scale provides measure of an individual's perception of quality of life for the following 4 domains:

1. Physical health,
2. Psychological health,
3. Social relationships,
4. Environment.

It has good test-retest reliability and high discriminant validity. The domain is called in a positive direction (i.e.; higher score denote higher quality of life).

SANS measures negative symptoms on a 25 item, 6-point scale. SANS has high reliability (reliability index = 0.97) and discriminativeness (the ability to differentiate 12 metric levels of severity of negative symptoms).

Items are listed under the five domains of

1. Affective blunting,
2. Alogia,
3. Avolition/apathy,
4. Anhedonia/asociality, and
5. Attention.

Assessments were conducted at four different time points: once prior to the intervention, once immediately after, and twice during follow-up periods. No financial incentives were offered to the participants. In total, 25 individuals completed the study, while 5 withdrew at various stages. The intervention was delivered by psychiatrists, psychiatric social workers, and psychiatric nurses who had received training and had experience in conducting social skills training.

Descriptive statistics and frequency analysis were conducted on the socio-demographic variables, and repeated measures analysis of variance (RMANOVA) was utilized to assess the intervention's effectiveness.

Table 2. Age of the Participants

Age	37.44 (9.19)	
Gender of the Participants		
Variables	Frequency	Percent
Male	12	48.0
Female	13	52.0
Total	25	100.0
Education of the Participants		
Primary	14	56.0
High School	6	24.0
PUC/Diploma	1	4.0
Under Graduation	2	8.0
Illiterate	2	8.0
Total	25	100.0
Marital Status of the participants		
Married	12	48.0
Unmarried	13	52.0
Total	25	100.0
Occupation of the participant		
Variables	Frequency	Percent
Agriculture and allied activities	4	16.0
Self employed	4	16.0
Coolie	4	16.0
Housewife	2	8.0
Unemployed	11	44.0
Total	25	100.0
Religion		
Hindu	21	84.0
Muslim	4	16.0
Total	25	100.0
Domicile		
Rural	15	60.0
Urban	10	40.0
Total	25	100.0

Results

The mean age of participants in our study was 37 years, with a standard deviation of 9 years. The youngest respondent was 20 years old, while the oldest was 60 years. The gender distribution was nearly equal, and approximately half of the respondents were married. Two-fifths of the participants were unemployed, while the remainder were employed in unorganized sectors, including daily laborers, agricultural workers, self-employed individuals, and homemakers. A significant majority of the respondents identified as Hindus (84 %), with the remainder being Muslims. Just over half of the respondents came from rural areas, while the rest were from urban settings.

Approximately 40 percent of the participants had been diagnosed with schizophrenia for five years, while only 8 percent had experienced the condition for one year. The length of treatment ranged from one to eight years, with 28 percent undergoing treatment for four years and 24 percent for five years. About 12 percent had been in treatment for eight years. A significant portion of the participants, 56 percent, reported poor adherence to their medication

In our study, the mean scores showed a consistent and significant increase during both the post-assessment and follow-up phases. We conducted an RMANOVA to evaluate the effectiveness of the intervention over the four time periods. The findings were strong, demonstrating a statistically significant improvement in the participants' so-

Table 3. Illness Variables

Duration of Illness (in Years)		
Variables	Frequency	Percent
1	2	8.0
2	1	4.0
3	4	16.0
4	3	12.0
5	10	40.0
6	2	8.0
8	2	8.0
10	1	4.0
Total	25	100.0
Duration of treatment (In Years)		
1	3	12.0
3	5	20.0
4	7	28.0
5	6	24.0
6	1	4.0
8	3	12.0
Total	25	100.0
Levels of Drug Adherence		
Good	11	44.0
Poor	14	56.0
Total	25	100.0

cial skills across all five sub-scales, as well as in the overall scores, as illustrated in Table 4.

The mean scores for all 5 plus 1 subscale of the VASP, which include Non-Verbal Social Skills, Verbal Social Skills, Receptive Social Competence Skills, Processing Social Competence Skills, Processing Expressive Social Competence Skill And The VASP Total, were recorded as 6 (SD = 1.32), 7.36 (SD = 1.19), 4.6 (SD = 0.82), 4.6 (SD = 0.82), 7.36 (SD = 1.73), and 29.92 (SD = 4.22) respectively. Following the intervention, the mean scores for each domain rose to 14 (SD = 1.78), 17.32 (SD = 1.99), 10.56 (SD = 1.33), 10.80 (SD = 1.41), 17.48 (SD = 2.22), and 70.16 (SD = 8.45), respectively. A significant time effect was observed across all domains. For Non-Verbal Social Skills, $F(3, 22) = 385.94$, $p < 0.001$, partial $\eta 2 = 0.94$, Verbal Social Skills, $F(2.21, 22) = 1008.84$, $p < 0.001$, partial $\eta 2 = 0.98$, Receptive Social Competence Skills, $F(2.04, 22) = 581.94$, $p < 0.001$, partial $\eta 2 = 0.96$, Processing Social Competence Skills, $F(1.96, 22) = 617.20$, $p < 0.001$, partial $\eta 2 = 0.96$, Processing Expressive Social Competence Skill $F(2.31, 22) = 615.07$, $p < 0.001$, partial $\eta 2 = 0.96$, and The VASP Total $F(3, 22) = 814.41$, $p < 0.001$, partial $\eta 2 = 0.97$, indicating a substantial effect.

In the current study, we observed an increase in the average scores across all four dimensions. This increase was statistically significant, as indicated by the F values presented in the final column. It is given in table 5.

The mean scores for all four subscales of the WHO-QOL-Bref—physical, psychological, social relationships, and environment-were recorded as 10.13 (SD = 1.96), 10.13 (SD = 1.54), 10.67 (SD = 2.58), and 10.24 (SD = 1.46), respectively. Following the intervention, the mean scores for each domain rose to 14.35 (SD = 2.32), 13.60 (SD = 2.31), 14.13 (SD = 3.33), and 13.50 (SD = 2.30), respectively. A significant time effect was observed across all domains. For Physical, $F(1.81, 22) = 47.06$, $p < 0.001$, partial $\eta 2 = 0.92$; for Psychological, $F(2.01, 22) = 22.98$, $p < 0.001$, partial $\eta 2 = 0.49$; for Social Relationships, $F(1.37, 22) = 41.17$, $p < 0.001$, partial $\eta 2 = 0.63$; and for Environment, $F(1.97, 22) = 22.77$, $p < 0.001$, partial $\eta 2 = 0.49$, indicating a substantial effect.

Total SANS score as well as scores in each domain were found elevated before the intervention but showed a significant reduction during the post-intervention and

Table 4. RMANOVA for VASP

Sub Scale	Pre Mean (SD)	Post Intervention Mean (SD)	Follow Up Mean (SD)	Follow Up 2 Mean(SD)	Df	F Value	Partial Eta Squared
Non-Verbal Social Skills	6 (1.32)	14 (1.78)	17.8 (1.87)	17.32 (1.55)	3	385.94***	0.94
Verbal Social Skills	7.36 (1.19)	17.32 (1.99)	22.04 (2.07)	21.8 (1.44)	2.21*	1008.84***	0.98
Receptive Social Competence Skills	4.6 (0.82)	10.56 (1.33)	13.36 (1.38)	13.32 (1.07)	2.04*	581.94***	0.96
Processing Social Competence Skills	4.6 (0.82)	10.8 (1.41)	13.56 (1.45)	13.52 (1.16)	1.96*	617.20***	0.96
Expressive Social Competence Skills	7.36 (1.73)	17.48 (2.22)	22.16 (2.32)	22.08 (1.75)	2.31*	615.07***	0.96
VASP Total	29.92 (4.22)	70.16 (8.45)	88.92 (8.81)	88.04 (6.23)	3	814.41***	0.97

***$p < 0.001$, * Sphericity Violated, Greenhouse-Geisser was used

Table 5. RMANOVA for WHOQOL – BREF

Sub Scale	Pre Mean (SD)	Post Intervention Mean (SD)	Follow Up Mean (SD)	Follow Up 2 Mean(SD)	Df	F Value	Partial Eta Squared
Physical	10.13 (1.96)	14.35 (2.32)	12.85 (1.46)	13.62 (1.77)	1.81*	47.06***	0.92
Psychological	10.13 (1.54)	13.60 (2.31)	10.82 (3.05)	9.57 (2.57)	2.01*	22.98***	0.49
Social Relationship	10.67 (2.58)	14.13 (3.33)	14.82 (2.65)	14.45 (2.23)	1.37*	41.17***	0.63
Environment	10.24 (1.46)	13.50 (2.30)	12.56 (2.54)	11.64 (2.10)	1.97*	22.77***	0.49

***p < 0.001, * Sphericity Violated, Greenhouse-Geisser was used

follow-up phases, as indicated by the F-values. Refer table 6.

The mean scores for all 5 plus 1 subscale of the SANS, which include affective flattening, alogia, apathy/avolition, anhedonia/asociality, attention, and the SANS Total, were recorded as 27.08 (SD = 2.1), 17.88 (SD = 1.27), 12.84 (SD = 0.99), 17.4 (SD = 1.38), 6 (SD = 1.22), and 81.2 (SD = 41.12) respectively. Following the intervention, the mean scores for each domain decreased to 19.72 (SD = 3.1), 12 (SD = 2.5), 9.28 (SD = 1.90), 11.6 (SD = 2.38), 5.4 (SD = 1.23), and 58 (SD = 10.22) respectively. A significant time effect was observed across all domains. For affective flattening, $F(2.17, 22) = 300.02$, $p < 0.001$, partial $\eta 2 = 0.93$; for alogia, $F(3, 22) = 355.72$, $p < 0.001$, partial $\eta 2 = 0.94$; for apathy/avolition, $F(3, 22) = 177.18$, $p < 0.001$, partial $\eta 2 = 0.88$; for anhedonia/asociality, $F(2.21, 22) = 294.63$, $p < 0.001$, partial $\eta 2 = 0.93$; for attention, $F(2.30, 22) = 57.43$, $p < 0.001$, partial $\eta 2 = 0.70$; and for SANS Total, $F(2.21, 22) = 372.14$, $p < 0.001$, partial $\eta 2 = 0.94$, indicating a substantial effect.

Discussion

The present study demonstrates that structured social skills training (SST) significantly improves multiple outcome domains among individuals with schizophrenia attending a rehabilitation daycare center. The observed post-intervention gains in quality of life suggest that enhanced social functioning supports broader well-being, reinforcing findings from Dziwota and associates, who highlighted the critical role of psychosocial interventions in reducing social dysfunction and isolation in this population [19]. This aligns with previous research, such as that by Aziz and associates, which also reported significant quality-of-life improvements following SST [20].

A substantial reduction was seen in negative symptoms as measured by the SANS across all domains and total scores, consistent with results from Barzegar and associates, who found significant reductions in negative symptoms after SST, though their protocol involved fewer sessions. The negative correlation between social skill acquisition and negative symptoms, as reported by Abdelgelil and associates, further corroborates these outcomes [21]. The present study's results mirror these trends, particularly the statistically significant declines in alogia, apathy, and anhedonia, echoing findings from Koujalgi and associates [22]. However, it should be noted that some studies, such as theirs, did not always demonstrate significant differences between intervention and control groups, a limitation that calls for further comparative research with control arms.

Table 6. RMANOVA for SANS

Sub Scale	Pre Mean (SD)	Post Intervention Mean (SD)	Follow Up Mean (SD)	Follow Up 2 Mean(SD)	Df	F Value	Partial Eta Squared
Affective Flattening	27.08 (2.1)	19.72 (3.1)	8.64 (2.22)	9.6 (2)	2.17*	300.02***	0.93
Alogia	17.88 (1.27)	12 (2.5)	4.4 (1.66)	5.64 (1.53)	3	355.72***	0.94
Apathy/Avolition	12.84 (0.99)	9.28 (1.90.)	6.52 (1.42)	4.64 (1.38)	3	177.18***	0.88
Anhedonia /Asociality	17.4 (1.38)	11.6 (2.38)	5.6 (1.66)	5.8 (1)	2.21*	294.63***	0.93
Attention	6 (1.22)	5.4 (1.23)	2.64 (0.99)	3.68 (1.25)	2.30*	57.43***	0.70
SANS Total	81.2 (41.12)	58 (10.22)	25.28 (5.78)	29.36 (6.8)	2.21*	372.14***	0.94

***p < 0.001, * Sphericity Violated, Greenhouse-Geisser was used

Our findings affirm that SST remains a robust psychosocial intervention for schizophrenia rehabilitation. Participants displayed sustained gains in social performance through both immediate and follow-up assessments, highlighting the durability of therapeutic benefit with this structured approach. This is in line with meta-analytic evidence from Turner and associates, which found SST to have significant, though modest, advantages over other active interventions for negative symptoms and social functioning, comparable to cognitive behavioral therapy.

Despite these positive results, several systemic challenges remain. Wide-scale implementation is constrained by factors including a shortage of trained professionals, difficulties in participant selection, and the length and intensity of the intervention required. Furthermore, while this study demonstrated effectiveness in a single-group pre-post design, the lack of a control group limits the ability to make causal inferences and generalize findings. Future research should prioritize randomized controlled trials with comparison groups to confirm these findings and inform best-practice guidelines.

Each 90-minute session was well-received, with active participation during role plays, behavioural rehearsals, group discussions, and in-vivo practice components. The group format facilitated peer support, enhancing motivation and social connectedness among participants, which contributed positively to adherence and enthusiasm.

Practically, the program's delivery by trained mental health professionals was feasible within the resource settings of the day care center without requiring extraordinary expenses or external support. The concentration of sessions over a month balanced intensity and participant burden, which appeared manageable for daily functioning.

Some challenges included coordinating schedules for individuals with varying functional levels and medication adherence. However, the presence of caregivers during assessments helped maintain consistency and accurate follow-up data collection.

Overall, the SST program was practical and sustainable within this rehabilitation context, showing promise for wider implementation in similar settings, especially where group-based psychosocial interventions can leverage existing staff expertise and infrastructure.

Conclusion

In summary, the present investigation adds to a growing body of evidence supporting SST as an essential component of comprehensive schizophrenia rehabilitation, capable of producing meaningful and sustainable improvements in social functioning, symptomatology, and overall quality of life for individuals affected by this disorder

Current study shows that a structured social skills training intervention with a minimum of 12 sessions spread over a month with each sessions lasting about 90 minutes demonstrated feasibility along with standard treatment in a rehabilitation day care center. This intervention has led to significant improvement across all domains of social functioning, symptom profile and quality of life in patients with schizophrenia.

However, there are a few limitations in this study, including the absence of a control or comparison group limits the ability to draw causal inferences. Coupled with the use of convenience sampling and a small sample size, which includes only 25 participants from a specific rehabilitation center, this restricts the generalisability of the results to broader populations of persons with schizophrenia. Furthermore, the lack of blinding or randomization introduces a potential for bias in the assessment or implementation of the intervention due to the absence of blinding and random assignment. However, the sustainability of effects and control arm with other forms of established interventions, like cognitive behavioral therapy, needs to be assessed through replication and comparative studies. The study should be replicated as a randomized controlled trial design with appropriate control groups, involving larger, more diverse samples to enhance generalizability. There should be longer follow-ups for assessing sustained benefits.

Acknowledgments

None.

Conflict of Interest

None to declare.

Funding Sources

None.

References

1. Leucht S, Lasser R. The concepts of remission and recovery in schizophrenia. Pharmacopsychiatry. 2006;39:161-70.
2. Buchanan RW. Persistent negative symptoms in schizophrenia: an overview. Schizophr Bull. 2007;33:1013-22.
3. Gühne U, Weinmann S, Arnold K, Becker T, Riedel-Heller S. Social skills training in severe mental illness. Psychiatr Prax. 2014;41:e1-e17.
4. Fitzgerald PB, Williams CL, Corteling N, Filia SL, Brewer K, Adams A, et al. Subject and observer-rated quality of life in schizophrenia. Acta Psychiatr Scand. 2001;103:387-92.
5. Granholm E, Harvey PD. Social skills training for negative symptoms of schizophrenia. Schizophr Bull. 2018;44:472-4.
6. Aleman A, Lincoln TM, Bruggeman R, Melle I , Arends J, Arango C, et al. Treatment of negative symptoms: where do we stand, and where do we go? Schizophr Res. 2017;186:55-62.
7. Pawłowska B, Fijałkowska-Kiecka P, Potembska E, Domański M, Lewczuk E. Changes to psychosocial functioning as demonstrated by the patients diagnosed with schizophrenia covered by the psychiatric rehabilitation system. Psychiatr Pol. 2015;49:1191-202.
8. Horan WP, Kern RS, Shokat-Fadai K, Sergi MJ, Wynn JK, Green MF. Social cognitive skills training in schizophrenia: an initial efficacy study of stabilized outpatients. Schizophr Res. 2009;107:47-54.
9. Fervaha G, Foussias G, Agid O, Remington G. Impact of primary negative symptoms on functional outcomes in schizophrenia. Eur Psychiatry. 2014;29:449-55.
10. Kopelowicz A, Liberman RP, Zarate R. Recent advances in social skills training for schizophrenia. Schizophr Bull. 2006;32:S12-S23.
11. Mitchell-Miland C, McCarthy S, Chinman M. Peer specialists deliver cognitive behavioral social skills training compared to social skills training and treatment as usual to veterans with serious mental illness: study protocol for a randomized controlled trial. Trials. 2022;23:439.
12. O'Handley RD, Ford WB, Radley KC, Helbig KA, Wimberly JK. Social Skills training for adolescents with intellectual disabilities: a school-based evaluation. Behav Modif. 2016;40:541-67.
13. Tyler PM, Aitken AA, Ringle JL, Stephenson JM, Mason WA. Evaluating social skills training for youth with trauma symptoms in residential programmes. Psychol Trauma. 2021;13:104-113.
14. Abaoğlu H, Mutlu E, Ak S, Akı E, Anıl Yağcıoğlu AE. The Effect of life skills training on functioning in schizophrenia: a randomized controlled trial. Turk Psikiyatri Derg. 2020;31:48-56.
15. Turner DT, McGlanaghy E, Cuijpers P, van der Gaag M, Karyotaki E, MacBeth A. A meta-analysis of social skills training and related interventions for psychosis. Schizophr Bull. 2018;44:475-491.
16. Bellack AS. Skills training for people with severe mental illness. Psychiatr Rehab J. 2004;27:375-91.
17. Kurtz MM, Mueser KT. A meta-analysis of controlled research on social skills training for schizophrenia. J Consult Clin Psychol. 2008;76:491-504.
18. Thamaraiselvi S, Priyadarshini A, Arisalya N, Samuel R, Jacob K. Development and validation of vellore assessment of social performance among clients with chronic mental illness. Indian J Psychiatry. 2020;62:121-30.
19. Dziwota E, Stepulak MZ, Wloszczak-Szubzda A, Olajossy M. Social functioning and the quality of life of patients diagnosed with schizophrenia. Ann Agric Environ Med. 2018;25:50-55.
20. El Aziz EMA, El Aziz Rady HEA, El Din MN. Effectiveness of social skills training programme on social functioning and severity of symptoms among patients with schizophrenia. Am J Nurs. 2017;6:454-66.
21. Abdelgelil SA, Elyazal AS, Mubarak AA-R, Elsherif ZA. Effect of social skills enhancement training programme on negative symptoms among patients with schizophrenia. Tanta Sci Nurs J. 2022;24:35-73.
22. Koujalgi SR, Patil SR, Nayak RB, Chate SS, Patil NM. Efficacy of social skill training in patient with chronic schizophrenia: An interventional study. J Sci Soc. 2014;41:156-161.