



EFFECTIVENESS OF GROUP ACTIVITY THERAPY IN ESTABLISHING TRUST RELATIONSHIPS ON PSYCHOSOCIAL RECOVERY AMONG PATIENTS WITH SCHIZOPHRENIA AND DELUSIONS

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ABSTRACT

Schizophrenia is frequently associated with impaired social interaction, communication difficulties, disturbed reality orientation, and reduced psychosocial functioning, particularly among patients experiencing delusions. This study aimed to evaluate the effectiveness of Group Activity Therapy (GAT) for Establishing Trust Relationships in improving psychosocial recovery among patients with schizophrenia and delusions. A quantitative quasi-experimental study with a pretest-posttest control group design was conducted from May to July 2026 in the working area of Lela Community Health Center. Sixty patients were recruited using purposive sampling and allocated to an intervention group and a control group, with 30 participants in each group. The intervention group received four sessions of GAT for Establishing Trust Relationships over four weeks, while the control group received routine nursing care. Psychosocial recovery was assessed using the Health of the Nation Outcome Scales and Social Functioning Scale. Data were analyzed using paired t-tests, independent t-tests, and Analysis of Covariance. The intervention group demonstrated a significant improvement in psychosocial recovery, with mean scores increasing from 51.23 to 74.81 ($p < 0.001$), whereas the change in the control group was not statistically significant ($p = 0.081$). Significant improvements were also observed in social interaction, communication ability, reality orientation, and psychosocial functioning ($p < 0.001$). GAT for Establishing Trust Relationships was effective in improving psychosocial recovery and may be incorporated as a complementary nursing intervention in community-based psychosocial rehabilitation for patients with schizophrenia and delusions.

Keywords: *Group Activity Therapy; Trust Relationships; Psychosocial Recovery; Schizophrenia; Delusions*

INTRODUCTION

Schizophrenia is a severe mental disorder characterized by disturbances in perception, thought processes, behavior, and social functioning, which may substantially interfere with an individual's ability to perform daily activities and maintain interpersonal relationships. In addition to positive and negative symptoms, patients with schizophrenia frequently experience impaired social cognition, communication difficulties, reduced social interaction, and limitations in community functioning. These psychosocial problems can persist even when clinical symptoms are partially controlled, making psychosocial recovery an important target of comprehensive schizophrenia management (Yildiz, 2021; Long *et al.*, 2022; Thakur *et al.*, 2026). Patients experiencing delusions may face additional difficulties in establishing interpersonal relationships because suspiciousness, distorted interpretations of social situations, and impaired reality orientation can reduce their willingness to interact with others and develop trust.

Psychosocial rehabilitation is therefore an essential component of schizophrenia treatment because it aims not only to reduce symptoms but also to improve social competence, interpersonal functioning, independence, and participation in the community. Evidence indicates that psychosocial and psychological interventions can contribute to relapse prevention and functional recovery, particularly when interventions address social skills, cognition, and interpersonal functioning (Bighelli *et al.*, 2021; Yildiz, 2021). Social skills training has been shown to improve social performance among people with schizophrenia, while structured occupational and social skills interventions can enhance functional abilities and social participation (Dogu *et al.*, 2021; Baskaran, Raghuthaman and Jayasudha, 2023). Similarly, cognitive behavioral group therapy and cognitive enhancement interventions have demonstrated potential benefits for rehabilitation and social cognitive functioning in patients with schizophrenia (Han and Lee, 2022; Chen *et al.*, 2023).

Group-based interventions are particularly relevant because they provide patients with opportunities to practice communication, interpersonal interaction, cooperation, emotional expression, and adaptive responses within a structured and supportive environment. Previous studies have demonstrated that social skills training, group therapy activities, and community-based psychosocial rehabilitation can improve social functioning and reduce social dysfunction among individuals with serious mental illness (Al-amin, 2021; Gunawan *et al.*, 2023; Indarna *et al.*, 2024). Interventions that incorporate cognitive and social components may also contribute to improvements in negative symptoms and social functioning, while activity-based approaches can support psychological and interpersonal recovery (Schutt *et al.*, 2022; Wildgruber *et al.*, 2025). These findings suggest that establishing a trusting therapeutic environment may be an important mechanism through which group activity therapy facilitates patients' willingness to communicate, interact socially, and engage in rehabilitation activities.

Despite the growing evidence supporting psychosocial rehabilitation and social skills interventions, there remains a need for structured group interventions specifically focused on establishing trust relationships among patients with schizophrenia and delusions, particularly in community-based primary healthcare settings. Trust is fundamental to therapeutic interaction because patients who experience delusions may have difficulty accepting others, interpreting interpersonal situations accurately, and participating consistently in social activities. Evidence from community psychiatric rehabilitation indicates that patients' engagement and continued participation may be influenced by their experiences within supportive rehabilitation environments (Zheng *et al.*, 2022). Other interventions targeting social cognition,

social functioning, and quality of life have also demonstrated that structured psychosocial approaches can produce meaningful improvements in patients with schizophrenia (Dabit *et al.*, 2021; Giuliani *et al.*, 2024; Yin *et al.*, 2024). Therefore, this study aimed to evaluate the effectiveness of Group Activity Therapy for Establishing Trust Relationships in improving psychosocial recovery among patients with schizophrenia and delusions in the working area of Lela Community Health Center.

METHODS

Study Design and Setting

This study employed a quantitative approach with a quasi-experimental pretest-posttest control group design to evaluate the effectiveness of Group Activity Therapy (GAT) for Establishing Trust Relationships on psychosocial recovery among patients with schizophrenia and delusions. The study was conducted from May to July 2026 in the working area of Lela Community Health Center, Lela District.

Population and Sample

The study population consisted of patients with schizophrenia and delusions who were receiving treatment within the working area of Lela Community Health Center. A total of 60 respondents were recruited using purposive sampling and allocated into an intervention group (n = 30) and a control group (n = 30).

Intervention

The intervention group received Group Activity Therapy for Establishing Trust Relationships consisting of four sessions conducted over four weeks. The therapy was designed to facilitate the development of trusting interpersonal relationships, social interaction, communication, and adaptation to the social environment. The control group received routine nursing care according to the applicable service standards.

Outcome Measure

The independent variable was Group Activity Therapy for Establishing Trust Relationships, while the dependent variable was psychosocial recovery. Psychosocial recovery included social interaction, reality orientation, communication, and social functioning. Data were collected using the Health of the Nation Outcome Scales (HoNOS) and Social Functioning Scale (SFS), which were reported as valid and reliable instruments in the study.

Data Collection and Analysis

Descriptive analysis was performed to describe the characteristics of the respondents and study variables. Paired t-tests were used to assess changes within each group, while independent t-tests were used to compare differences between groups. Analysis of Covariance (ANCOVA) was also performed to evaluate the effectiveness of the intervention while accounting for baseline differences. Statistical significance was set at $p < 0.05$.

Ethical Considerations

The study received approval from the Health Research Ethics Committee and was conducted in accordance with the principles of the Declaration of Helsinki. Informed consent was obtained from all respondents. Confidentiality of participant information and respondents' rights throughout the study were maintained.

RESULT AND DISCUSSION

Results

Table 1. Characteristics of Respondents (n = 60)

Characteristics	Intervention (n=30)	Control (n=30)	Total n (%)
Age (years)			
18-30	8	7	15 (25.0)
31-40	12	13	25 (41.7)
41-50	7	6	13 (21.7)
>50	3	4	7 (11.6)
Sex			
Male	18	17	35 (58.3)
Female	12	13	25 (41.7)
Duration of schizophrenia			
<5 years	11	10	21 (35.0)
5-10 years	13	14	27 (45.0)
>10 years	6	6	12 (20.0)

A total of 60 patients with schizophrenia and delusions participated in the study, comprising 30 patients in the intervention group who received Group Activity Therapy (GAT) for Establishing Trust Relationships and 30 patients in the control group who received routine nursing care. Table 1 presents the demographic and clinical characteristics of the respondents. The largest proportion of respondents was aged 31-40 years (41.7%), followed by those aged 18-30 years (25.0%), 41-50 years (21.7%), and >50 years (11.6%). More than half of the respondents were male (58.3%), while 41.7% were female. Regarding the duration of schizophrenia, most respondents had experienced the disorder for 5–10 years (45.0%), followed by <5 years (35.0%) and >10 years (20.0%).

Table 2. Levels of Psychosocial Recovery Before and After the Intervention

Group	Psychosocial Recovery	Pretest n (%)	Posttest n (%)
Intervention (n=30)	Good	4 (13.3)	20 (66.7)
	Moderate	12 (40.0)	8 (26.7)
	Poor	14 (46.7)	2 (6.6)
Control (n=30)	Good	5 (16.7)	8 (26.7)
	Moderate	13 (43.3)	15 (50.0)
	Poor	12 (40.0)	7 (23.3)

The distribution of psychosocial recovery categories before and after the intervention is presented in Table 2. In the intervention group, the proportion of patients classified as having good psychosocial recovery increased from 4 (13.3%) at pretest to 20 (66.7%) at posttest. Meanwhile, the proportion classified as having poor psychosocial recovery decreased from 14 (46.7%) to 2 (6.6%). The proportion classified as having moderate psychosocial recovery decreased from 12 (40.0%) to 8 (26.7%). In the control group, the proportion of patients with good psychosocial recovery increased from 5 (16.7%) at pretest to 8 (26.7%) at posttest. The moderate category increased from 13 (43.3%) to 15 (50.0%), while the poor category decreased from 12 (40.0%) to 7 (23.3%).

Table 3. Differences of Psychosocial Recovery Scores

Group	Pretest (Mean $\pm$ SD)	Posttest (Mean $\pm$ SD)	Mean Difference	<i>p</i> -value
Intervention	51.23 $\pm$ 7.84	74.81 $\pm$ 6.37	+23.58	<0.001
Control	50.96 $\pm$ 8.12	57.35 $\pm$ 7.65	+6.39	0.081

As shown in Table 3, the mean psychosocial recovery score in the intervention group increased from 51.23 $\pm$ 7.84 at pretest to 74.81 $\pm$ 6.37 at posttest, representing a mean increase of 23.58 points. The within-group difference was statistically significant ($p < 0.001$). In the control group, the mean score increased from 50.96 $\pm$ 8.12 to 57.35 $\pm$ 7.65, corresponding to a mean increase of 6.39 points. This change was not statistically significant ($p = 0.081$).

Table 4. Differences in Intervention Effectiveness Across Psychosocial Recovery Dimensions

Variable	Mean Difference	<i>t</i>	<i>p</i> -value
Social interaction	8.92	5.61	<0.001
Communication ability	7.84	4.97	<0.001
Reality orientation	6.71	4.35	<0.001
Psychosocial functioning	9.15	6.08	<0.001

Table 4 shows statistically significant differences between the intervention and control groups across all assessed dimensions of psychosocial recovery. The mean difference was 8.92 for social interaction ($t = 5.61$, p -value < 0.001), 7.84 for communication ability ($t = 4.97$, p -value < 0.001), 6.71 for reality orientation

(*t* = 4.35, p-value < 0.001), and 9.15 for psychosocial functioning (t = 6.08, p-value < 0.001). Overall, patients receiving Group Activity Therapy for Establishing Trust Relationships demonstrated greater improvement in psychosocial recovery than those receiving routine nursing care, as reflected by improvements in social interaction, communication ability, reality orientation, and psychosocial functioning.

Discussion

The findings of this study demonstrate that Group Activity Therapy (GAT) for Establishing Trust Relationships produced a substantial improvement in psychosocial recovery among patients with schizophrenia and delusions. The intervention group showed an increase in psychosocial recovery scores from 51.23 to 74.81, with a mean improvement of 23.58 points, whereas the control group improved by only 6.39 points and did not demonstrate a statistically significant change. The relatively large improvement may be explained by the fact that the intervention directly targeted interpersonal and psychosocial difficulties that are central to functional impairment in schizophrenia, rather than focusing only on symptom reduction. Psychosocial rehabilitation is considered an important component of schizophrenia management because social functioning, interpersonal relationships, and community participation may remain impaired even when psychiatric symptoms are partially controlled (Bighelli *et al.*, 2021; Yildiz, 2021). The findings are also consistent with previous studies demonstrating that structured social skills interventions can improve social performance among patients with schizophrenia (Al-amin, 2021; Baskaran, Raghuthaman and Jayasudha, 2023). Thus, the magnitude of change observed in the present study may reflect the close alignment between the therapeutic target and the outcome domains assessed.

The relatively large effect may also be related to the repeated and experiential nature of the GAT intervention. The intervention consisted of four sessions conducted over four weeks, providing patients with repeated opportunities to communicate, interact, cooperate, and gradually develop interpersonal trust rather than receiving a single or predominantly didactic intervention. Repeated interpersonal practice may facilitate behavioral learning because patients are able to immediately apply communication and social responses within a supportive group environment. Group-based interventions have previously been shown to provide opportunities for practicing interpersonal behaviors and reducing social dysfunction, while structured occupational therapy combined with social skills training has demonstrated benefits for functioning among people with schizophrenia (Dogu *et al.*, 2021; Indarna *et al.*, 2024). Similarly, social skills programs have been associated with improved social performance in schizophrenia, supporting the possibility that repeated behavioral practice contributes to functional improvement (Al-amin, 2021; Baskaran, Raghuthaman and Jayasudha, 2023). The group format may therefore have amplified the intervention effect by transforming trust-building from an abstract therapeutic goal into repeated social experiences that could be practiced and reinforced during each session.

Another possible explanation for the magnitude of improvement is the specific focus on establishing trust relationships, which may be particularly relevant for patients experiencing delusions. Suspiciousness, difficulties in interpreting interpersonal situations, and impaired reality orientation can interfere with patients' willingness to communicate and participate in social activities. Establishing a psychologically

supportive group environment may reduce interpersonal hesitation and create conditions in which patients become increasingly willing to communicate and respond to others. Evidence from community psychiatric rehabilitation indicates that patients' experiences of supportive rehabilitation environments can influence their willingness to remain engaged in rehabilitation programs (Zheng *et al.*, 2022). Improvements in social cognition may further support this process because interventions targeting social cognitive functioning have demonstrated benefits in patients with schizophrenia (Han and Lee, 2022; Giuliani *et al.*, 2024). Therefore, the relatively large improvement observed in this study may not be attributable to social interaction alone, but potentially to the interaction between trust, repeated communication, social learning, and improved interpretation of interpersonal experiences. This interpretation is also consistent with evidence that interventions combining cognitive, social, and behavioral components can improve functional outcomes in schizophrenia (Schutt *et al.*, 2022; Wildgruber *et al.*, 2025).

Nevertheless, the magnitude of the observed improvement should be interpreted cautiously because several potential confounding variables may have contributed to the outcome. Although the intervention and control groups were similar in several basic characteristics, the study used purposive sampling and a quasi-experimental design rather than individual randomized allocation, leaving the possibility of unmeasured baseline differences between groups. Potential factors include differences in medication adherence, duration and severity of psychotic symptoms, cognitive functioning, previous exposure to psychosocial rehabilitation, family support, frequency of contact with healthcare providers, and participation in other therapeutic activities. Routine nursing care and ongoing treatment may also explain part of the improvement observed in the control group, which increased by 6.39 points despite the absence of statistical significance. Although ANCOVA was performed to account for baseline differences, residual confounding cannot be completely excluded in a relatively small quasi-experimental sample. Furthermore, because psychosocial recovery was assessed using HoNOS and the Social Functioning Scale, differences in how patients responded to structured social interaction or how outcomes were rated could also influence the magnitude of the observed change. The importance of carefully selecting and interpreting social functioning outcome measures in schizophrenia intervention research has been emphasized previously (Long *et al.*, 2022).

The findings should therefore be interpreted as evidence that GAT for Establishing Trust Relationships may provide an effective complementary approach to psychosocial rehabilitation rather than as evidence that the intervention alone accounts for all observed improvement. The significant differences across social interaction, communication ability, reality orientation, and psychosocial functioning indicate that the intervention may have influenced several interconnected dimensions of recovery rather than a single behavioral outcome. This multidimensional pattern is broadly consistent with evidence supporting social skills training, cognitive-behavioral group interventions, social cognition remediation, and community-based psychosocial rehabilitation in schizophrenia (Chen *et al.*, 2023; Gunawan *et al.*, 2023; Giuliani *et al.*, 2024). However, previous evidence also indicates that the magnitude of psychosocial outcomes can vary according to intervention characteristics, patient characteristics, and the outcome measures used (Long *et al.*, 2022; Schutt *et al.*, 2022). Consequently, the strong improvement observed in this study may reflect the

combined effects of a structured group format, repeated interpersonal practice, trust-building, therapeutic support, and the patients' ongoing care environment. Future studies using randomized allocation, larger samples, longer follow-up periods, and systematic measurement of medication adherence, symptom severity, cognitive functioning, family support, and concurrent psychosocial interventions would help determine whether the observed effect is primarily attributable to GAT itself or partly influenced by these additional factors.

CONCLUSION

Group Activity Therapy for Establishing Trust Relationships was effective in improving psychosocial recovery among patients with schizophrenia and delusions. The intervention produced improvements in social interaction, communication ability, reality orientation, and psychosocial functioning compared with routine nursing care. These findings indicate that structured, trust-oriented group activities can serve as a useful complementary nursing intervention in community-based psychosocial rehabilitation. Integrating Group Activity Therapy into routine mental health services may support patients in developing interpersonal relationships, improving social adaptation, and strengthening overall psychosocial recovery.

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