INPLASY PROTOCOL

To cite: Wang et al. The efficacy of social skills training (SST) and social cognition and interaction training (SCIT) for negative symptoms: A meta-analysis. Inplasy protocol 202320030. doi: 10.37766/inplasy2023.2.0030

Received: 07 February 2023

Published: 07 February 2023

Corresponding author:
Ying Li

liying@bch.com.cn

Author Affiliation:
Department of Psychiatry, Beijing Children's Hospital, Capital Medical University, National Center for Children Healthy.

Support: **No financial support.**

Review Stage at time of this submission: **Data analysis.**

Conflicts of interest:
None declared.

The efficacy of social skills training (SST) and social cognition and interaction training (SCIT) for negative symptoms: A meta-analysis

Wang, H[1]; Hu, N[2]; Chai, JB[3]; Huang, WQ[4]; Zhou, XZ[5]; Li, Y[6].

Review question / Objective: **To test the efficacy of social skills training (SST) and social cognition and interaction training (SCIT) for negative symptoms in schizophrenia.In terms of the PICO framework:Population: patients with a diagnosis of schizophrenia. Intervention:n the basis of conventional drug therapy, SST or SCIT was given. Comparison:routine medication and routine care were given. Outcome:SST or SCIT is effective for negative symptoms,SST may be more effective than SCIT for negative symptoms.**

Condition being studied: **Negative symptoms have often been found to contribute to long-term illness features, including poor community and social functioning, and to negatively influence recovery . Negative symptoms are a strong predictor of poor functional outcome in people with schizophrenia .Pharmacological agents are the first treatment choice in schizophrenia,but Pharmacological treatments have had minimal impact on negative symptoms, cognitive impairments, and social functioning.Psychosocial treatments have been developed to improve social skills and cognitive functioning. But their effectiveness and accessibility remain unclear to date in negative symptoms of schizophrenia.**

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 07 February 2023 and was last updated on 07 February 2023 (registration number INPLASY202320030).

INTRODUCTION

Review question / Objective: **To test the efficacy of social skills training (SST) and social cognition and interaction training (SCIT) for negative symptoms in schizophrenia.In terms of the PICO framework:Population: patients with a diagnosis of schizophrenia. Intervention:n the basis of conventional drug therapy, SST or SCIT was given. Comparison:routine medication and routine care were given. Outcome:SST or SCIT is effective for**

negative symptoms,SST may be more effective than SCIT for negative symptoms.

Rationale: Psychosocial treatments such as SST or SCIT have been developed to improve social skills and cognitive functioning.However, few studies investigate the efficacy of psychosocial treatments for negative symptoms. their effectiveness and accessibility remain unclear to date in negative symptoms of schizophrenia.This study used a meta-analysis to test the effectiveness of two treatments (SST and SCIT) in improving negative symptoms.

Condition being studied: Negative symptoms have often been found to contribute to long-term illness features, including poor community and social functioning, and to negatively influence recovery . Negative symptoms are a strong predictor of poor functional outcome in people with schizophrenia. Pharmacological agents are the first treatment choice in schizophrenia, but Pharmacological treatments have had minimal impact on negative symptoms, cognitive impairments, and social functioning. Psychosocial treatments have been developed to improve social skills and cognitive functioning. But their effectiveness and accessibility remain unclear to date in negative symptoms of schizophrenia.

METHODS

Search strategy: An extensive literature search was conducted in the following databases: PubMed, Web of Science, China National Knowledge Infrastructure (CNKI) and Wanfang Database E-Resources. The search was performed by two researchers using the following keywords: “social cognitive interaction training” OR “SCIT” OR “social skills training” OR “SST” AND “schizophrenia”.

Participant or population: The population of study include patients with a diagnosis of schizophre.

Intervention: Intervention group: on the basis of conventional drug therapy, SST or SCIT was given.

Comparator: Control group: routine medication and routine care were given.

Study designs to be included: Quasirandomized controlled studies or cohort studies will be included in the meta-analysis.

Eligibility criteria: The inclusion criteria were as follows: (1) included a majority of patients with a diagnosis of schizophrenia; (2) intervention group: on the basis of conventional drug therapy, SST or SCIT was given; control group: routine medication and routine care were given; (3) outcome indicators: negative symptoms were measured by a validated scale, such as the Positive and Negative Syndrome Scale (PANSS), the Scale for the Assessment of Negative Symptoms (SANS), the Clinical Assessment Interview for Negative Symptoms (CAINS), and the Brief Negative Symptom Scale (BNSS); and (4) published in English or Chinese. (4) Study type: included studies are quasirandomized controlled studies or cohort studies. The exclusion criteria were as follows: (1) participants had comorbid diagnoses, such as substance abuse or ultrahigh risk of psychosis; (2) missing data could not be obtained by contacting authors; (3) authors mixed other interventions (e.g., SST/SCIT plus oxytocin) into the intervention, resulting in difficulty comparing the active SST element; (4) missing data could not be obtained by contacting authors; (5) articles were duplicate records or included overlapping samples; and (6) articles were case reports, editorials, comments, or review papers.

Information sources: A systematic literature search was completed in September 2022 (with no limits applied for yearof publication). An extensive literature search was conducted in the following databases: PubMed, Web of Science, China National Knowledge Infrastructure (CNKI) and Wanfang Database E-Resources.The reference lists located from all searche,

previous meta-analyses, and unpublished articles were screened to identify potentially eligible articles. Eligibility was assessed by three Aauthors in three rounds: titles, abstracts, and full texts. In case of disagreement, publications were reexamined to reach consensus under the supervision of the remaining authors.

Main outcome(s): SST or SCIT is effective for negative symptoms,SST may be more effective than SCIT for negative symptoms.

Additional outcome(s): The predictors affecting the efficacy.

Data management: Two authors independently extracted the data, and inconsistencies were discussed with the third author before reaching a consensus. Obviously irrelevant articles were excluded by title during the screening process,and then the abstract and the full text were read to determine whether the articles could be included. If necessary ,the authours of the original articles were contacted by email or phone to obtain information about key articles.

Quality assessment / Risk of bias analysis: The quality of each included study was assessed using the modified Jadad scale ,which included seven items.Using the Cochrane Collaboration's teachnique for assessing risk of bias,two independently study authors will each independently determine the risk of bias for the appropriately screened studies. Discussion among the researchers helped to settle any disagreements over the quality rating .

Strategy of data synthesis: The standard mean difference (SMD) of each study and the pooled SMD were calculated. All the analyses were performed in R (version 3.5.3) using the “meta” or “metafor” packages.

Subgroup analysis: Subgroup analysis were used to explore the heterogeneity in the effect sizes of SST/SCITs for negative symptoms.

Sensitivity analysis: Sensitivity analysis will be performed to evaluate the robustness of the results by excluding high-risk studies.

Language restriction: English and Chinese.

Country(ies) involved: China.

Other relevant information: No other relevant information.

Keywords: Social cognitive interaction training; SCIT; social skills training; SST; schizophrenia.

Dissemination plans: No dissemination plans.

Contributions of each author:

Author 1 - Hong Wang.
Email: whong666@163.com
Author 2 - Na Hu.
Author 3 - Jiabao Chai.
Author 4 - Wenqian Huang.
Author 5 - Xuanzi Zhou.
Author 6 - Ying Li.