BEST in Mental Health

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Best Evidence Summaries of Topics in Mental Healthcare

BEST *in* MH *clinical question-answering service*

Question

"In adult males with acute psychiatric conditions how effective is group social skills training, compared to any other intervention, for improving patient outcomes?"

Clarification of question using PICO structure

Patients:	Adult males with acute psychiatric conditions
Intervention:	Group social skills training
Comparator:	Any other intervention
Outcome:	Any patient outcomes

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Clinical and research implications

No definite clinical or research implications can be made from the available evidence. Three relatively older clinical trials evaluated social skills training in male schizophrenic patients, but the studies were not well reported, and two had small sample sizes. While some positive outcomes were indicated from these studies, the reliability of their results is uncertain.

What does the evidence say?

Number of included studies/reviews (number of participants)
Three randomised controlled trials (RCTs) (Finch and Wallace 1977; Marder et al. 1996; Wallace et al. 1985) met the inclusion criteria for this BEST summary.

Main Findings
All of the included studies included male schizophrenic patients. In two of the trials, the interventions and controls were conducted in a hospital setting (Finch and Wallace 1977; Wallace et al. 1985), and the third was conducted in a community setting (Marder et al. 1996).

The trial by Finch and Wallace (1977) aimed to compare the effectiveness of interpersonal skills training sessions versus normal hospital routine in 16 male schizophrenic inpatients. After 4 weeks (and 12 one hour sessions in the intervention group), the intervention group behavioural (i.e. loudness, fluency, affect, content, eye contact, latency, overall) and assertiveness scores (as assessed using the Wolpe-Lazarus questionnaire) were significantly better than the control group scores ($p<0.01$ for all).

A later study by Wallace et al. (1985) randomised 28 schizophrenic male patients, who were at a high risk for relapse, to 9 months of social skills training or holistic health training. Both groups also received family therapy sessions. The authors reported that patients in the social skills training group had significantly greater acquisition, generalisation, and durability of social skills. Both groups showed statistically significant improvements in psychopathology from pre- to post-treatment. While rates of hospitalisation and relapse were higher in patients randomised to the holistic health training group, no statistically significant differences were observed.

Marder et al. (1996) compared the effectiveness of behaviourally oriented social skills training with supportive group therapy for improving the social adjustment of schizophrenic patients living in the community. After a 2 year period, the authors found only some modest effects; two of the six items on the Social Adjustment Scale II Score were found to significantly differ between groups, in favour of social skills training (personal well-being [$p=0.01$] and total [$p=0.02$]).

Authors Conclusions
Finch and Wallace (1977) concluded that interpersonal skills training with schizophrenic inpatients was effective. Wallace et al. (1985) reported that patients in the social skills training group had significantly greater acquisition, generalisation, and durability of social skills than those in the holistic health therapy group. Marder et al. (1996) concluded that social skills training may be a useful adjunct to pharmacotherapy for some patients with schizophrenia.

Reliability of conclusions/Strength of evidence

Details on methods of randomisation and allocation concealment were not reported in any of the included trials. Due to small sample sizes, and/or lack of reporting of the outcome data, all the trials were considered to have a high risk of bias, so that the reliability of their results is uncertain.

What do guidelines say?

National Institute for health and Care Excellence (NICE) guidelines make the following recommendations regarding social skills training and psychotic disorders:

"Do not routinely offer social skills training (as a specific intervention) to people with psychosis or schizophrenia." (p.26, 2014; CG178)

Scottish Intercollegiate Guidelines Network (SIGN) guidelines make the following recommendations regarding social skills training and psychotic disorders:

"Social skills training may be considered for individuals diagnosed with schizophrenia who have persisting problems related to social skills." (p.30, 2013; CG131)

No other NICE or SIGN guidelines comment upon the use to social skills training for adults with acute psychiatric conditions.

Date question received: 14/08/2006
Date searches conducted: 07/10/2014, updated from 05/09/2006
Date answer completed: 05/02/2015

References

RCTs

Marder, S. R., Lebell, M., Zimmerman, K., & Liberman, R. P. (1996). Two-year outcome of social skills training and group psychotherapy for outpatients with schizophrenia. *Age (Years)*, *38*(9.0), 37-9.

Wallace, C. J., & Liberman, R. P. (1985). Social skills training for patients with schizophrenia: a controlled clinical trial. *Psychiatry Research*, *15*(3), 239-247.

Finch, B. E., & Wallace, C. J. (1977). Successful interpersonal skills training with schizophrenic inpatients. *Journal of Consulting and Clinical Psychology, 45,* 885–890.

Guidelines

National Institute for Health and Care Excellence (2014) *Psychosis and schizophrenia in adults: Treatment and management guidance. CG178*. London: National Institute for Health and Care Excellence.

Scottish Intercollegiate Guidelines Network (2013) *Management of schizophrenia. CG131*. Edinburgh: Scottish Intercollegiate Guidelines Network.

Results

RCTs

Author (year)	Inclusion criteria	Number of participants	Summary of results	Risk of bias
Finch & Wallace (1977)	*Participants*: Male schizophrenic inpatients, aged 21-40 years, hospitalised for a minimum of 1 year. *Intervention*: Interpersonal skills training (conducted by 2 therapists), 12 one hour sessions over 4 weeks, plus assignments. Therapists modelled appropriate and inappropriate behaviour in a given situation, and patients engaged in response practice. *Comparator*: Treatment as usual, for 4 weeks. *Outcome*: Social skills (Wolpe-Lazarus Assertiveness Questionnaire, WLQ), behavioural test of interpersonal skills which were rated on 5 components: loudness of speech, affect, latency of response, and content.	16 (8 participants in each group)	After 4 weeks, the intervention group scores were significantly better than the control group scores for all outcomes assessed (P<0.01 for all). In their discussion, the authors noted that 1 out of 8 patients in the control group were discharged, compared with 5 out of 8 in the intervention group (p<0.06).	High (small sample size)
Marder et al. (1996)	*Participants*: Male outpatients with a diagnosis of schizophrenia (DSM-III-R). *Intervention*: Social Skills Training (90 minutes, twice a week for 6 months, and then weekly for 18 months).	80 (43 in the social skills training group and	The authors reported significant main effects favouring social skills training compared with supportive group therapy on two of the Social Adjustment Scale II items: personal well-being (p=0.01) and total (p=0.02). There were no significant differences between groups for work role, household role,	High

	Comparator: Supportive group therapy (90 minutes, twice a week for 6 months, and then weekly for 18 months). *Outcome*: Psychiatric symptoms (Brief Psychiatric rating Scale, BPRS); Functioning (Social Adjustment Scale, SAS).	37 in the supportive group therapy)	external family role, or social and leisure activities. A subgroup analysis by age group revealed that there was significant benefit (as measured using the SAS score) in those randomised to social skills training only for those patients who were 24 years of age or less (2.32 (SE 0.08) in social skills training group vs. 2.80 (SE 0.07) in supportive group therapy, p=0.0007).	
Wallace et al. (1985)	*Participants*: Male inpatients with a diagnosis of schizophrenia (DSM-III). *Intervention*: Intensive social skills training (5 mornings a week for 2 hours, for 9 weeks). *Comparator*: Holistic health therapy, including yoga, exercise and meditation (5 days a week, for 9 weeks). Both groups had family therapy, in multiple family sessions, once a week (9 sessions). All patients were provided with neuroleptic medication. *Outcome*: Social skills and adjustment (Confederate Test of Social Skills, CTSS; Social Anxiety and Distress Scale, SADS; Fear of Negative Evaluation Scale, FNAS; Rathus Assertiveness Schedule, RAS; Katz Adjustment Scale, KAS), psychopathology (Brief Psychiatric Rating Scale, BPRS; Clinical Global Impressions, CGI; Present State Examination, PSE; Minnesota	28 (14 in the SST group and 14 in the HHT group)	After 9 weeks of treatment in the hospital, patients in the social skills training group had higher scores in a test of social competence than patients who received holistic health therapy (0.76 vs 0.62). This difference between groups was also observed at 9 months follow-up (0.77 vs. 0.58). The authors reported statistical results for pre-post interactions. The results of the naturalistic Confederate Test demonstrated a pattern generally favouring the SST patients who were described by the confederate as being significantly less hostile ($p < 0.05$), less mistrusting ($p<0.01$), less detached ($p<0.01$), less inhibited ($p<0.01$), and less submissive ($p< 0.01$) than holistic patients at the 9-month follow-up. The SST patients also showed significantly higher scores on the self-report Rathus Assertiveness Schedule at 9-months follow-up. Both SST and HHT patients showed statistically significant improvements on the other self-report scales of social skills-the Social Anxiety and Distress Scale and the Fear of Negative Evaluation Scale-but there were no differences between groups. Ratings by the patient's relative on the Katz	High

	Multiphasic Personality Inventory, MMPI; Symptom Checklist, SCL).		Adjustment Scale (KAS) reflected significantly greater improvements on a range of areas related to social adjustment for the SST patients over the HHT. The results of the ANOVA for KAS revealed that SST patients were rated by Relatives' as significantly less negative ($p < 0.05$); less obstreperous ($p<0.01$); and as having less psychopathology ($p < 0.01$) than the HHT patients. Both groups showed statistically significant improvements in psychopathology from pre- to post-treatment (BPRS; Minnesota Multiphasic Personality Inventory [MMPI-168]; Hopkins Symptom Checklist [SCL-90] and Clinical Global Rating Scales), with maintenance of gains on the BPRS at 9- and 24-month follow-up. During the 2-year follow-up period, re-hospitalisation occurred 16 times in the SST group compared with 30 in the HHT group. Three SST patients and 7 HHT patients relapsed during the 9 months after discharge, while 7 of the SST patients and 11 of the HHT patients relapsed over the 2-year period (there was no statistically significant differences between the groups for re-hospitalisation or relapse).	

Risk of Bias:

RCTs

Study	RISK OF BIAS					
	Random allocation	Allocation concealment	Blinding of participants and personnel	Blinding of outcome assessment	Incomplete outcome data	Selective Reporting
Finch & Wallace (1977)	?	?	NA	☺	☺	?
Marder et al. (1996)	?	?	NA	☹	☹	?
Wallace et al. (1985)	?	?	NA	☺	☹	?

☺Low Risk ☹High Risk ? Unclear Risk

Search Details

Source	Search Strategy	Number of hits	Relevant evidence identified
SRs and Guidelines			
NICE	social skills training psychosis (63) social skills training bipolar (64) social skills training depression (152)	152	2
DARE	1 ((behaviour* OR behavior*) adj2 modif*) IN DARE WHERE LPD FROM 05/09/2006 TO 17/09/2014 49 Delete 2 (psychosoc* adj2 treat*) IN DARE WHERE LPD FROM 05/09/2006 TO 17/09/2014 72 Delete 3 (social* adj3 skill*) IN DARE WHERE LPD FROM 05/09/2006 TO 17/09/2014 67 Delete 4 ((learn* OR educat*) adj3 skill*) IN DARE WHERE LPD FROM 05/09/2006 TO 17/09/2014 32 Delete 5 (social* adj3 competenc*) IN DARE WHERE LPD FROM 05/09/2006 TO 17/09/2014 10 Delete 6 MeSH DESCRIPTOR Psychotherapy, Group EXPLODE ALL TREES 197 Delete 7 (bipolar OR anxiet* OR anxious OR psychosis OR psychotic OR schizo* OR OCD) IN DARE WHERE LPD FROM 05/09/2006 TO 17/09/2014 1596 Delete 8 MeSH DESCRIPTOR Bipolar Disorder EXPLODE ALL TREES 164 Delete 9 MeSH DESCRIPTOR Obsessive-Compulsive Disorder EXPLODE ALL TREES 47 Delete 10 MeSH DESCRIPTOR Schizophrenia EXPLODE ALL TREES 493 Delete 11 MeSH DESCRIPTOR Psychotic Disorders EXPLODE ALL TREES 149 Delete 12 MeSH DESCRIPTOR Anxiety Disorders EXPLODE ALL TREES 436 Delete 13 #1 OR #2 OR #3 OR #4 OR #5 OR #6 407 Delete 14 #7 OR #8 OR #9 OR #10 OR #11 OR #12 2255 Delete 15 #13 AND #14 112 Delete	112	0
Primary studies			
CENTRAL	#1 social skill 3130 #2 learn skill 2817	934	3

	#3 education skill 4951 #4 MeSH descriptor: [Psychotherapy, Group] explode all trees 2440 #5 #1 or #2 or #3 or #4 9618 #6 bipolar 4405 #7 psychosis 2856 #8 psychotic 3679 #9 schizophrenia 9630 #10 anxiety 22162 #11 MeSH descriptor: [Bipolar Disorder] explode all trees 1581 #12 MeSH descriptor: [Obsessive-Compulsive Disorder] explode all trees 651 #13 MeSH descriptor: [Schizophrenia] explode all trees 4922 #14 MeSH descriptor: [Psychotic Disorders] explode all trees 1548 #15 MeSH descriptor: [Anxiety Disorders] explode all trees 4920 #16 #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 38027 #17 #5 and #16 2131 #18 male 391415 #19 MeSH descriptor: [Male] explode all trees 847 #20 #18 or #19 391415 #21 #17 and #20 1429		
PsycINFO	1. PsycINFO; (social* adj3 skill*).ti,ab; 15164 results. 2. PsycINFO; ((learn* OR educat*) adj3 skill*).ti,ab; 10103 results. 3. PsycINFO; SOCIAL SKILLS/ OR SOCIAL SKILLS TRAINING/; 14505 results. 4. PsycINFO; (bipolar OR anxiet* OR psychosis OR psychotic OR schizo*).ti,ab; 282756 results. 5. PsycINFO; BIPOLAR DISORDER/; 19726 results. 6. PsycINFO; OBSESSIVE COMPULSIVE DISORDER/; 10251 results. 7. PsycINFO; SCHIZOPHRENIA/ OR PSYCHOSIS/; 85570 results. 8. PsycINFO; ANXIETY DISORDERS/; 13905 results. 9. PsycINFO; CLINICAL TRIALS/ [Limit to: Publication Year 1860-2014]; 7958 results. 10. PsycINFO; random*.ti,ab [Limit to: Publication Year 1860-2014]; 133902 results. 11. PsycINFO; (doubl* adj3 blind*).ti,ab [Limit to: Publication Year 1860-2014]; 18617 results. 12. PsycINFO; (singl* adj3 blind*).ti,ab [Limit to: Publication Year 1860-2014]; 1685 results. 13. PsycINFO; EXPERIMENTAL DESIGN/ [Limit to: Publication Year 1860-2014]; 9285 results.	409	0

	14. PsycINFO; controlled.ti,ab [Limit to: Publication Year 1860-2014]; 83030 results. 15. PsycINFO; (clinical adj3 study).ti,ab [Limit to: Publication Year 1860-2014]; 8127 results. 16. PsycINFO; trial.ti,ab [Limit to: Publication Year 1860-2014]; 70416 results. 17. PsycINFO; "treatment outcome clinical trial".md [Limit to: Publication Year 1860-2014]; 27915 results. 18. PsycINFO; 1 OR 2 OR 3; 32062 results. 19. PsycINFO; 4 OR 5 OR 6 OR 7 OR 8; 294687 results. 20. PsycINFO; 9 OR 10 OR 11 OR 12 OR 13 OR 14 OR 15 OR 16 OR 17 [Limit to: Publication Year 1860-2014]; 254772 results. 21. PsycINFO; 18 AND 19 AND 20 [Limit to: Publication Year 1860-2014]; 409 results.		
Embase	1. EMBASE; (social* adj3 skill*).ti,ab; 6593 results. 2. EMBASE; ((learn* OR educat*) adj3 skill*).ti,ab; 8511 results. 3. EMBASE; SOCIAL SKILLS/ OR SOCIAL SKILLS TRAINING/; 18983 results. 4. EMBASE; (bipolar OR anxiet* OR psychosis OR psychotic OR schizo*).ti,ab; 352035 results. 5. EMBASE; BIPOLAR DISORDER/; 34432 results. 6. EMBASE; OBSESSIVE COMPULSIVE DISORDER/; 15911 results. 7. EMBASE; SCHIZOPHRENIA/ OR PSYCHOSIS/; 174461 results. 8. EMBASE; ANXIETY DISORDERS/; 42241 results. 9. EMBASE; 1 OR 2 OR 3; 30713 results. 10. EMBASE; 4 OR 5 OR 6 OR 7 OR 8; 427756 results. 11. EMBASE; CLINICAL TRIAL/; 834422 results. 12. EMBASE; RANDOMIZED CONTROLLED TRIAL/; 350916 results. 13. EMBASE; RANDOMIZATION/; 63453 results. 14. EMBASE; SINGLE BLIND PROCEDURE/; 18869 results. 15. EMBASE; DOUBLE BLIND PROCEDURE/; 115609 results. 16. EMBASE; CROSSOVER PROCEDURE/; 40306 results. 17. EMBASE; "Randomi?ed controlled trial$".ti,ab; 103940 results. 18. EMBASE; rct.ti,ab; 14868 results. 19. EMBASE; "Random allocation".ti,ab; 1341 results. 20. EMBASE; "Randomly allocated".ti,ab; 20844 results. 21. EMBASE; ((allocated adj2 random)).ti,ab; 717 results. 22. EMBASE; "Single blind$".ti,ab; 14681 results.	641	0

	23. EMBASE; "Double blind$".ti,ab; 143690 results. 24. EMBASE; (treble ADJ blind$).ti,ab; 0 results. 25. EMBASE; (triple ADJ blind$).ti,ab; 394 results. 26. EMBASE; Placebo$.ti,ab; 202525 results. 27. EMBASE; PROSPECTIVE STUDY/; 262677 results. 28. EMBASE; 11 OR 12 OR 13 OR 14 OR 15 OR 16 OR 25 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR 27; 1386582 results. 29. EMBASE; "case report".ti,ab; 264895 results. 30. EMBASE; ABSTRACT REPORT/; 71421 results. 31. EMBASE; LETTER/; 831141 results. 32. EMBASE; 60 OR 29 OR 30 OR 31; 1189612 results. 33. EMBASE; 28 not 32; 1348547 results. 34. EMBASE; 9 AND 10 AND 33; 641 results.		
Cinahl	78. CINAHL; (social* adj3 skill*).ti,ab; 2160 results. 79. CINAHL; ((learn* OR educat*) adj3 skill*).ti,ab; 4056 results. 80. CINAHL; SOCIAL SKILLS/ OR SOCIAL SKILLS TRAINING/; 1784 results. 81. CINAHL; (bipolar OR anxiet* OR psychosis OR psychotic OR schizo*).ti,ab; 39517 results. 82. CINAHL; BIPOLAR DISORDER/; 4162 results. 83. CINAHL; OBSESSIVE COMPULSIVE DISORDER/; 0 results. 84. CINAHL; SCHIZOPHRENIA/ OR PSYCHOSIS/; 9422 results. 85. CINAHL; ANXIETY DISORDERS/; 3264 results. 86. CINAHL; 78 OR 79 OR 80; 7260 results. 87. CINAHL; 81 OR 82 OR 83 OR 84 OR 85; 44709 results. 88. CINAHL; 86 AND 87; 446 results.	446	0
Medline	33. MEDLINE; (social* adj3 skill*).ti,ab; 4997 results. 33. MEDLINE; (social* adj3 skill*).ti,ab; 4997 results. 34. MEDLINE; ((learn* OR educat*) adj3 skill*).ti,ab; 6979 results. 34. MEDLINE; ((learn* OR educat*) adj3 skill*).ti,ab; 6979 results. 35. MEDLINE; SOCIAL SKILLS/ OR SOCIAL SKILLS TRAINING/; 0 results. 35. MEDLINE; SOCIAL SKILLS/ OR SOCIAL SKILLS TRAINING/; 0 results. 36. MEDLINE; (bipolar OR anxiet* OR psychosis OR psychotic OR schizo*).ti,ab; 281973 results. 36. MEDLINE; (bipolar OR anxiet* OR psychosis OR psychotic OR schizo*).ti,ab; 281973 results.	246	0

	37. MEDLINE; BIPOLAR DISORDER/; 32001 results. 37. MEDLINE; BIPOLAR DISORDER/; 32001 results. 38. MEDLINE; OBSESSIVE COMPULSIVE DISORDER/; 11470 results. 39. MEDLINE; SCHIZOPHRENIA/ OR PSYCHOSIS/; 107692 results. 40. MEDLINE; ANXIETY DISORDERS/; 23642 results. 40. MEDLINE; ANXIETY DISORDERS/; 23642 results. 41. MEDLINE; 33 OR 34 OR 35; 11814 results. 42. MEDLINE; 36 OR 37 OR 38 OR 39 OR 40; 332557 results. 43. MEDLINE; RANDOMIZED CONTROLLED TRIALS AS TOPIC/; 96599 results. 44. MEDLINE; RANDOMIZED CONTROLLED TRIAL/; 389609 results. 45. MEDLINE; RANDOM ALLOCATION/; 82323 results. 46. MEDLINE; DOUBLE-BLIND METHOD/; 129749 results. 47. MEDLINE; SINGLE-BLIND METHOD/; 20049 results. 48. MEDLINE; CLINICAL TRIAL/; 496094 results. 49. MEDLINE; "clinical trial, phase i".pt; 14856 results. 50. MEDLINE; "clinical trial, phase ii".pt; 23949 results. 51. MEDLINE; "clinical trial, phase iii".pt; 9734 results. 52. MEDLINE; "clinical trial, phase iv".pt; 992 results. 53. MEDLINE; "controlled clinical trial".pt; 89898 results. 54. MEDLINE; "randomized controlled trial".pt; 389609 results. 55. MEDLINE; "clinical trial".pt; 496094 results. 56. MEDLINE; exp CLINICAL TRIALS AS TOPIC/; 287985 results. 57. MEDLINE; (single$ ADJ blind$).ti,ab; 12118 results. 58. MEDLINE; (doubl$ ADJ blind$).ti,ab; 120147 results. 59. MEDLINE; (treb$ ADJ blind$).ti,ab; 0 results. 60. MEDLINE; (trip$ ADJ blind$).ti,ab; 353 results. 61. MEDLINE; (single$ ADJ mask$).ti,ab; 320 results. 62. MEDLINE; (doub$ ADJ mask$).ti,ab; 2732 results. 63. MEDLINE; (treb$ ADJ mask$).ti,ab; 0 results. 64. MEDLINE; (trip$ ADJ mask$).ti,ab; 41 results. 65. MEDLINE; PLACEBOS/; 33414 results. 66. MEDLINE; placebo$.ti,ab; 165193 results.		

	67. MEDLINE; "randomly allocated".ti,ab; 17991 results. 68. MEDLINE; (allocated adj2 random$).ti,ab; 20640 results. 69. MEDLINE; 43 OR 44 OR 45 OR 46 OR 47 OR 48 OR 49 OR 50 OR 51 OR 52 OR 53 OR 54 OR 55 OR 56; 972889 results. 70. MEDLINE; 57 OR 58 OR 59 OR 60 OR 61 OR 62 OR 63 OR 64 OR 65 OR 66 OR 67 OR 68; 244702 results. 71. MEDLINE; 69 OR 70; 1020869 results. 72. MEDLINE; "case report".ti,ab; 212986 results. 73. MEDLINE; LETTER/; 859486 results. 74. MEDLINE; HISTORICAL ARTICLE/; 307380 results. 75. MEDLINE; 72 OR 73 OR 74; 1368019 results. 76. MEDLINE; 71 not 75; 992855 results. 77. MEDLINE; 41 AND 42 AND 76; 246 results.		
Summary	**NA**	**NA**	

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