

## Supportive therapy

### Introduction

Therapeutic support is a key component of the successful treatment of schizophrenia, providing the opportunity to listen to patients' concerns, give encouragement, and arrange assistance for practical problems. A definition of 'supportive therapy' can include a variety of interventions, ranging from traditional supportive psychotherapy with a clinician, to mental health workers providing practical support. This type of therapy aims to support people with schizophrenia living in the community or in treatment facilities to increase self-esteem, quality of life, and achieve greater social and community functioning.

### Method

We have included only systematic reviews (systematic literature search, detailed methodology with inclusion/exclusion criteria) published in full text, in English, from the year 2000 that report results separately for people with a diagnosis of schizophrenia, schizoaffective disorder, schizophreniform disorder or first episode schizophrenia. Reviews were identified by searching MEDLINE, EMBASE, CINAHL, Current Contents, PsycINFO and the Cochrane Library databases. Hand searching reference lists of identified reviews was also conducted. When multiple copies of reviews were found, only the most recent version was included. Reviews with pooled data are prioritised for inclusion.

Review reporting assessment was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) checklist that describes a preferred way to present a meta-analysis<sup>1</sup>. Reviews rated as having less than 50% of items checked have been excluded from the library. The PRISMA flow diagram is a suggested way of providing information about studies included and excluded with reasons for exclusion. Where no flow diagram has been presented by individual

reviews, but identified studies have been described in the text, reviews have been checked for this item. Note that early reviews may have been guided by less stringent reporting checklists than the PRISMA, and that some reviews may have been limited by journal guidelines.

Evidence was graded using the Grading of Recommendations Assessment, Development and Evaluation ([GRADE](#)) Working Group approach where high quality evidence such as that gained from randomised controlled trials (RCTs) may be downgraded to moderate or low if review and study quality is limited, if there is inconsistency in results, indirect comparisons, imprecise or sparse data and high probability of reporting bias. It may also be downgraded if risks associated with the intervention or other matter under review are high. Conversely, low quality evidence such as that gained from observational studies may be upgraded if effect sizes are large or if there is a dose dependent response. We have also taken into account sample size and whether results are consistent, precise and direct with low associated risks<sup>2</sup>. The resulting table represents an objective summary of the available evidence, although the conclusions are solely the opinion of staff of NeuRA (Neuroscience Research Australia).

### Results

We found three systematic reviews that met our inclusion criteria<sup>3-5</sup>.

- Moderate to low quality evidence suggests supportive therapy may increase study retention in the medium term, but not the long term when compared to psychodynamic psychotherapy.
- Moderate to low quality evidence suggests cognitive behavioural therapy may show benefit over supportive therapy for affective



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symptoms, with no differences for other symptoms or functioning.

- Moderate to low quality evidence suggests no clear benefit of supportive therapy over standard care or any other psychosocial therapy.



Buckley LA, Maayan N, Soares-Weiser K, Adams CE

**Supportive therapy for schizophrenia**

Cochrane Database of Systematic Reviews, Cochrane Database of Systematic Reviews 2015; Issue 4. Art. No.: CD004716. DOI: 10.1002/14651858.CD004716.pub4.

[View review abstract online](#)

<p><b>Comparison 1</b></p>	<p><b>Supportive therapy vs. treatment as usual.</b> Treatment duration range 5 weeks to 3 years. Most interventions were twice weekly, weekly or fortnightly.</p>
<p><b>Summary of evidence</b></p>	<p><b>Moderate quality evidence (small to medium-sized samples, consistent where applicable, unable to assess precision, direct) suggests no clear benefit of supportive therapy over treatment as usual.</b></p>
<p><b>Mental state</b></p>	
<p style="text-align: center;"><i>No differences between groups in general mental state;</i> Medium term (12-26 weeks): 1 RCT, N = 54, RR = 0.95, 95%CI 0.77 to 1.17, <math>p = 0.61</math> Long term: 2 RCTs, N = 98, RR = 0.95, 95%CI 0.82 to 1.11, <math>p = 0.53</math>, <math>I^2 = 0\%</math>, <math>p = 0.93</math> <i>No differences between groups in overall symptom endpoint (PANSS) scores;</i> Short term (&lt; 12 weeks): 1 RCT, N = 131, WMD = -4.42, 95%CI -10.13 to 1.29, <math>p = 0.13</math> Long term: 1 RCT, N = 36, WMD = 4.70, 95%CI -6.71 to 16.11, <math>p = 0.42</math> PANSS positive endpoint: 1 RCT, N = 131, WMD = -1.09, 95%CI -2.84 to 0.66, <math>p = 0.22</math> <i>No differences between groups in depressive symptoms;</i> Long term: 1 RCT, N = 260, WMD = 1.61, 95%CI -1.61 to 4.83, <math>p = 0.33</math> <i>No differences between groups in rates of relapse;</i> Medium term: 1 RCT, N = 54, RR = 0.12, 95%CI 0.01 to 2.11, <math>p = 0.15</math> Long term: 1 RCT, N = 54, RR = 0.96, 95%CI 0.44 to 2.11, <math>p = 0.91</math> <i>No differences between groups in rates of hospitalisation;</i> Long term: 1 RCT, N = 48, RR = 1.00, 95%CI 0.07 to 15.08, <math>p = 1.0</math></p>	
<p><b>General functioning</b></p>	



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<p><i>No differences between groups in functioning;</i></p> <p>Global Assessment Scale, long term (&gt; 26 weeks): 1 RCT, N = 29, WMD = 1.40, 95%CI -5.09 to 7.89, <math>p = 0.67</math></p> <p>Global Assessment of Functioning, long term: 1 RCT, N = 260, WMD = -2.66, 95%CI -6.20 to 0.88, <math>p = 0.14</math></p> <p>Social functioning, long term: 1 RCT, N = 260, WMD = -0.67, 95%CI -7.05 to 5.71, <math>p = 0.84</math></p> <p><i>No differences between groups in quality of life;</i></p> <p>Self-esteem, long term: 1 RCT, N = 260, WMD = -1.21, 95%CI -2.85 to 0.43, <math>p = 0.15</math></p> <p>Well-being, long term: 1 RCT, N = 260, WMD = -2.73, 95%CI -6.04 to 0.58, <math>p = 0.11</math></p> <p>Global health, long term: 1 RCT, N = 260, WMD = 2.45, 95%CI -2.41 to 7.35, <math>p = 0.32</math></p>	
<b>Mortality and study attrition</b>	
<p><i>No differences between groups in number of deaths;</i></p> <p>Medium term: 1 RCT, N = 54, RR = 3.22, 95%CI 0.14 to 75.75, <math>p = 0.47</math></p> <p>Long term: 2 RCTs, N = 92, RR = 2.87, 95%CI 0.31 to 26.63, <math>p = 0.35</math>, <math>I^2 = 0\%</math>, <math>p = 0.97</math></p> <p><i>No differences between groups in rates of study attrition;</i></p> <p>4 RCTs, N = 354, RR = 0.86, 95%ci 0.53 to 1.40, <math>p = 0.55</math>, <math>I^2 = 0\%</math>, <math>p = 0.99</math></p>	
<b>Consistency in results<sup>‡</sup></b>	Consistent where applicable (> 1 RCT).
<b>Precision in results<sup>§</sup></b>	Imprecise where applicable, unable to assess WMD.
<b>Directness of results<sup>  </sup></b>	Direct
<b>Comparison 2</b>	<b>Supportive therapy vs. any other psychological or psychosocial therapy.</b>
<b>Summary of evidence</b>	<b>Low quality evidence (small to medium-sized samples, some inconsistency and imprecision, indirect) is unable to determine any differences between supportive therapy and other therapies.</b>
<b>Mental state</b>	
<p><i>No significant differences in clinical improvement in the medium term, with lower clinical improvement in the long term with supportive therapy;</i></p> <p>Medium term: 1 RCT, N = 59, RR = 1.27, 95%CI 0.95 to 1.70, <math>p = 0.11</math></p> <p>Long term: 3 RCTs, N = 194, RR = 1.27, 95%CI 1.04 to 1.54, <math>p = 0.016</math>, <math>I^2 = 67\%</math>, <math>p = 0.05</math></p> <p><i>No significant differences in rates of hospitalisation in the medium term, with higher rates of</i></p>	



*hospitalisation in the long term with supportive therapy;*

Medium term: 3 RCTs, N = 153, RR = 1.60, 95%CI 0.85 to 3.00,  $p = 0.14$ ,  $I^2 = 0\%$ ,  $p = 0.83$

Long term: 4 RCTs, N = 306, RR = 1.82, 95%CI 1.11 to 2.99,  $p = 0.018$ ,  $I^2 = 13\%$ ,  $p = 0.33$

*A significant, small effect of increased remission rates with supportive therapy;*

Long term: 1 RCT, N = 39, RR = 1.87, 95%CI 1.11 to 3.15,  $p = 0.19$

*No significant differences in rates of relapse;*

Long term: 5 RCTs, N = 570, RR = 1.19, 95%CI 0.66 to 2.16,  $p = 0.55$ ,  $I^2 = 77\%$ ,  $p = 0.001$

Authors report no differences on individual symptom scores, apart from thought disturbance and affective symptom episodes, which were higher with supportive therapy.

### **Treatment adherence**

*A significant, medium-sized effect of increased treatment adherence in the short term, but not the long term in patients receiving any other psychosocial intervention;*

Medium term: 2 RCTs, N = 58, RR = 2.63, 95%CI 1.30 to 5.35,  $p = 0.0074$

Long term: 1 RCT, N = 38, RR = 1.29, 95%CI 0.69 to 2.39,  $p = 0.42$

### **General functioning**

*No significant differences in functioning, employment or incarceration, with a small significant effect of improved behaviour in patients receiving any other psychosocial intervention;*

Social functioning, short term: 1 RCT, N = 65, WMD = -7.20, 95%CI -17.86 to 3.46,  $p = 0.19$

Social functioning, long term: 1 RCT, N = 65, WMD = -8.80, 95%CI -21.67 to 4.07,  $p = 0.18$

Employment, long term: 2 RCTs, N = 171, RR = 1.03, 95%CI 0.84 to 1.25,  $p = 0.79$ ,  $I^2 = 77\%$ ,  $p = 0.79$

Incarceration, long term: 1 RCT, N = 39, RR = 1.05, 95%CI 0.24 to 4.59,  $p = 0.95$

Behaviour: 1 RCT, N = 39, RR = 1.46, 95%CI 1.04 to 2.04,  $p = 0.029$

### **Quality of life**

*No significant differences between groups in quality of life;*

1 RCT, N = 19, WMD = -0.07, 95%CI -21.11 to 20.97,  $p = 0.99$

### **Mortality**

*No significant differences between groups in mortality rates;*

Medium term: 1 RCT, N = 59, RR = 1.27, 95%CI 0.08 to 19.34,  $p = 0.86$

Long term: 2 RCTs, N = 115, RR = 3.99, 95%CI 0.44 to 36.08,  $p = 0.22$



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<b>Consistency in results</b>	Inconsistent for relapse and clinical improvement, consistent for hospitalisation and employment.
<b>Precision in results</b>	Mostly imprecise.
<b>Directness of results</b>	Indirect comparison (mixed control conditions combined).
<b>Comparison 3</b>	<b>Supportive therapy vs. cognitive behavioural therapy (CBT).</b>
<b>Summary of evidence</b>	<b>Moderate to low quality evidence (small to medium-sized samples, imprecise, consistent, direct) suggests CBT may be more beneficial than supportive therapy for affective symptoms, but there may be no differences for any other outcome (symptoms, relapse rates, functioning, mortality or attrition).</b>
<b>Mental state</b>	
<p><i>People receiving cognitive behavioural therapy showed greater improvement than supportive therapy on;</i></p> <p>Affective symptoms: 2 RCTs, N = 101, RR = 2.17, 95%CI 1.16 to 4.06, <math>p = 0.015</math>, <math>I^2 = 0\%</math>, <math>p = 0.43</math>          BPRS long form: 1 RCT, N = 37, WMD = 7.60, 95%CI 0.90 to 14.30, <math>p = 0.026</math>          BPRS general endpoint, medium term: 1 RCT, N = 37, WMD = 7.60, 95%CI 0.90 to 14.30, <math>p = 0.03</math>          PANSS thought disturbance subscale: 1 RCT, N = 12, WMD = 4.30, 95%CI 1.17 to 7.43, <math>p = 0.007</math></p> <p><i>There were no significant differences in clinically important improvement;</i></p> <p>Medium term: 1 RCT, N = 59, RR = 1.27, 95%CI 0.95 to 1.70, <math>p = 0.11</math>          Long term: 3 RCTs, N = 194, RR = 1.23, 95%CI 0.89 to 1.70, <math>p = 0.20</math>, <math>I^2 = 67\%</math>, <math>p = 0.05</math></p> <p><i>No significant differences in mental state on;</i></p> <p>BPRS general endpoint, short term: 2 RCTs, N = 92, WMD = -1.07, 95%CI -5.08 to 2.94, <math>p = 0.60</math>, <math>I^2 = 35\%</math>, <math>p = 0.21</math>          BPRS short form, short term: 1 RCT, N = 74, WMD = -0.90, 95%CI -3.02 to 1.22, <math>p = 0.41</math>          BPRS short form, medium term: 1 RCT, N = 67, WMD = 2.20, 95%CI -1.18 to 5.58, <math>p = 0.20</math>          BPRS short form, long term: 1 RCT, N = 45, WMD = 2.30, 95%CI -0.54 to 5.14, <math>p = 0.11</math>          SANS negative, medium term: 1 RCT, N = 37, WMD = 6.60, 95%CI -5.81 to 19.01, <math>p = 0.30</math>          PSYRATS voices subscale: 1 RCT, N = 65, WMD = 0.10, 95%CI -3.63 to 3.83, <math>p = 0.96</math></p> <p><i>There were no differences in relapse or hospitalisation rates;</i></p> <p>Relapse, medium term: 2 RCTs, N = 100, RR = 2.86, 95%CI 0.32 to 25.24, <math>p = 0.34</math>, <math>I^2 = 0\%</math>, <math>p = 1.0</math>          Hospitalisation, medium term: 3 RCTs, N = 153, RR = 1.60, 95%CI 0.85 to 3.00, <math>p = 0.14</math>, <math>I^2 = 0\%</math>, <math>p</math></p>	



= 0.83	
Hospitalisation, long term: 1 RCT, N = 65, RR = 0.73, 95%CI 0.18 to 3.00, $p = 0.66$	
<b>General functioning and satisfaction with treatment</b>	
<i>No significant differences between groups in social functioning or quality of life;</i>	
Social functioning, long term: 1 RCT, N = 65, RR = -8.80, 95%CI -21.67 to 4.07, $p = 0.18$	
Quality of life, long term: 1 RCT, N = 65, RR = -1.70, 95%CI -51.19 to 1.79, $p = 0.34$	
<i>More people receiving cognitive behavioural therapy were satisfied with the treatment;</i>	
Long term: 1 RCT, N = 45, RR = 3.19, 95%CI 1.01 to 10.07, $p = 0.048$	
<i>More people receiving cognitive behavioural therapy had a favourable attitude towards medication;</i>	
Attitudes to Medication Questionnaire, short term: 1 RCT, N = 74, WMD = -4.50, 95%CI -6.83 to -2.17, $p = 0.00015$	
Drug Attitudes Inventory, short term: 1 RCT, N = 63, WMD = -5.70, 95%CI -9.35 to -2.05, $p = 0.0022$	
Drug Attitudes Inventory, long term: 1 RCT, N = 44, WMD = -4.90, 95%CI -9.38 to -0.42, $p = 0.032$	
<b>Mortality and attrition</b>	
<i>No significant differences between groups in mortality or attrition;</i>	
Mortality, medium term: 1 RCT, N = 59, RR = 1.27, 95%CI 0.08 to 19.34, $p = 0.86$	
Mortality, long term: 1 RCT, N = 45, RR = 2.88, 95%CI 0.12 to 67.03, $p = 0.51$	
Attrition: 10 RCTs, N = 711, RR = 0.93, 95%CI 0.66 to 1.30, $p = 0.67$ , $I^2 = 13%$ , $p = 0.33$	
<b>Consistency in results</b>	Consistent where applicable (> 1 RCT).
<b>Precision in results</b>	Imprecise
<b>Directness of results</b>	Direct
<b>Comparison 4</b>	<b>Supportive therapy vs. family therapy.</b>
<b>Summary of evidence</b>	<b>Low quality evidence (small samples, imprecise, direct) is unable to determine any differences between supportive and family therapies.</b>
<b>Mental state</b>	
<i>A small to medium-sized effect of greater remission and medication adherence (medium-term only) in people receiving family therapy, with no differences in hospitalisation rates or affective symptoms;</i>	



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<p>Remission, long term: 1 RCT, N = 39, RR = 1.87, 95%CI 1.11 to 3.15, <math>p = 0.019</math>                  Medication adherence, medium term: 1 RCT, N = 39, RR = 2.63, 95%CI 1.30 to 5.35, <math>p = 0.0074</math>                  Medication adherence, long term: 1 RCT, N = 39, RR = 1.29, 95%CI 0.69 to 2.39, <math>p = 0.42</math>                  Hospitalisation: 1 RCT, N = 39, RR = 1.93, 95%CI 0.89 to 4.17, <math>p = 0.095</math>                  Affective symptoms, long term: 1 RCT, N = 48, RR = 1.71, 95%CI 0.82 to 3.60, <math>p = 0.15</math></p>	
<b>General functioning</b>	
<p><i>A significant, small effect of less social impairment with family therapy;</i>                  Long term: 1 RCT, N = 39, RR = 1.46, 95%CI 1.04 to 2.04, <math>p = 0.029</math>  <i>No significant differences between groups for;</i>                  Ability to cope with relatives, long term: 1 RCT, N = 39, RR = 0.90, 95%CI 0.37 to 2.20, <math>p = 0.82</math>                  Admission to residential placement: 1 RCT, N = 39, RR = 1.05, 95%CI 0.24 to 4.59, <math>p = 0.95</math>                  Admission to jail: 1 RCT, N = 39, RR = 1.05, 95%CI 0.24 to 4.59, <math>p = 0.95</math>                  Rates of paid employment: 1 RCT, N = 39, RR = 0.96, 95%CI 0.57 to 1.63, <math>p = 0.89</math>                  Appointment attendance: 1 RCT, N = 39, RR = 1.93, 95%CI 0.89 to 4.17, <math>p = 0.095</math></p>	
<b>Attrition</b>	
<p>Attrition: 1 RCT, N = 39, RR = 0.70, 95%CI 0.13 to 3.75, <math>p = 0.68</math></p>	
<b>Consistency in results</b>	Not applicable (all 1 RCT)
<b>Precision in results</b>	Imprecise
<b>Directness of results</b>	Direct
<b>Comparison 5</b>	<b>Supportive therapy vs. psychoeducation.</b>
<b>Summary of evidence</b>	<b>Low quality evidence (small samples, imprecise, direct) is unable to determine any differences between supportive therapy and psychoeducation.</b>
<b>Mental state</b>	
<p><i>No significant differences between groups in clinically important improvement or hospitalisation;</i>                  Clinically important improvement: 1 RCT, N = 19, RR = 1.61, 95%CI 0.95 to 2.68, <math>p = 0.069</math>                  PANSS general: 1 RCT, N = 19, WMD = 2.86, 95%CI -3.21 to 8.93, <math>p = 0.36</math>                  Hospitalisation: 1 RCT, N = 47, RR = 0.48, 95%CI 0.05 to 4.93, <math>p = 0.54</math>                  Medication adherence: 1 RCT, N = 39, RR = 1.00, 95%CI 0.83 to 1.21, <math>p = 1.0</math></p>	





<b>General functioning</b>	
<p><i>No significant differences between groups in quality of life, behaviour or insight;</i>            Quality of life: 1 RCT, N = 19, WMD = -0.07, 95%CI -21.11 to 20.97, <math>p = 0.99</math>            Behaviour: 1 RCT, N = 19, WMD = -0.02, 95%CI -0.44 to 0.40, <math>p = 0.93</math>            Insight: 1 RCT, N = 19, WMD = -1.55, 95%CI -5.85 to 2.73, <math>p = 0.48</math></p>	
<b>Mortality and attrition</b>	
<p><i>No significant differences between groups in mortality or attrition rates;</i>            Mortality: 1 RCT, N = 47, RR = 2.88, 95%CI 0.12 to 67.29, <math>p = 0.51</math>            Attrition: 2 RCTs, N = 71, RR = 0.57, 95%CI 0.21 to 1.54, <math>p = 0.27</math>, <math>I^2 = 0\%</math>, <math>p = 0.63</math></p>	
<b>Consistency in results</b>	Consistent where applicable (attrition).
<b>Precision in results</b>	Imprecise
<b>Directness of results</b>	Direct
<b>Comparison 6</b>	<b>Individual or group supportive therapy vs. rehabilitation programs.</b>
<b>Summary of evidence</b>	<b>Low quality evidence (small to medium-sized samples, imprecise, direct) is unable to determine any differences between supportive therapy and rehabilitation programs.</b>
<b>Mental state</b>	
<p><i>A significant, large effect of fewer hospitalisations with rehabilitation programs;</i>            1 RCT, N = 132, RR = 2.71, 95%CI 1.22 to 6.02, <math>p = 0.014</math></p>	
<b>General functioning</b>	
<p><i>No significant differences between groups in employment rates;</i>            1 RCT, N = 132, RR = 1.04, 95%CI 0.85 to 1.29, <math>p = 0.70</math></p>	
<b>Attrition</b>	
<p><i>No significant differences between groups in attrition;</i>            1 RCT, N = 132, RR = 1.45, 95%CI 0.92 to 2.29, <math>p = 0.11</math></p>	
<b>Consistency in results</b>	Not applicable, 1 RCT.



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<b>Precision in results</b>	Imprecise
<b>Directness of results</b>	Direct
<b>Comparison 7</b>	<b>Individual or group supportive therapy vs. skills training programs.</b>
<b>Summary of evidence</b>	<b>Moderate to low quality evidence (small to medium-sized samples, consistent where applicable, imprecise, direct) suggests no clear benefit of supportive therapy over skills training.</b>
<b>Hospitalisation</b>	
<i>No significant differences between groups in rates of service utilisation;</i> Long term: 1 RCT, N = 47, RR = 0.96, 95%CI 0.06 to 14.43, $p = 0.98$	
<b>Mortality and attrition</b>	
<i>No significant differences between groups in mortality or attrition rates;</i> Mortality: 1 RCT, N = 47, RR = 2.88, 95%CI 0.12 to 67.29, $p = 0.51$ Attrition: 3 RCTs, N = 168, RR = 1.01, 95%CI 0.61 to 1.67, $p = 0.96$ , $I^2 = 0\%$ , $p = 0.39$	
<b>Consistency in results</b>	Consistent where applicable
<b>Precision in results</b>	Imprecise
<b>Directness of results</b>	Direct
<b>Comparison 8</b>	<b>Supportive therapy vs. psychodynamic psychotherapy.</b>
<b>Summary of evidence</b>	<b>Moderate to low quality evidence (small to medium-sized sample, precise, direct) suggests increased study retention for supportive therapy over psychodynamic psychotherapy in the medium term, but not the long term.</b>
<b>Attrition</b>	
<i>A significant, small effect of less study attrition with supportive therapy in the medium term, but not in the long term;</i> Medium term: 1 RCT, N = 164, RR = 0.62, 95%CI 0.42 to 0.91, $p = 0.015$ Long term: 1 RCT, N = 164, RR = 0.89, 95%CI 0.73 to 1.09, $p = 0.27$	
<b>Consistency in results</b>	Not applicable



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<b>Precision in results</b>	Precise
<b>Directness of results</b>	Direct
<b>Comparison 9</b>	<b>Supportive therapy plus case management vs. case management alone.</b>
<b>Summary of evidence</b>	<b>Low quality evidence (small to medium-sized samples, imprecise, direct) is unclear as to any benefit of supportive therapy in addition to case management compared to case management alone.</b>
<b>Mental state</b>	
<i>No significant differences between groups in relapse rates;</i> 1 RCT, N = 61, RR = 0.32, 95%CI 0.05 to 2.14, $p = 0.24$	
<b>Mortality and attrition</b>	
<i>No significant differences between groups in mortality or attrition;</i> Mortality (client-focused case management): 1 RCT, N = 84, RR = 2.61, 95%CI 0.11 to 62.26, $p = 0.55$ Mortality (standard case management): 1 RCT, N = 80, RR = 2.35, 95%CI 0.10 to 55.94, $p = 0.60$ Attrition (client-focused case management): 2 RCTs, N = 145, RR = 2.38, 95%CI 1.15 to 4.93, $p = 0.020$ , $I^2 = 26%$ , $p = 0.25$ Attrition (standard case management): 1 RCT, N = 80, RR = 0.88, 95%CI 0.52 to 1.51, $p = 0.64$	
<b>Consistency in results</b>	Not applicable
<b>Precision in results</b>	Imprecise
<b>Directness of results</b>	Direct
<b>Comparison 10</b>	<b>Supportive therapy plus skills training vs. skills training alone.</b>
<b>Summary of evidence</b>	<b>Low quality evidence (small samples, imprecise, direct) is unable to determine any differences between supportive therapy plus skills training compared to skills training alone.</b>
<b>Mental state</b>	
<i>No significant differences between groups for overall mental state, relapse, remission or hospitalisation;</i> Comprehensive Psychiatric Rating Scale: 1 RCT, N = 80, WMD = 0.10, 95%CI -0.08 to 0.28, $p =$	



0.26	
Relapse: 1 RCT, N = 80, RR = 1.00, 95%CI 0.49 to 2.04, <i>p</i> = 1.0	
Remission: 1 RCT, N = 80, RR = 0.78, 95%CI 0.54 to 1.12, <i>p</i> = 0.18	
Hospitalisation: 1 RCT, N = 80, RR = 1.14, 95%CI 0.46 to 2.85, <i>p</i> = 0.77	
<b>General functioning</b>	
<i>People receiving supportive therapy plus skills training showed significantly higher levels of global functioning;</i>	
Katz Adjustment Scale: 1 RCT, N = 80, WMD = 0.10, 95%CI 0.02 to 0.18, <i>p</i> = 0.013	
<b>Mortality and attrition</b>	
<i>No significant differences between groups in mortality or attrition;</i>	
Mortality: 1 RCT, N = 80, RR = 2.00, 95%CI 0.19 to 21.18, <i>p</i> = 0.56	
Attrition: 1 RCT, N = 80, RR = 1.00, 95%CI 0.35 to 2.84, <i>p</i> = 1.0	
<b>Consistency in results</b>	Not applicable
<b>Precision in results</b>	Imprecise
<b>Directness of results</b>	Direct

*Gottdiener WH, Haslam N*

**The benefits of individual psychotherapy for people diagnosed with schizophrenia: A meta-analytic review**

Ethical Human Sciences and Services 2002; 4(3): 163-187

[View review abstract online](#)

<b>Comparison</b>	<b>Supportive therapy vs. routine care or any other treatment, for people with schizophrenia (average treatment duration 20 months, 1 session per week).</b>
<b>Summary of evidence</b>	<b>Moderate to low quality evidence (precise, unable to assess consistency or sample size) is unclear as to any benefit of supportive therapy for symptom severity.</b>



<b>Mental state</b>	
<i>Supportive therapy showed a small to medium-sized benefit compared to any other treatment; 37 studies, N not reported, <math>r = 0.23</math>, 95%CI 0.00 to 0.44, <math>p = 0.05</math></i>	
<b>Consistency in results</b>	Unable to assess, no measure of heterogeneity is reported.
<b>Precision in results</b>	Precise
<b>Directness of results</b>	Indirect comparison (mixed control conditions combined).

<p><i>Turner DT, van der Gaag M, Karyotaki E, Cuijpers P</i></p> <p><b>Psychological Interventions for Psychosis: A Meta-Analysis of Comparative Outcome Studies</b></p> <p>American Journal of Psychiatry 2014; 171: 523-538</p> <p><a href="#">View review abstract online</a></p>	
<b>Comparison</b>	<b>Supportive therapy vs. any other psychosocial intervention.</b>
<b>Summary of evidence</b>	<b>Moderate to low quality evidence (mostly inconsistent, precise, indirect, large samples) suggests no differences between supportive therapy and other psychosocial interventions for symptoms.</b>
<b>Overall symptoms</b>	
<p><i>No significant differences between groups;</i></p> <p>All studies: 17 RCTs, N = 908, <math>g = 0.00</math>, 95%CI -0.21 to 0.11, <math>p &gt; 0.05</math>, <math>I^2 = 60.31\%</math>, <math>p &lt; 0.05</math></p> <p>Excluding studies with a high risk of bias: 10 RCTs, <math>g = 0.01</math>, 95%CI -0.30 to 0.32, <math>p &gt; 0.05</math>, <math>I^2 = 72.70\%</math>, <math>p &lt; 0.05</math></p> <p>Excluding studies with a low risk of bias: 9 RCTs, <math>g = -0.12</math>, 95%CI -0.30 to 0.05, <math>p &gt; 0.05</math>, <math>I^2 = 0\%</math>, <math>p &gt; 0.05</math></p> <p>Excluding studies with any risk of bias: 7 RCTs, <math>g = -0.08</math>, 95%CI -0.28 to 0.11, <math>p &gt; 0.05</math>, <math>I^2 = 0\%</math>, <math>p &gt; 0.05</math></p>	
<b>Positive symptoms</b>	



**Supportive therapy**

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<p><i>No significant differences between groups;</i></p> <p>All studies: 8 RCTs, <math>g = -0.14</math>, 95%CI -0.36 to 0.09, <math>p &gt; 0.05</math>, <math>I^2 = 31.90\%</math>, <math>p &gt; 0.05</math></p> <p>Excluding studies with a high or low risk of bias: 6 RCTs, <math>g = -0.05</math>, 95%CI -0.25 to 0.15, <math>p &gt; 0.05</math>, <math>I^2 = 6.27\%</math>, <math>p &gt; 0.05</math></p> <p>Excluding studies with any risk of bias: 5 RCTs, <math>g = -0.02</math>, 95%CI -0.27 to 0.23, <math>p &gt; 0.05</math>, <math>I^2 = 19.98\%</math>, <math>p &gt; 0.05</math></p>	
<p><b>Negative symptoms</b></p>	
<p><i>No significant differences between groups;</i></p> <p>All studies: 9 RCTs, <math>g = -0.12</math>, 95%CI -0.41 to 0.17, <math>p &gt; 0.05</math>, <math>I^2 = 56.87\%</math>, <math>p &lt; 0.05</math></p> <p>Excluding studies with a high or low risk of bias: 6 RCTs, <math>g = -0.21</math>, 95%CI -0.57 to 0.15, <math>p &gt; 0.05</math>, <math>I^2 = 62.52\%</math>, <math>p &lt; 0.05</math></p> <p>Excluding studies with any risk of bias: 5 RCTs, <math>g = -0.09</math>, 95%CI -0.45 to 0.27, <math>p &gt; 0.05</math>, <math>I^2 = 48.50\%</math>, <math>p &gt; 0.05</math></p>	
<b>Consistency in results</b>	Consistent for positive symptoms only.
<b>Precision in results</b>	Precise
<b>Directness of results</b>	Indirect comparison (mixed control conditions combined).

**Explanation of acronyms**

BPRS = Brief Psychiatric Rating Scale, CBT = Cognitive Behavioural Therapy, CI = Confidence Interval,  $d$  = Cohen's  $d$  and  $g$  = Hedges'  $g$  = standardised mean differences (see below for interpretation of effect size),  $I^2$  = the percentage of the variability in effect estimates that is due to heterogeneity rather than sampling error (chance),  $N$  = number of participants,  $p$  = statistical probability of obtaining that result ( $p < 0.05$  generally regarded as significant), PANSS = Positive and Negative Syndrome Scale, PSYRATS = Psychotic Symptoms Rating Scale,  $Q$  =  $Q$  statistic for the test of heterogeneity, RCT = randomised controlled trial, RR = relative risk, vs = versus, SANS = Scale for the Assessment of Negative Symptoms, WMD = weighted mean difference



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### Explanation of technical terms

\* Bias has the potential to affect reviews of both RCT and observational studies. Forms of bias include; reporting bias – selective reporting of results; publication bias - trials that are not formally published tend to show less effect than published trials, further if there are statistically significant differences between groups in a trial, these trial results tend to get published before those of trials without significant differences; language bias – only including English language reports; funding bias - source of funding for the primary research with selective reporting of results within primary studies; outcome variable selection bias; database bias - including reports from some databases and not others; citation bias - preferential citation of authors. Trials can also be subject to bias when evaluators are not blind to treatment condition and selection bias of participants if trial samples are small<sup>6</sup>.

† Different effect measures are reported by different reviews.

Prevalence refers to how many existing cases there are at a particular point in time. Incidence refers to how many new cases there are per population in a specified time period. Incidence is usually reported as the number of new cases per 100,000 people per year. Alternatively some studies present the number of new cases that have accumulated over several years against a person-years denominator. This denominator is the sum of individual units of time that the persons in the population are at risk of becoming a case. It takes into account the size of the underlying population sample and its age structure over the duration of observation.

Reliability and validity refers to how accurate the instrument is. Sensitivity is the proportion of actual positives that are correctly identified (100% sensitivity = correct identification of all actual positives) and specificity is the proportion of negatives that are correctly identified (100% specificity = not identifying anyone as positive if they are truly not).

Weighted mean difference scores refer to mean differences between treatment and comparison groups after treatment (or occasionally pre to post treatment) and in a randomised trial there is an assumption that both groups are comparable on this measure prior to treatment. Standardised mean differences are divided by the pooled standard deviation (or the standard deviation of one group when groups are homogenous), which allows results from different scales to be combined and compared. Each study's mean difference is then given a weighting depending on the size of the sample and the variability in the data. Less than 0.4 represents a small effect, around 0.5 a medium effect, and over 0.8 represents a large effect<sup>7</sup>.

Odds ratio (OR) or relative risk (RR) refers to the probability of a reduction ( $< 1$ ) or an increase ( $> 1$ ) in a particular outcome in a treatment group, or a group exposed to a risk factor, relative to the comparison group. For example, a RR of 0.75 translates to a reduction in risk of an outcome of 25% relative to those not receiving the treatment or not exposed to the risk factor. Conversely, a RR of 1.25 translates to an increased risk of 25% relative to those not receiving treatment or not having been exposed to a risk factor. A RR or OR of 1.00 means there is no difference between groups. A medium effect is considered if  $RR > 2$  or  $< 0.5$  and a large effect if  $RR > 5$  or  $< 0.2$ <sup>7</sup>. InOR stands for logarithmic OR where a InOR of 0 shows no difference between groups. Hazard ratios



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measure the effect of an explanatory variable on the hazard or risk of an event.

Correlation coefficients (eg,  $r$ ) indicate the strength of association or relationship between variables. They can provide an indirect indication of prediction, but do not confirm causality due to possible and often unforeseen confounding variables. An  $r$  of 0.10 represents a weak association, 0.25 a medium association and 0.40 and over represents a strong association<sup>7</sup>. Unstandardised ( $b$ ) regression coefficients indicate the average change in the dependent variable associated with a 1 unit change in the independent variable, statistically controlling for the other independent variables. Standardised regression coefficients represent the change being in units of standard deviations to allow comparison across different scales.

‡ Inconsistency refers to differing estimates of effect across studies (i.e. heterogeneity or variability in results) that is not explained by subgroup analyses and therefore reduces confidence in the effect estimate.  $I^2$  is the percentage of the variability in effect estimates that is due to heterogeneity rather than sampling error (chance) - 0% to 40%: heterogeneity might not be important, 30% to 60%: may represent moderate heterogeneity, 50% to 90%: may represent considerable heterogeneity and over this is considerable heterogeneity.  $I^2$  can be calculated from  $Q$  (chi-square) for the test of heterogeneity with the following formula;

$$I^2 = \left( \frac{Q - df}{Q} \right) \times 100\%$$

§ Imprecision refers to wide confidence intervals indicating a lack of confidence in the effect estimate. Based on GRADE recommendations, a result for continuous data (standardised mean differences, not weighted mean differences) is considered imprecise if the upper or lower confidence limit crosses an effect size of 0.5 in either direction, and for binary and correlation data, an effect size of 0.25. GRADE also recommends downgrading the evidence when sample size is smaller than 300 (for binary data) and 400 (for continuous data), although for some topics, these criteria should be relaxed.

|| Indirectness of comparison occurs when a comparison of intervention A versus B is not available but A was compared with C and B was compared with C that allows indirect comparisons of the magnitude of effect of A versus B. Indirectness of population, comparator and/or outcome can also occur when the available evidence regarding a particular population, intervention, comparator, or outcome is not available and is therefore inferred from available evidence. These inferred treatment effect sizes are of lower quality than those gained from head-to-head comparisons of A and B.



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