

# Could Music Group Therapy Improve Negative Symptoms of Schizophrenia?



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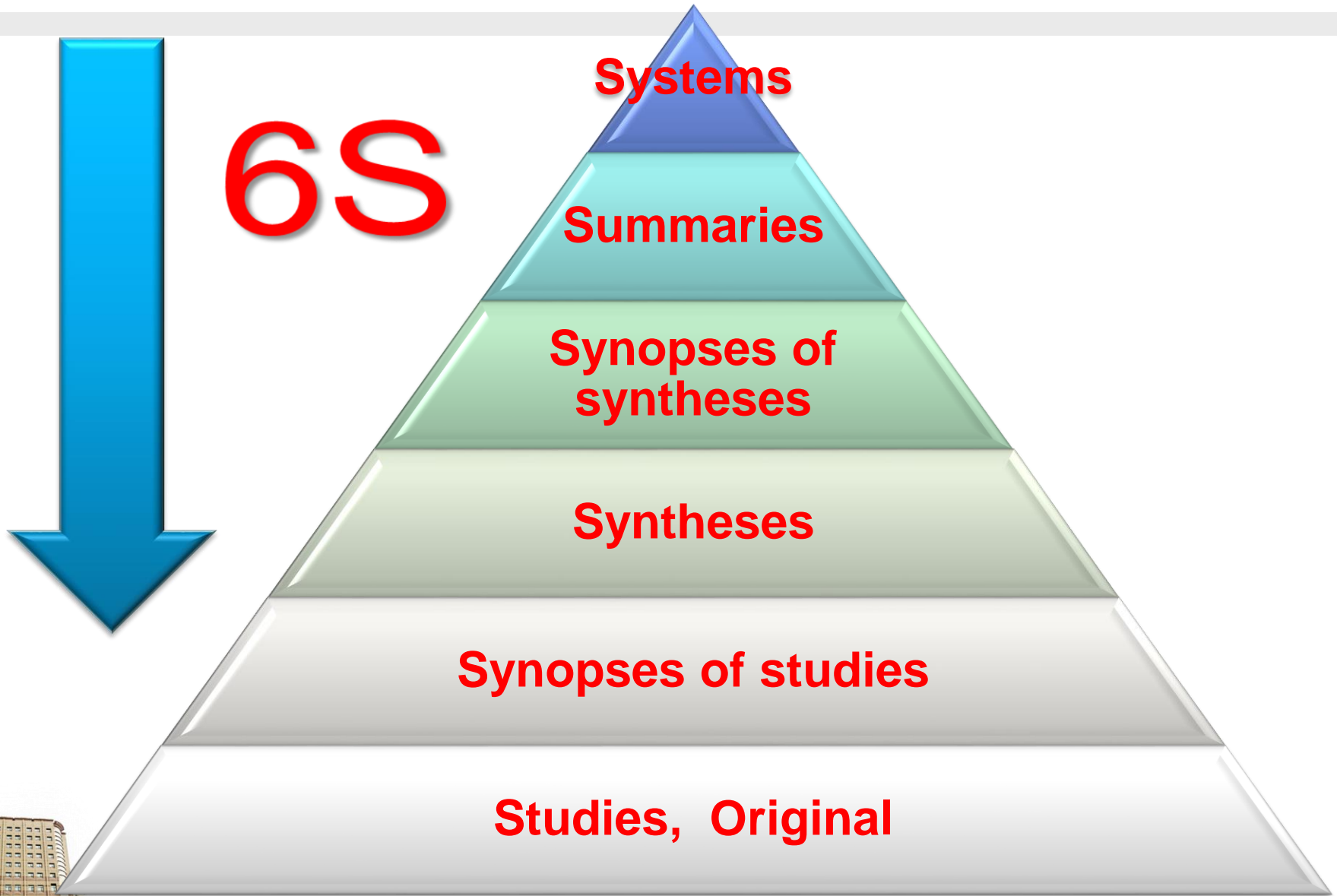
# Scenario



Negative symptoms of schizophrenia  
weakening or lack of normal thoughts,  
emotions or behaviors.



# Information Resources



# Background Knowledge

from UpToDate

- **Schizophrenia**
  - **positive symptoms**
    - » Hallucination, Delusions, Disorganizations
  - negative symptoms**
    - Affective flattening, Alogia, Apathy,  
Asociality/anhedonia
- **Treatment: medicine**
- **Add-on treatment: Music Therapy, CBT, Exercise Therapy...**



# Background Knowledge

## Negative symptoms

- **Assessment Tool:**
  - **SANS**  
(scale for the assessment of negative symptoms)
  - **BPRS**  
(brief psychotic rating scale)



# Background Knowledge

## Music Therapy

- **Music:** lyrics, tone
- **Music Therapy:** Music therapy is the use of interventions to accomplish individual goals within a therapeutic relationship by a professional who has completed an approved music therapy program .(American Music Therapy Association, 2013 )
- **The effect of music therapy:** cognitive functioning, motor skills, emotional development, social skills, and quality of life.
- **Music therapy – schizophrenia:** diminished negative symptoms such as flattened affect, speech issues, and anhedonia and improved social symptoms such as increased conversation ability, reduced social isolation, and increased interest in external events.(Tang, W.; X. Yao; Z. Zheng (1994).



# 5 stags of EBM

Asking an Answerable Questions (PICO)



Searching for Evidences



Critical Appraisal



Apply Back to PICO



Auditing Performance in Step 1-4



## 問題類型:治療型問題

PICO		MeSH Term
Patient/ population	schizophrenia	Schizophrenia and Disorders with Psychotic Features Schizophrenia, Paranoid Type Schizophrenia, Disorganized Type
Intervention	music therapy	same item
Comparison	standard care	
Outcome	negative symptoms	no items found

**PICO: Could Music Therapy Improve Negative Symptoms of Schizophrenia?**

Key words : schizo\* AND music therapy AND negative symptoms



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# Systemic review of RCTs -the best

Publication type :SR or RCT



Excluded: can't answer question



Included: match PICO, Best research design,  
last publish year, PDF available

Appraisal articles  
SR:1 RCT:3



# Articles

- Mössler, K., Chen, X. J., Haldal, T. O., Gold, C. (2011). Music therapy for people with schizophrenia and schizophrenia-like disorders. *Cochrane Database of Systematic Reviews* : Issue 12 of 12, December . DOI:0.1002/14651858.CD004025.pub3
- Mohammadi<sup>1</sup>, A. Z., Minhas, L. S., Haidari, M., & Panah, F. M. ( 2012 ) .A Study of the Effects of Music Therapy on Negative and Positive Symptoms in Schizophrenic Patients. *The German Journal of Psychiatry*, 15(2), 56-62. <http://www.gjpsy.uni-goettingen.de>
- Ulrich, G., Houtmans, T., & Gold, C. (2007). The additional therapeutic effect of group music therapy for schizophrenic patients: a randomized study. *Acta Psychiatrica Scandinavica*, 116(5), 362-370.
- Wang, Shu-Mai., Yeh, Mei-Yu., & Chang, Li-Yun. (2003). The Effects of Music Therapy for Chronic Psychotic Patients. *Chang Gung Nursing*, 14(4), 342-352.



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Mössler, K., Chen, X. J., Heldal, T. O., Gold, C. (2011). Music therapy for people with schizophrenia and schizophrenia-like disorders. Cochrane Database of Systematic Reviews : Issue 12 of 12, December DOI:0.1002/14651858.CD004025.pub3

# Critical Appraisal Skills Program



## CASP Systematic Review Checklist

10 questions to help you make sense of a review

### How to use this appraisal tool

Three broad issues need to be considered when appraising the report of a systematic review:

- Are the results of the review valid? (Section A)
- What are the results? (Section B)
- Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically.

The first two questions are screening questions and can be answered quickly. If the answer to both is "yes", it is worth proceeding with the remaining questions.

There is some degree of overlap between the questions, you are asked to record a "yes", "no" or "can't tell" to most of the questions. A number of prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

**These checklists were designed to be used as educational tools as part of a workshop setting**

There will not be time in the small groups to answer them all in detail!

# CASP- SR

1

• Did the review address a clearly focused question?

2

• Did the authors look for the right type of papers?

3

• Do you think all the important, relevant studies were included?

4

• Did the review's authors do enough to assess the quality of the included studies?

5

• If the results of the review have been combined, as it reasonable to do so?

6

• What are the overall results of the review?

7

• How precise are the results?

8

• Can the results be applied to the local population?

9

• Were all important outcomes considered?

10

• Are the benefits worth the harms and costs?

# CASP- SR

- **Did the review address a clearly focused question?**
- **Yes.** Focused on the effects of music therapy for negative symptoms of schizophrenia.
- **Did the authors look for the right type of papers?**
- **Yes.** To review the effects of music therapy, or music therapy added to standard care, compared with 'placebo' therapy, standard care or no treatment for people with serious mental disorders such as schizophrenia.
- **Do you think all the important, relevant studies were included?**
- **Yes.** They searched the Cochrane Schizophrenia Group Trials Register and supplemented this by contacting relevant study authors, hand searching of music therapy journals and manual searches of reference lists.

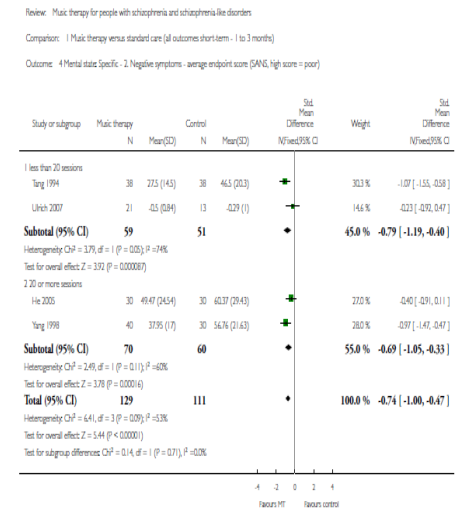


# CASP- SR

- Did the review's authors do enough to assess the quality of the included studies?
- **Yes.** Three authors assess
- If the results of the review have been combined, as it reasonable to do so?
- **Yes.** Reasonable to combined
- What are the overall results of the review?
- **Yes.** Meta-analysis forest flow

	Random sequence !	Allocation concealm	Blinding (performa	Incomplete outcome	Selective reporting (r	Other bias
Ceccato 2009	+	?	+	+	?	?
He 2005	?	?	?	?	+	-
Li 2007	?	?	?	+	+	?
Talwar 2006	+	+	+	+	+	+
Tang 1994	?	?	+	+	+	?
Ulrich 2007	+	?	+	+	+	+
Wen 2005	?	?	?	+	+	?
Yang 1998	?	?	?	?	+	+

Analysis 1.4. Comparison 1 Music therapy versus standard care (all outcomes short-term - 1 to 3 months), Outcome 4 Mental state: Specific - 2. Negative symptoms - average endpoint score (SANS, high score = poor).





# CASP- SR

- How precise are the **results**?
- **Yes.** -0.74 95% CI -1.00 to -0.47
- Can the results be **applied** to the local population?
- **Yes.** ICD or DSM diagnosis schizophrenia
- Were all important **outcomes** considered?
- **Yes.** Negative symptoms and positive symptoms.
- Are the **benefits** worth the **harms** and **costs**?
- **Yes.** global state, mental state (including negative symptoms) and social functioning improved. No harms.

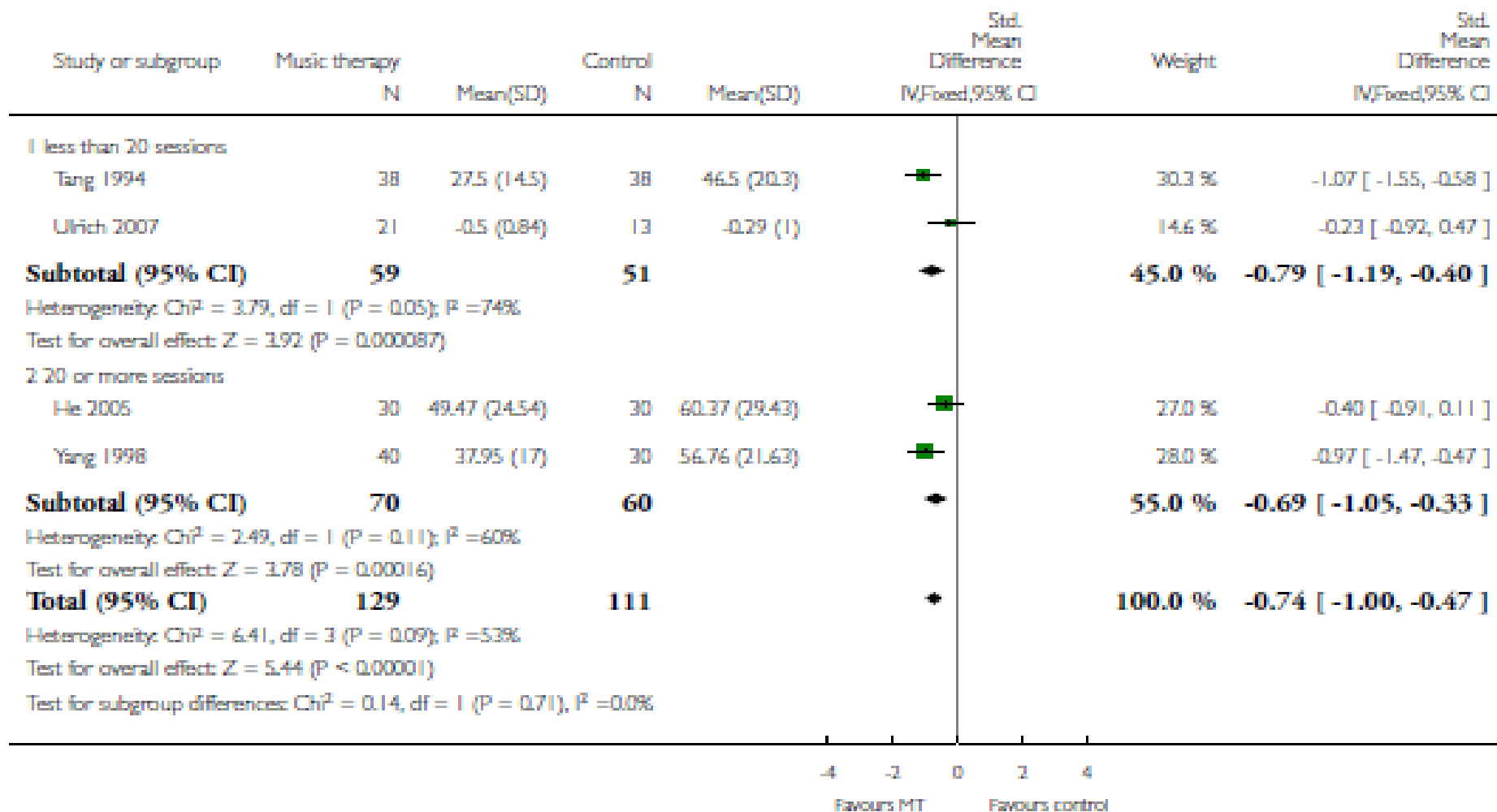


**Analysis 1.4. Comparison 1 Music therapy versus standard care (all outcomes short-term - 1 to 3 months), Outcome 4 Mental state: Specific - 2. Negative symptoms - average endpoint score (SANS, high score = poor).**

Review: Music therapy for people with schizophrenia and schizophrenia-like disorders

Comparison: 1 Music therapy versus standard care (all outcomes short-term - 1 to 3 months)

Outcome: 4 Mental state: Specific - 2. Negative symptoms - average endpoint score (SANS, high score = poor)



**Oxford Centre for Evidence-Based Medicine 2011 Levels of Evidence**

Question	Step 1 (Level 1*)	Step 2 (Level 2*)	Step 3 (Level 3*)	Step 4 (Level 4*)	Step 5 (Level 5)
<b>How common is the problem?</b>	Local and current random sample surveys (or censuses)	Systematic review of surveys that allow matching to local circumstances**	Local non-random sample**	Case-series**	n/a
<b>Is this diagnostic or monitoring test accurate?</b> (Diagnosis)	Systematic review of cross sectional studies with consistently applied reference standard and blinding	Individual cross sectional studies with consistently applied reference standard and blinding	Non-consecutive studies, or studies without consistently applied reference standards**	Case-control studies, or *poor or non-independent reference standard**	Mechanism-based reasoning
<b>What will happen if we do not add a therapy?</b> (Prognosis)	Systematic review of inception cohort studies	Inception cohort studies	Cohort study or control arm of randomized trial*	Case-series or case-control studies, or poor quality prognostic cohort study**	n/a
<b>Does this intervention help?</b> (Treatment Benefits)	Systematic review of randomized trials or <i>n</i> -of-1 trials	Randomized trial or observational study with dramatic effect	Non-randomized controlled cohort/follow-up study**	Case-series, case-control studies, or historically controlled studies**	Mechanism-based reasoning
<b>What are the COMMON harms?</b> (Treatment Harms)	Systematic review of randomized trials, systematic review of nested case-control studies, <i>n</i> -of-1 trial with the patient you are raising the question about, or observational study with dramatic effect	Individual randomized trial or (exceptionally) observational study with dramatic effect	Non-randomized controlled cohort/follow-up study (post-marketing surveillance) provided there are sufficient numbers to rule out a common harm. (For long-term harms the duration of follow-up must be sufficient.)**	Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning
<b>What are the RARE harms?</b> (Treatment Harms)	Systematic review of randomized trials or <i>n</i> -of-1 trial	Randomized trial or (exceptionally) observational study with dramatic effect			
<b>Is this (early detection) test worthwhile?</b> (Screening)	Systematic review of randomized trials	Randomized trial	Non-randomized controlled cohort/follow-up study**	Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning

\* Level may be graded down on the basis of study quality, imprecision, indirectness (study PICO does not match questions PICO), because of inconsistency between studies, or because the absolute effect size is very small; Level may be graded up if there is a large or very large effect size.

\*\* As always, a systematic review is generally better than an individual study.

**How to cite the Levels of Evidence Table**

OCEBM Levels of Evidence Working Group\*. "The Oxford 2011 Levels of Evidence".

Oxford Centre for Evidence-Based Medicine. <http://www.cebm.net/index.aspx?o=5653>

Question	Step 1 (Level 1*)	Step 2 (Level 2*)	Step 3 (Level 3*)	S (L
<b>How common is the problem?</b>	Local and current random sample surveys (or censuses)	Systematic review of surveys that allow matching to local circumstances**	Local non-random sample**	C
<b>Is this diagnostic or monitoring test accurate?</b> (Diagnosis)	Systematic review of cross sectional studies with consistently applied reference standard and blinding	Individual cross sectional studies with consistently applied reference standard and blinding	Non-consecutive studies, or studies without consistently applied reference standards**	C "i re
<b>What will happen if we do not add a therapy?</b> (Prognosis)	Systematic review of inception cohort studies	Inception cohort studies	Cohort study or control arm of randomized trial*	C ci q st
<b>Does this intervention help?</b> (Treatment Benefits)	Systematic review of randomized trials or <i>n</i> -of-1 trials	Randomized trial or observational study with dramatic effect	Non-randomized controlled cohort/follow-up study**	C st ci
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<b>What are the RARE harms?</b> (Treatment Harms)	Systematic review of randomized trials or <i>n</i> -of-1 trial	Randomized trial or (exceptionally) observational study with dramatic effect		
<b>Is this (early detection) test worthwhile?</b> (Screening)	Systematic review of randomized trials	Randomized trial	Non-randomized controlled cohort/follow-up study**	C o st



# CASP Randomised Controlled Trial Checklist

## 11 questions to help you make sense of a trial

### How to use this appraisal tool

Three broad issues need to be considered when appraising the report of a randomised controlled trial:

- Are the results of the trial valid? (Section A)
- What are the results? (Section B)
- Will the results help locally? (Section C)

The 11 questions on the following pages are designed to help you think about these issues systematically.

The first two questions are screening questions and can be answered quickly. If the answer to both is **yes**, it is worth proceeding with the remaining questions.

There is some degree of overlap between the questions, you are asked to record a **yes**, **no** or **can't tell** to most of the questions. A number of prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.





# Critical Appraisal Skills Program (CASP) Randomised Controlled Trials Checklist 31.05.13

Items	Mohammadil, Mi nha, Haidari, & Panah (2012)	Ulrich, Houtma ns, & Gold(2007)	Wang, Yeh, & Chang, (2003)
1. Did the trial address a clearly <b>focused</b> issue?	<b><u>YES</u></b> , focused schizophrenia and music therapy	<b><u>YES</u></b> , focused schizophrenia and music therapy	<b><u>YES</u></b> , focused schizophrenia and music therapy
2. Was the assignment of patients to treatments <b>randomised</b> ?	<b><u>YES</u></b> , 96 patients were randomly assigned a control group or 2 experimental group	<b><u>YES</u></b> , 37 patients were randomly assigned 2 group by dice.	<b><u>YES</u></b> , randomly assigned 2 group.

Items	Mohammadi, M inha, Haidari , & Panah (2012)	Ulrich, Houtm ans, & Gold(2007)	Wang, Yeh, & Chang, (2003)
3. Were all of the patients who entered the trial properly <b>accounted</b> for at its conclusion?	<u><b>Yes</b></u>	<u><b>No</b></u> , no Intention-to-treat analysis.	<u><b>Yes</b></u>
4. Were patients, health workers and study personnel <b>'blind'</b> to treatment?	<u><b>No</b></u> , patients and health workers no blind, study personnel unclear	<u><b>No</b></u> , patients and health workers no blind, study personnel unclear	<u><b>No</b></u> , patients and health workers no blind, study personnel unclear



Items	Mohammadi1, Mi nha, Haidari, & Panah (2012)	Ulrich, Houtma ns, & Gold(2007)	Wang, Yeh, & Chang, (2003)
5. Were the groups <b>similar</b> at the start of the trial?	<u>Yes, similar</u>	<u>Yes, similar</u>	<u>Yes, similar</u>
6. Aside from the experimental intervention, were the groups <b>treated equally</b> ?	<u>Yes,</u> Experimental 1 Active music therapy and standard care Experimental 2 Passive music therapy and standard care Control: standard care.	<u>Can't tell,</u> Experimental: music therapy and standard care Control: standard care and active, not description active.	<u>Can't tell,</u> Experimental: music therapy Control: no music therapy, not description.



Items	Mohammadi1, Mi nha, Haidari, & Panah (2012)	Ulrich, Houtma ns, & Gold(2007)	Wang, Yeh, & Chang, (2003)
7. How large was the treatment effect?	Experimental 1 &2 ANCOVA analysis SANS total p <.05	GLM analysis , SANS: except Apathy p =.06 , others p <=.05	Hu scare p <.05
8. How precise was the estimate of the treatment effect?	<b>Can't tell,</b> never description confounding factor	<b>Few sample , 37 patients, loss follow up 27.03%,</b> never description confounding factor and allocation concealment, Hawthorne Effect	<b>Few sample , 34 patients,</b> never description <b>confounding factor and</b> allocation concealment, Hawthorne Effect

Items	Mohammadi, Mi nha, Haidari, & Panah (2012)	Ulrich, Houtma ns, & Gold(2007)	Wang, Yeh, & Chang, (2003)
9. Can the results <b>be applied</b> in your context? (or to the local population?)	<u>Yes</u> , DSM-IV schizophrenia	<u>Yes</u> , ICD 10 schizophrenia	<u>Yes</u> , DSM-IV schizophrenia
10. Were all clinically important <b>outcomes</b> considered?	<u>Yes</u> , improve positive and negative symptoms	<u>Can't tell</u> , never description improve positive symptoms	<u>Can't tell</u> , never description improve positive symptoms

Items	Mohammadi1, Mi nha, Haidari, & Panah (2012)	Ulrich, Houtma ns, & Gold(2007)	Wang, Yeh, & Chang, (2003)
11. Are the <b>benefits</b> worth the harms and costs?	<u>Yes</u> , improve all symptoms, and more confident	<u>Yes</u> , improve negative symptoms, interpersonal activity, social relationship.	<u>Yes</u> , improve negative symptoms, attention, persist, interest.
Level	Level 3	Level 3	Level 3



Question	Step 1 (Level 1*)	Step 2 (Level 2*)	Step 3 (Level 3*)
<b>How common is the problem?</b>	Local and current random sample surveys (or censuses)	Systematic review of surveys that allow matching to local circumstances**	Local non-random sample
<b>Is this diagnostic or monitoring test accurate?</b> (Diagnosis)	Systematic review of cross sectional studies with consistently applied reference standard and blinding	Individual cross sectional studies with consistently applied reference standard and blinding	Non-consecutive studies, or studies without consistently applied reference standards**
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<b>What are the COMMON harms?</b> (Treatment Harms)	Systematic review of randomized trials, systematic review of nested case-control studies, <i>n</i> -of-1 trial with the patient you are raising the question about, or observational study with dramatic effect	Individual randomized trial or (exceptionally) observational study with dramatic effect	Non-randomized controlled cohort/follow-up study (post-marketing surveillance) provided there are sufficient numbers to rule out a common harm. (For long-term harms the duration of follow-up must be sufficient.)**
<b>What are the RARE harms?</b> (Treatment Harms)	Systematic review of randomized trials or <i>n</i> -of-1 trial	Randomized trial or (exceptionally) observational study with dramatic effect	
<b>Is this (early detection) test worthwhile?</b> (Screening)	Systematic review of randomized trials	Randomized trial	Non-randomized controlled cohort/follow-up study**

# Summary

**PICO:**

**Could** Music Therapy Improve  
Negative Symptoms of Schizophrenia?

**Conclusion:**

Music Therapy **Could** Improve  
Negative Symptoms of  
Schizophrenia.



# 5 stags of EBM

Asking an Answerable Questions (PICO)



Searching for Evidences



Critical Appraisal



Apply to PICO



Auditing Performance in Step 1-4



# Ethical Considerations

<b>Health of adaptation: benefits, no harm</b>	<b>Patient Preference: respect, autonomy</b>
<ul style="list-style-type: none"><li>◆ Improve negative symptoms will <b>benefit</b> patients</li><li>◆ Group norm can <b>not attack criticize</b> other members</li></ul>	<ul style="list-style-type: none"><li>◆ <b>Respecting</b> their preferences and <b>autonomous will</b>, not reluctantly join research.</li><li>◆ After adding research can still <b>exit</b>.</li></ul>
<b>Quality of life: benefits, not harm, autonomy</b>	<b>Other situational: trustworthiness, fairness</b>
Music therapy can enhance learning and enhance <b>interpersonal skills</b> , speaking skills and attention, express emotion, the patient may be	<ul style="list-style-type: none"><li>● Groups principle of <b>confidentiality</b> and <b>avoid exposure</b> group members' <b>privacy</b>.</li></ul>

# Clinical applicability



**Where:** Acute psychiatric ward

**Who:** Inpatient, schizophrenia

**What:** music therapy

**How:** Group model

**How:** Assessment tool

**When:** 1230pm~1330pm, BIW

**Why:** improve negative symptoms





# Cost-benefit assessment

Improve negative symptoms maybe Increase patient capacity

**Group model**

Less equipment cost

nursing salary around 10 dollars/hour , cost 20dollars

**Summary:** Music therapy is the least expensive of the treatment, but the patient's help, to improve the symptoms of increased motivation and vitality, much better than costs.

EBN term



Medical team meeting



Subjects conditions

- Age: Over 20 years old
- Diagnosis: schizophrenia
- Ability: could declare and sign name
- Exclude: confusion, violence and escape condition



# Conference Room

No interference

Groups mode: Listen, sing,  
chorus, game, improvisation  
accompaniment, telling  
feelings



## Group program

- Experimental term **8 times group, BIW**
- **Topic:** children songs, cartoon songs, Taiwanese songs, Chinese songs, pop songs, country songs, light music, and classical
- Groups mode: Listen, sing, chorus, game, improvisation accompaniment, telling feelings
- **Group member:** 3~10 person
- Leading: leader, co-leader
- **Group rule:** confidentiality, no criticism

## Assessment tool

- Pre-test, Post-test
- Four tool: BPRS, SANS, MMSE, IFS

## Statistics

- SPSS



簡短精神症狀量表(BPRS)

# BPRS

項目/評分	無 不確定 輕度 中度 重度				
	0	1	2	3	4
1.思考缺乏組織 (可以告訴我你來這裡的原因?)					
2.不尋常的思考 (想法有點奇怪=1;想法脫離現實=3)					
3.幻覺 (你曾聽到有人說話的聲音,但看不到說話的人?)					
4.定向感不良與意識混淆 (今天是哪一年/月/日?)					
5.敵視 (你覺得你可以信任別人?)					
6.懷疑性 (你會不會覺得有人對你不利?)					
7.擔心身體健康 (你覺得自己身體的健康狀況怎樣?)					
8.心理焦慮					
9.情緒無法投入					
10.情感遲滯 (表情不自然=1;表情減少=2;完全無表情=4)					
11.自貶與愧疚 (你會不會覺得自己做錯了什麼事?)					
12.憂鬱情緒 (近一星期你的心情大部分是好還是不好?)					
13.身體緊張					
14.不尋常動作					
15.誇大言行 (你會不會覺得自己在某方面比別人特別?)					
16.行為遲滯 (速度慢=1;說話次數明顯少=2;無法會談=4)					
17.會談不合作 (保留=1;防衛=2;無法談完=3;拒絕=4)					
18.行為激動 (易生氣=1;偶暴力/自殘=2;需約束=4)					

# IFS (interpersonal functions scale)

人際互動功能量表

姓名: \_\_\_\_\_

請判斷以下的描述與您目前的符合程度,「勾選」一個您認為最適當的答案,謝謝您的合作。

填寫日期: \_\_\_\_\_ 年 \_\_\_\_\_ 月 \_\_\_\_\_ 日 \_\_\_\_\_

	極不符合	極者不符合	極者符合	極符合
1 我從不喜歡走近人群。				
2 有空的時候,我總喜歡獨自創造有人的地方走走。				
3 對周圍事物,我不感什麼興趣。				
4 和別人在一起,我總感到不舒服。				
5 我覺得整大器在被忽視感覺並非最舒服的事情。				
6 有時我會因看到人群的某些某物地不安或感惱。				
7 世界上沒有一個人我喜歡和他交往。				
8 比較喜歡人接觸。				

自性症狀量表評分表(SANS)

病人姓名: \_\_\_\_\_ 日期: \_\_\_\_\_ 評量者: \_\_\_\_\_  親友  護理 編號: \_\_\_\_\_

項目/評分	無 不確定 輕度 中度 重度				
	0	1	2	3	4
三、情感遲滯 (以會談過程為標準)					
1.減少面部表情 <input checked="" type="checkbox"/> 得宜 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部表情減少=2; 面部表情減少=3; 面部表情減少=4					
2.減少面部動作 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
3.缺乏表達性動作 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
4.缺乏視線接觸 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
5.缺乏面部反應 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
6.面部表情反應 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
7.缺乏面部變化 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
8.情感遲滯綜合評分					
四、言語及語言質化					
9.言語質化 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
10.言語內容質化 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
11.語言中斷 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
12.言語反應遲鈍 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
13.言語及語言綜合評分					
五、個人衛生					
14.個人衛生 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
15.工作或學業或會談活動障礙 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
16.缺乏精力(精力) <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
17.缺乏意識綜合評分					
六、休閒興趣及活動					
18.休閒興趣及活動 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
19.性親及性活動 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
20.缺乏親密關係 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
21.親朋及同學的關係 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
22.缺乏生活(興趣)及社交綜合評分					
七、社會力					
23.社交場合或會談活動力不足 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
24.精神狀態或精神活動力不足 <input checked="" type="checkbox"/> 正常 <input checked="" type="checkbox"/> 減少 <input checked="" type="checkbox"/> 面部動作減少=2; 面部動作減少=3; 面部動作減少=4					
25.社會力綜合評分					

# SANS

臺中榮民總醫院 精神科 MMSE 量表

姓名: \_\_\_\_\_ 案別號: \_\_\_\_\_ 學歷: \_\_\_\_\_

得分: \_\_\_\_\_ 測驗內容 總分: \_\_\_\_\_

\_\_\_\_ (5) 現在是民國 \_\_\_\_\_ 年 \_\_\_\_\_ 月 \_\_\_\_\_ 日,星期 \_\_\_\_\_,季節: \_\_\_\_\_

\_\_\_\_ (5) 這裡是 \_\_\_\_\_ (市) \_\_\_\_\_ (路) \_\_\_\_\_ (醫院) \_\_\_\_\_ (科) \_\_\_\_\_ (樓)

\_\_\_\_ (3) 請跟著我說,並記住下列三樣東西:  香蕉,  雨傘,  腳踏車

\_\_\_\_ (5)  100-7,  93-7,  80-7,  79-7,  72-7 (每題得一分);  
(或) 列出5個字 (每字唸一秒) 科學博物館、台中市政府 (每字得一分)

\_\_\_\_ (2) 拿出  手錶 和  筆 給我看,請寫出它們的名字 (每題得一分)

\_\_\_\_ (1) 請跟著我說: 台語:  有無往真趣味,國語:  有無無不自在  
(或) 做收帳, 狗咬狗, 狗咬狗, 狗咬狗。 (國台語皆可重複交叉測試)

\_\_\_\_ (3) 請照吩咐做下面三個步驟: (每題得一分)  
 用你的左手拿這張紙,  把紙對摺一次,  再把紙放在地上

\_\_\_\_ (1) 唸一次,並且跟著做: **閉上眼睛** (得一分)

\_\_\_\_ (1) 寫完整句子: \_\_\_\_\_ (含主動詞得一分)

\_\_\_\_ (1) 請依下面的圖形畫在右側空白處: (兩角交叉畫出完整的十字,得一分)



# MMSE

\_\_\_\_ (3) 你還記得剛剛說的三樣東西嗎? ( 香蕉,  雨傘,  腳踏車)

請問病人有否下列狀況:

- 不合作
- 方言謬言
- 聽力不良
- 視力不良
- 意識不清楚
- 其他,請說明: \_\_\_\_\_

# Difficulties in the process of implementation

Exclude acute confusion, there are still positive symptoms

using music game, playing or singing symptoms can be distracting

**Fewer members of group**

Participated in eight groups for post-test  
Continue to participate



# 5 stages of EBN

Asking an Answerable Questions (PICO)



Searching for Evidences



Critical Appraisal



Apply Back to PICO



Auditing Performance in Step 1-4



# Result

*Tab1 Simple Statistics of the Categorical Variables*

		experimental (n=53)		control (n=55)		p
Gender	man	26	49.1%	23	41.8%	0.574
	feman	27	50.9%	32	58.2%	
Anti-psychosis	Typical	9	17.0%	9	16.7%	0.117
	Non-typical	40	75.5%	45	83.3%	
	Both	4	7.5%	0	0%	
Marriage	married	9	17.0%	10	18.2%	0.807
	single	40	75.5%	39	70.9%	
	divorce	4	7.5%	6	10.9%	
Education	literacy	2	3.8%	1	1.8%	0.621
	Primary school	1	1.9%	3	5.5%	
	junior school	10	18.9%	6	10.9%	
	High school	16	30.2%	19	34.5%	
	college	24	45.3%	26	47.3%	
Religion	yes	28	52.8%	32	58.2%	0.714
	no	25	47.2%	23	41.8%	
Job	yes	11	20.8%	9	16.4%	0.734
	no	42	79.2%	46	83.6%	

P for Chi-square test





# Result

**Tab2 Distributions independent samples test of experimental and control term**

	experimental (n=53)		control (n=55)		p
	mean,	SD	mean,	SD	
Age	40.05	10.79	41.28	10.57	0.549
Group times	7.02	1.43	0	0	
First onset age	27.38	9.05	27.40	10.52	0.992
IFS pre-test	16.60	4.95	16.96	5.35	0.718
BPRS pre-test	21.60	11.25	16.96	9.76	0.025
SANS pre-test	42.47	23.39	33.40	23.11	0.045
IFS post-test	15.11	4.73	15.55	4.65	0.633
BPRS post-test	9.92	8.78	13.31	9.51	0.058
SANS post-test	16.38	14.80	27.76	20.48	0.001
MMSE pre-test	26.23	3.32	26.02	4.08	0.772
MMSE post-test	27.43	3.04	26.84	3.56	0.351

P for independent samples test



# Result

*Tab 3 Pair-t test of experimental and control term*

Post-pre test	experimental			control			p
	N	Mean	SD	N	Mean	SD	
MMSE	53	1.21	2.63	55	0.82	3.09	0.482
SANS	52	-25.90	20.08	54	-5.98	18.19	0.000
BPRS	53	-11.68	11.43	54	-3.46	9.60	0.000
IFS	53	-1.49	5.19	55	-1.42	4.04	0.936

Pair-t test



# Discussion

- **Music Therapy Could Improve Negative Symptoms of Schizophrenia.**
- **Group leader need to consider the culture and patients' condition, leading and adjusting group process.**
- **Music therapy is a safe and economy method to use in schizophrenia patients.**



# Thank You



**VGHTC TAIWAN**

Taichung Veterans General Hospital