Cognitive Stimulation Therapy (CST) for People with Dementia: Training Workshop





FIRST IN WHOLE PERSON HEALTHCARE





Presenters

Marla Berg-Weger, PhD., LCSW Executive Director, Geriatric Education Center School of Social Work Saint Louis University, Saint Louis, MO Max Zubatsky, PhD., LMFT Associate Professor Program Director Medical Family Therapy Program Saint Louis University, Saint Louis, MO

Angela Sanford, MD Assistant Professor Department of Internal Medicine Division of Geriatric Medicine Saint Louis University, Saint Louis, MO

Janice Lundy, MA, MHA, BSW, CDP Director of Social Work and Geriatric Care Management Perry County Memorial Hospital, Perryville, MO **Debbie Blessing,** BS GWEP Project Coordinator A.T. Still University, Kirksville, MO

Speaker Disclosures

Marla Berg-Weger

- HRSA
- Beaumont Faculty Development Fund
- MAOI Technologies

Janice Lundy

• HRSA

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U1QHP28716 Geriatrics Workforce Enhancement Program for \$750,000. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS, or the U.S. Government.

Debbie Blessing

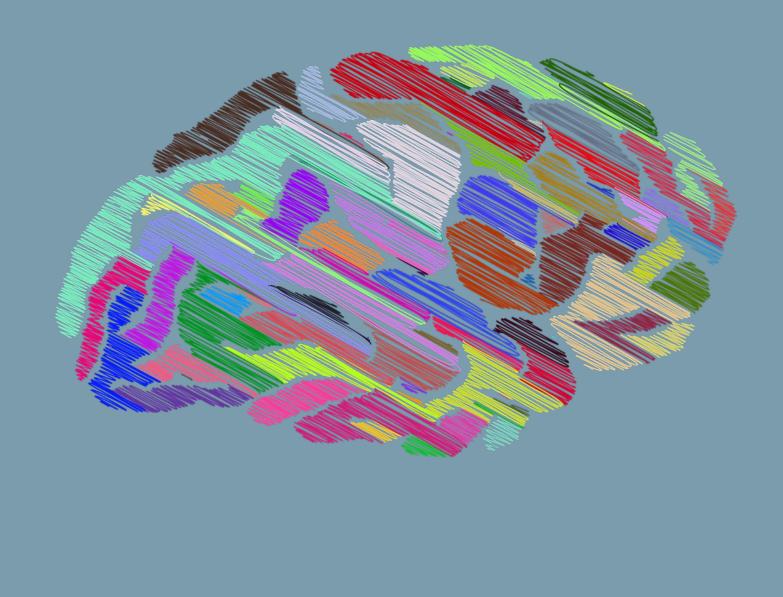
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Objectives of Training

- 1. To reflect on the different perspectives of dementia.
- 2. To consider key psychosocial approaches for dementia.
- 3. To learn about how CST was designed and evaluated.
- 4. To become familiar with CST sessions and demonstrate competency in application.
- 5. To understand how to apply the key principles to CST and demonstrate competency in use.
- 6. To develop a plan for running CST groups, which considers issues around implementation.

Non-pharmacological Interventions for Dementia:

- Different perspectives of dementia
- Overview of psychosocial therapies for dementia



Medical Model of Dementia*

Predominantly used in assessment, formulation and treatment. Assumes that dementia is:

- A disease.
- Caused by organic (neurological) problems.
- Treated and managed according to medical authority.

Advantages:

- •Can help communication amongst professionals.
- •Can help people and families come to terms with diagnosis.

Disadvantages:

- •Medication has limited effects and is not suitable for all.
- •Symptoms can be attributed to 'the dementia', without consideration of wider issues.



Dialectical Model of Dementia *

- Presents dementia as an interrelationship between neurological damage and psychological factors.
- **Dementia** = personality + biography + health + neurological impairment + impairment + social psychology.
- Model used to emphasise the importance of 'personhood' and person-centered care, which has had great impact on how dementia is viewed.



A Biopsychosocial Model of Dementia*

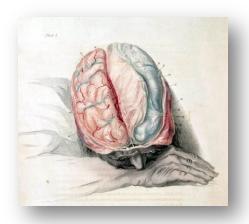
DEMENTIA = NF + MS + SP + P + SS + E + PH + LE + M

- NF = Neurological Factors
- MS = Mental Stimulation
- SP = Social Psychology
- P = Personality
- SS = Sensory Stimulation
- E = Environment
- PH = Health
- LE = Life Events
- M = Mood



Neurological Factors

- Different types of dementia defined by different pathologies.
- For example, Alzheimer's involves atrophy (shrinkage) of the brain, plaques and tangles. Vascular Dementia involves restriction or loss of blood supply to the brain which destroys small areas of brain cells.
- No direct relationship between degree of brain pathology and dementia.
- Cases of advanced dementia with limited neurological damage at post-mortem **and** substantial neurological damage with limited dementia symptoms.
- A degree of cerebral atrophy in healthy aging.



Mental Stimulation (MS)

- 'Use it or lose it'*: Mental activity can lead to new learning and increased cognitive functioning in dementia.
- Can lead to new neuronal pathways being formed / neuroplasticity.



*Swaab DF (1991). Brain Aging and Alzheimer's disease. "Wear and Tear" versus "Use it or lose it". Neurobiology of Aging, 12: 317-324.

Social Psychology (SP)

- Describes how the way that people are treated and spoken to by others impacts on their wellbeing and behavior.
- Kitwood's 'Malignant Social Psychology'*: 17 common factors which Kitwood argued can exacerbate the symptoms of dementia, such as:
 - **Disempowerment:** Not allowing a person to use their abilities.
 - Infantilization: Treating a person like a child.
 - **Outpacing:** Acting or behaving at a rate too fast for a person to follow or understand.



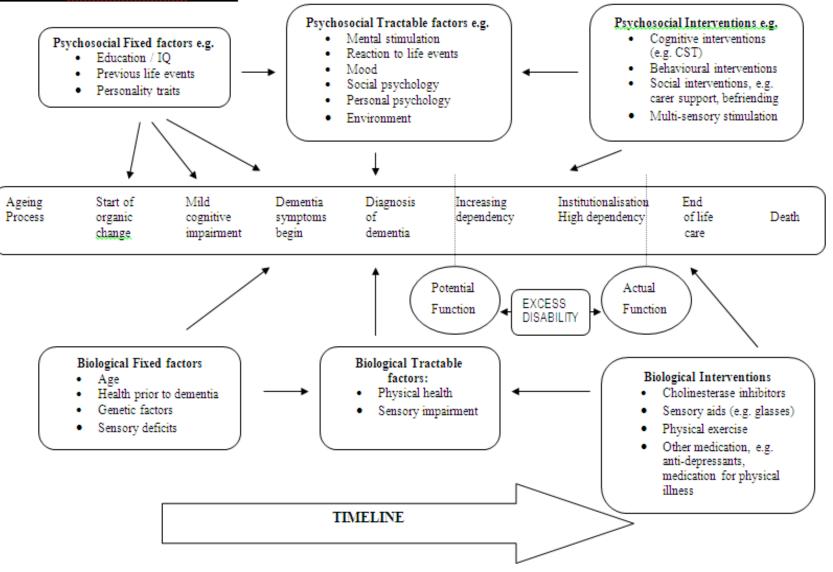
- High incidence of impairment in all senses in older people.
- For people with dementia, effects are likely to be exaggerated, due to inattention or difficulty in selecting appropriate information.
- Hebb (1953) demonstrated that students placed in sensory isolation can experience hallucinations. Care settings often provide little sensory input.



Other Factors

- **Personality**: including coping mechanisms, intelligence and cognitive reserve*.
- **Environment**: presence of memory aids and supports such as signposts, door markings, reminders.
- **Physical Health**: medication may impact on mood and increase confusion-pain itself may impact on symptoms of dementia.
- Life events: dramatic life events such as loss of important others or move into care can trigger dementia or exacerbate symptoms.
- **Mood**: significant overlap between depression, anxiety and dementia.

Figure 1: The Biopsychosocial model



*Spector A and Orrell M (2010). Using a Biopsychosocial model of dementia as a tool to guide clinical practice. International Psychogeriatrics, 22 (6): 957-965.

Examples of Psychosocial Therapies for Dementia



Reality Orientation*

- "The presentation and repetition of time, place and person related information".
- Made important impact in 1960s: one of first non-drug interventions for dementia.
- 24 hour RO (used in every interaction) versus group RO. Tasks included maps, categorizing words /objects, food, current affairs.
- RO boards: contain information such as day, date, next meal, weather, news headline, name of home, daily activities.
- Some evidence-base for its effectiveness** but rarely used in practice since.



*Folsom JC (1966). Reality Orientation for the elderly mental patient. Read at 122nd annual meeting of American Psychiatric Association, May 1966. **Spector A, Orrell M, Davies S & Woods B (2000). A systematic Review of the use of Reality Orientation in dementia. The Gerontologist, 40 (2): 206-212.

Reminiscence Therapy*

- Discussion about the past, often using prompts (e.g. pictures, objects, music) with groups or individuals (e.g. life review books).
- Focuses on long-term memory, the last to deteriorate in dementia.
- Cochrane review^{**}of 16 studies including 4 multi-center RCTs showed improvements in cognition and mood following individual sessions and in communication following group sessions.
- Greatest effects on quality of life were found in care homes. Overall, effect sizes were very small and diversity of approaches made it hard to compare studies.





Validation Therapy*

- An approach that focuses on the emotional meaning of what people say or do, rather than the factual content.
- Instead of orientating to facts or reinforcing the disorientated perception, use active, empathic listening.
- Emotions are not right or wrong, but always real.
- Cochrane review** highlighted lack of evidence-base.



*Feil N (1992). Validation Therapy with late onset dementia populations. In: Jones GMM and Meisen BML (Eds). Care-giving in dementia: Research and applications, vol 1. London: Routledge.**Neal, M., & Briggs, M. (2003). Validation therapy for dementia. *Cochrane Database Syst Rev, 3*(3).

Multisensory Stimulation

- Stimulating the senses through sound, taste, touch, smell and visual images.
- Snoezelen rooms: calming music, visual stimulation from fibre optics and lava lamps, aromatherapy, etc.
- Some evidence-base* showing immediate effect on mood during the sessions, not maintained over time. Promising effects on cognition in small studies, but systematic review included mostly methodologically weak studies (including underpowered or uncontrolled).
- Too much stimulation can be unhelpful or distressing. Can be incorporated into other techniques.



Exercise

A growing number of studies suggest that physical activity and exercise have positive effects on cognitive function of the elderly.

Guidelines for Exercise in Older Adults

American College of Sports Medicine and the American Heart Association

- Aerobic Exercise
 - Moderate Intensity; 30 minutes/day; 5 days/week
 - Vigorous Intensity; 20 minutes/day; 3 days/week
- Resistance Exercise
 - At least 2 nonconsecutive days/week
 - Eight to ten exercises
- Flexibility Exercise
 - At least 2 days/week for at least 10 minutes
- Balance Exercise

World Health Organization recommend people over the age of 65 in order to prevent cognitive decline should participate in:

150 minutes weekly of moderate-intensity aerobic or 75 minutes of vigorous-intensity with additional muscle-strengthening exercise.



Effects of physical activity and exercise on the cognitive function of patients with Alzheimer disease

Meta-analysis was used to explore if physical activity and exercise can exert positive effects on cognition of elderly with AD and subgroup analysis were conducted to find out if there are dose-response effect

- 13 randomized controlled trials were included (673 subjects) diagnosed with AD.
- Compared moderate-intensity exercise interventions.

Results

Intervention groups showed a statistically significant improvement in cognition measured by the MMSE score (SMD = $1.12 \text{ CI:} 0.66 \sim 1.59$) compared to the control groups. Subgroup analysis showed different amounts of physical activity and exercise can generate different effects.

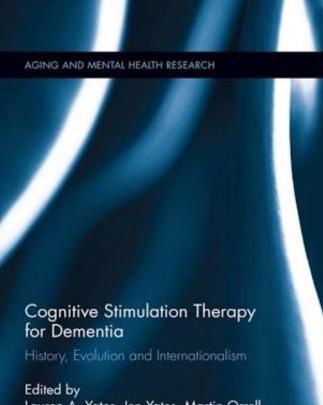
- Cognitive functions of high frequency interventions was not greater than that of low frequency interventions
- 30 min exercise sessions had greater effectiveness for improving cognition compared to those conducted more than 30 min per session.
- Up to 2hrs per week slightly greater effectiveness than more than 2hr per week.

Exercise for cognitive brain health in aging: A systematic review for an evaluation of dose.

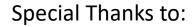
- 98 RCTs evaluating physical exercise to influence cognitive performance in 11,061 older people.
- Assessed various exercise modes (comprising aerobic, resistance, combined, mind-body exercises).
- The average exercise dose from all included studies was 1 hour a day, 3 times per week, for 60 hours distributed over 25 weeks.
- No relationships between cognitive improvements and session time, exercise frequency, intensity, and weekly minutes.
- Improvements in processing speed/attention, executive function, and global cognition are most stable and consistently associated with exercise participation.

Introduction to Cognitive Stimulation Therapy

 Historical Perspective
Development and Evidence

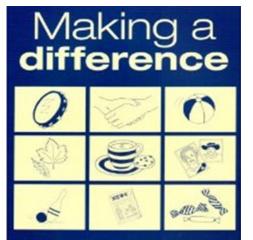


Lauren Á. Yates, Jen Yates, Martin Orrell, Aimee Spector, and Bob Woods



Cognitive Stimulation Therapy (CST)





An evidence-based group programme to offer cognitive stimulation therapy (CST) to people with dementia **The manual for group leaders** Aimee Spector, Lene Thorgrimsen

Bob Woods, Martin Orrell Publication of the Journal for Dementia Care

2006







An evidence-based group programme o offer maintenance cognitive stimulation therap (CST) to people with dementia

The manual for group leaders

Elsa Aguirre, Aimée Spector, Amy Streater Juanita Hoe, Bob Woods, Martin Orrell Published by **The Journal of Dementia Care**

2011



Individual Cognitive Stimulation Therapy: A manual for carers VOLUME THREE

Aimee Spector, Bob Woods, Vasiliki Orgeta Published by **The Journal of Dementia Care**





2020

Cognitive Stimulation Therapy: Defined

- Cognitive Stimulation Therapy (CST) is an evidence-based group intervention for persons with mild to moderate dementia.
- CST provides guidelines for structuring small, theme-based group or individual sessions aimed at actively stimulating and engaging, while providing an optimal learning environment and the social benefits of a group or one-on-one interaction.



How did CST come about?

- Mid-nineties interest in positive non-drug approaches to dementia care.
- Promising drug trials with rigorous methodology e.g. tacrine.
- Woods & Orrell editorial (1996)*: 'Tacrine & psychological therapies in dementia no contest?'
 - Psychological therapies as serious competitors to drugs.
 - Low quality of methodology of studies evaluating psych approaches.
 - Standard, sensitive instruments of measurement evaluating a range of outcomes in order to compare to drug trials.
 - Funding bodies should encourage large scale, robust, multi site studies inc. cost/benefits analysis.
- Funding secured for the development of a psychological therapy package for dementia.

Development of CST

- CST developed through systematic reviews of literature and pilot study*.
- 14 session program with themed activities (e.g. food, childhood).
- Designed to run twice a week for 7 weeks.

*Spector A, Orrell M, Davies S, Woods B (2001) Can reality orientation be rehabilitated? Developing and piloting of an evidence-based programme of cognition-based therapies for people with dementia. *Neuropsychological Rehabilitation* 11, 3\4, 377-397.

Original CST Study (2003)

- Multi-center, single-blind RCT of CST (14 sessions, 7 weeks delivered by researchers) vs. Treatment as Usual
- N=201 across 18 care homes & 5 day centers

Key findings

• Participants assessed at baseline and post CST/Treatment as Usual (7 weeks)







Cost-effective compared to anticholinesterase inhibitors

Improvements in quality of life

CST Trial

- *201 participants* who:
 - Met DSM IV criteria for dementia.
 - Scored 10-24 on MMSE (mean score = 14).
 - Did not have significant visual or auditory impairments.
 - Did not have learning disability or major physical health problem.
 - Were not on dementia medication.
- Groups run by two facilitators. Approximately 5 people in each group, others received treatment as usual.

CST Trial: Results*

- Cognition: Mini-mental state examination (brief, widely adopted screening tool): significant improvement following CST (p=0.04). ADAS-Cog (more detailed scale measuring cognition, used in drug trials): significant improvement following CST (p = 0.01).
- Quality of Life:

QoL-AD (brief questionnaire covering 13 areas of QoL, rated by person with dementia): sig. improvement following CST (p = 0.03).

CST Trial: Results*

- Adas-Cog divides into three subscales:
 - Memory and new learning
 - Language
 - Praxis
- Only significant subscale was language (p<0.05), which includes commands, spoken language, naming, word-finding and comprehension.
- No significant changes in functional ability (CAPE-BRS), depression (Cornell) or anxiety (RAID), although a major limitation was changes in proxy raters pre-post the study.
- Communication (Holden): positive trends (p = 0.09).

Comparison with Dementia Drugs

• CST as effective as Galantamine and Tacrine.

- For CST, 6 people need to be treated in order for one to improve by 4 or more points on the ADAS-Cog.
- Substantially better than Rivastigmine or low dose (5mg) Donepezil (4 or more points on ADAS-Cog).

^{*}Livingston, G., & Katona, C. (2000). How useful are cholinesterase inhibitors in the treatment of Alzheimer's disease? A number needed to treat analysis. *International Journal of Geriatric Psychiatry*, 15(3), 203-207.

Qualitative Research*

- 34 participants (people with dementia, carers and staff) participated in individual interviews and focus groups.
- Asked about experiences of CST positive or negative.
- Key themes emerging:
 - Positive experiences of being in group (e.g. supportive and non-threatening).
 - Changes generalized into everyday life: improvement in mood and confidence (finding talking easier), changes in concentration and alertness (wanting to attend to things more).

Quotes from people with dementia

"I noticed people becoming more fluent and you could see people trying to express themselves more."

"We just enjoyed ourselves; there's an awful lot of laughter."

"It helped all of us know we were in the same boat."

"I can relax, we share the same problem and all like coming, otherwise we wouldn't be here."



Long-term benefits: Maintenance CST *

- Included 237 people with mild to moderate dementia who had previously received 14 sessions of CST. A third of the sample was on dementia medication.
- Intervention: weekly, 24-session program of Maintenance CST (MCST) compared to treatment as usual.
- MCST improved quality of life at 3 and 6 months, and activities of daily living at 3 months.

Long-term benefits: Maintenance CST

- Cognition was higher in MCST group but the difference was not significant.
- Sub-analysis indicated that MCST appeared to be effective irrespective of whether or not dementia medication was prescribed.
- Greatest improvements showed in the medication plus MCST group.
- Conclusions: There is good evidence for the benefits of continuing CST beyond the initial program. While people are still willing and able, CST should be continued.

Cost-effectiveness of CST/MCST

- Analysis conducted in conjunction with London School of Economics (LSE)*.
- Incremental cost-effectiveness ratio: balancing cost difference between CST and usual activities with benefits.
- Compared cost of health and social care use (including GP visits, inputs from unpaid carers) between treatment and control groups.
- Both CST and MCST are cost-effective.



D'Amico F, Rehill A, Knapp M, Aguirre E, Donovan H, Hoare Z, Hoe J, Russell I, Spector A, Streater A, Whitaker C, Woods RT, Orrell M (2015). Maintenance cognitive stimulation therapy: an economic evaluation within a randomised controlled trial. *Journal of the American Medical Directors Association*, 16 (1): 63-70.

Knapp M, Thorgrimsen L, Patel A, Spector A, Hallam, A, Woods B, Orrell M (2006) Cognitive Stimulation Therapy for dementia: is it cost effective? British Journal of Psychiatry, 188: 574-580.

Neuropsychological Mechanisms of Change*

- 34 participants given detailed neuropsychological test battery before and after 7 weeks (14 sessions) of CST.
- Significant improvements (p<0.05) in verbal memory, non-verbal memory, language comprehension and orientation.
- No significant changes in executive function, praxis, attention/working memory, language expression.

Who Benefits Most?



The higher the **cognitive & brain reserve**, the better the response to CST.



People >80 years old

Females



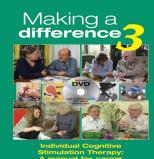
People on anti-dementia drugs

International CST research

- Recent systematic review * of studies evaluating this specific CST protocol, many culturally adapted.
- Included 12 papers of which 8 were RCTs and 4 were pre-post studies.
- Included research from the UK, US, Hong Kong, Japan, Tanzania and Portugal.
- All 12 studies examined cognition, with 9 finding a significant positive impact.
- 4 studies examined impact on specific cognitive domains, confirming that the greatest impact was on language.
- 9 studies examined QoL, of which 4 found significant positive impacts.
- 8 studies examined depression, of which 4 found significant positive impacts.
- 3 studies examined impact on caregivers, with 2 finding some benefits.
- Demonstrates how CST can successfully be generalized across language and culture.

Individual CST (iCST)*

- Involves one-to-one CST, led by home carers, professionals or volunteers. Follows similar themes to group CST.
- A total of 356 caregiving dyads were recruited and 273 completed the trial.
- 75 structured CST sessions for people with dementia, completed up to three times a week for 25 weeks. Family carers were supported to deliver the sessions at home.
- At follow-up, no differences in any of the primary outcomes when comparing iCST to treatment as usual.
- iCST improved relationship with carer and carer QoL.
- Uptake was low: people on average only received 33 sessions.



Stimulation Therapy: A manual for carers VOLUME THREE Lauren Yates, Martin Grett, Phaong Leurg, Armee Spector, Bob Woods, Vesälle Orgets Deservery The Journal of Demontite Care

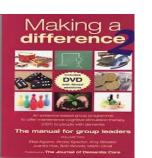
Orrell, M., Yates, L., Leung, P., Kang, S., Hoare, Z., Whitaker, C., ... & Pearson, S. (2017). The impact of individual Cognitive Stimulation Therapy (iCST) on cognition, quality of life, caregiver health, and family relationships in dementia: A randomised controlled trial. *PLoS Medicine*, *14*(3), e1002269.

What was the outcome of all this research?

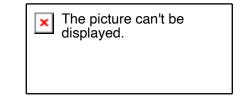


Impact of CST

- UK best practice / routine care guidelines
- International guidelines e.g. Alzheimer's Disease International
- CST used in over 25 countries
 - World wide culturally adapted versions of CST
- 4 manuals published: CST, maintenance CST and individual CST



National Institute for Health and Clinical Excellence





NHS Institute for Innovation & Improvement (Matrix Evidence, 2011)

- "An economic evaluation of alternatives to antipsychotic drugs for individuals living with dementia".
- Analysis focused on cost of providing CST.
- Combining health care cost savings and QoL improvements, behavioural interventions generate a net benefit of nearly £54.9 million (U.S. \$86.7 million) per year for the NHS.

Cognitive Stimulation Therapy in Practice

Why does CST work?Implementation and evaluation



How do we think CST works?

- Use it or lose it taking part in mentally stimulating activities strengthens & creates new neuronal connections.
 - Provides complexity, novelty & diversity required for transferrable cognitive gains (Moreau & Conway, 2014)
 - **Positive reinforcement** of questioning, thinking about and interacting with objects.
 - **Social environment** is positive & stimulating participants perceive CST as an enjoyable experience and are more likely to continue to participate.
 - Sense of belonging, sense of achievement and getting physiological rib cage expansion with slow release all aide in serotonin release.
 - Improves overall self-esteem, confidence.

QoL is mediated by improvements in cognition.

CST session themes



Physical games	Being creative	
Sound	Categorizing objects	
Childhood	Orientation	
Food	Using money	
Current Affairs	Number games	
Faces / Scenes	Word games	
Word Association	Team quiz	

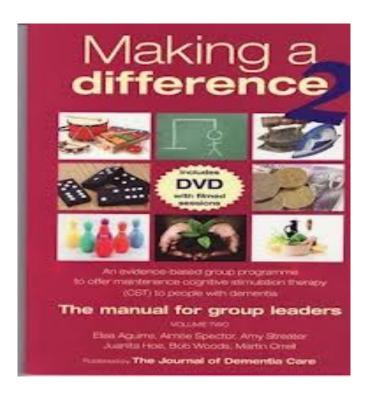
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Making a Difference 2 – Maintenance CST sessions



24 additional MCST sessions

Common Goals and Objectives: All Sessions

- Orientation to time, place, and person.
- Increase attention and concentration.
- Encourage expressive language/exercise word finding skills.
- Increase active engagement and confidence in expressing and exploring thoughts and opinions.
- Elevate mood.
- Promote social awareness.
- Promote new ideas and associations.
- Create new learning.

Session 1: Physical Games MCST 8

- Introducing members. Name badges / name sheet.
- Ask people to select a name for the group vote if necessary.
- Throw soft ball and use it to introduce 'getting to know you' questions, such as:
 - If you could go anywhere on holiday, where would it be?
 - What is your favorite hobby?
 - What was your former occupation?
 - Play a physical game, such as skittles or boules, which incorporates teamwork. Include score calculations if group are able to.



Session 1: Physical Games Goals This session promotes the following skills.

Basic

- Visual and motor coordination.
- Problem solving.

Higher Level

- Memory recall.
- Mathematical calculation.

Example of CST Activities

Session one: PHYSICAL GAMES

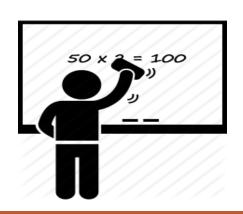
Activity: Indoor bowling (seated or standing).

Level A:

Split group into teams and play a few rounds of bowling.

Level B:

To add complexity, ask members of the group to write their names on slips of paper and pick them out of a hat to allocate each other to teams. Have group members keep track of, and calculate scores on the whiteboard.





- Play sound effects CDs which include different categories, such as 'animal noises' and 'occupations'. Invite people to match sounds with corresponding pictures.
- Play selected songs and ask people to identify names of songs or singers (providing multiple choice if required).
- Give percussion instruments to each person and ask them to play along to familiar music, such as popular 1960's music.



Session 2: Sound Goals This session promotes the following skills.

Basic

- Imaginative thinking through visualization and auditory stimulation.
- Concentration and attention.

Higher Level

- Categorization
- Memory/recall
- Problem solving
- Organization



- Ask members to fill out a printed sheet including their name, names of family members, former address(es), childhood friends, etc.
- Invite people to make a plan of their childhood bedroom / house, or create a reconstruction of it on the board.
- Invite people to demonstrate the use of old-fashioned childhood toys, e.g. spinning top, jacks and hoopla.
- Taste foods that remind people of their childhood.



Session 4: Food MCST 3 & 17

- Price food items and give people a budget (e.g. \$15) and scenario (e.g. meal for four). Get people to calculate in pairs.
- Categorize food, e.g. different mealtimes, sweet versus savoury.
- Brainstorm food categories on the board, e.g. meats, fruit, Christmas food.
- Taste food which has reminiscent value or is seasonal.
- Ask people to name foods beginning with a particular letter.



Session 5: Current Affairs MCST 2 & 21

- Discuss issues from recent newspapers / magazines. Make multiple copies of interesting articles so that everybody can look at once.
- Use questions on cue cards to stimulate conversation on news and views:
 - What do you think of today's fashion?
 - Should men and women have different roles?
 - What do you think about same sex weddings?



Session 6: Faces / Scenes MCST 15

- Prepare multiple (laminated) photographs of famous faces or of local scenes, to stimulate discussion.
- Give people one or more pictures of famous faces and ask for opinions, such as:
 - Who is the most attractive?
 - What do they have in common?
 - How are they different?
- Use pictures of local scenes to encourage reminiscence and compare the past with the present.





Session 7: Associated words / discussion MCST 18

- Ask people to supply the missing word in a number of phrases.
- E.g. famous couples (Laurel and...), places (Westminster...) or proverbs (A stitch in time....).
- Present the first few words of a song and ask group to sing a few lines.



Session 8: Being Creative MCST 4

- Select an appropriate creative activity such as:
 - Cookery (ensuring to divide all tasks between people).
 - Making a seasonal collage.
 - Clay modelling.
 - Getting group members to draw each other.



Session 9: Categorizing Objects MCST 9

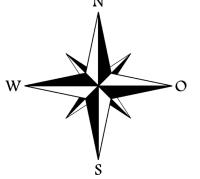
- Get one person to pick from a selection of categories (e.g. men's names) and letters. Get group to think of many words in that category beginning with that letter.
- Place objects or pictures of objects on a table and ask the group to categorize them, for example items found in different rooms in the house.
- Place objects or pictures of objects on a table and ask the group to identify the 'odd one out'.



www.alamy.com - F1W9JF

Session 10: Orientation MCST 19

- Depending on where people come from, construct a map of the UK, local area or center on the board.
- Ask people to fill out where different landmarks are, such as towns, the local post office or their bedroom.
- Discuss how long journeys take, distances between places and transport links.



Session 11: Using money/ clip adverts MCST 20

- Use laminated cut-outs of common objects (e.g. from a catalogue), with prices on the back.
- Ask people to guess the price of items, add up prices or match the price tag with the object.
- Show examples of (or pictures of) old and new coins.
- Discuss changes in prices and values, such as:
 - How much was your first pay check?
 - How much do you think people earn now?
 - How much did a loaf of bread used to cost?
 - What can you buy for \$10 these days?



Session 12: Number Game MCST 5

- Play games involving the recognition and use of numbers, e.g. bingo or dominoes.
- Pass a pack of playing cards around the group. Ask people to guess whether the next card will be higher or lower.
- Get people to guess how many items are in a container, e.g. pennies in a small jar.



Session 12: Number Game Goals This session promotes the following skills.

Basic

• Number recognition and quantity.

Higher Level

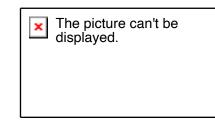
• Manipulation of number through mathematical calculation.

Session 13: Word Game MCST 16

- Draw a number of dashes on the board and invite people to guess letters to form the word. Provide a category clue, e.g. Country.
- Prepare word search or crossword puzzles at a difficulty level geared to group members. Complete as a group or in pairs.
- Use word cards and get people to explain the word without actually using it.

Session 14: Team games / Quiz MCST 6

- Ask group to divide into two teams and give their team a name.
- Play trivia quiz or other game that group has enjoyed previously. Give prizes to all group members.
- Bring back materials from previous sessions for all to see.
- Celebrate the final session with a special tea.



Implementation of Cognitive Stimulation Therapy

Key FeaturesGuiding Principles

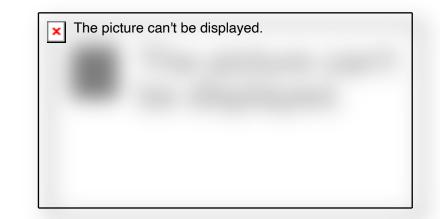
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Video

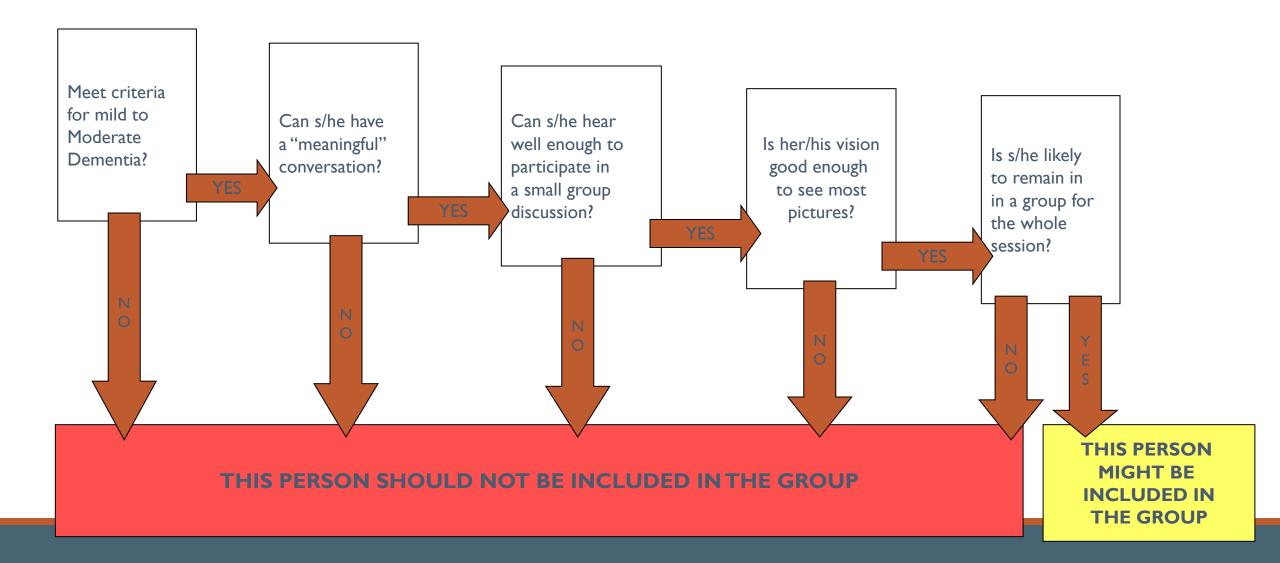
https://www.youtube.com/watch?v=5L1NCS1z65A&feature=yo utu.be

Key Features of the Program

- 14 sessions, usually twice a week.
- Approximately one hour in length.
- Ideally 5-8 people in groups, run by two facilitators.
- Each session has choice of activities, to cater for interests and abilities of group.
- Group members should ideally be at similar stages of dementia, so activities can be pitched accordingly.
- Attention should be paid to gender mix.



Who Should Be Included?



Session Structure

- Introduction
- Theme Song
- Current Affairs
- Main Activity
- Suggested activities for home
- Closure







Session Structure: <u>Introduction</u>

Welcome every member individually

- Orients members to beginning of group and one another.
- Fosters rapport.

State the Group name

- Chosen by Group members on first session.
- Encourages feeling of ownership of group.

Soft ball toss

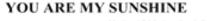
- Serves as a warm up and orientation.
- Increases level of alert and intensity.
- Tool for facilitators to gauge language.

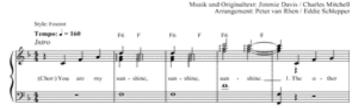
Reference to day, weather, season (always on board as cue)

• Implicit orientation.

Session Structure: <u>Theme Song</u>

- Sung at beginning and end of each session.
- Chosen by group members
 - Offer group participants options to pick from.
 - Pay attention to songs relevant to demographic.
- Short song or chorus only are appropriate.





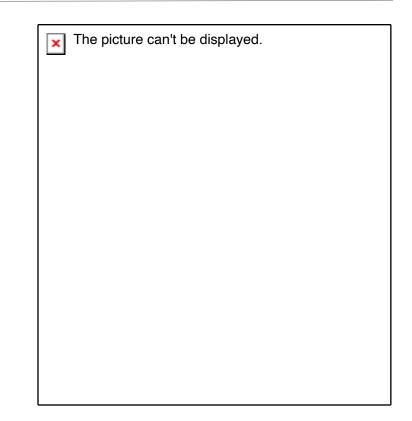


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Session Structure: <u>Current Affairs</u>

- Pull from local and national sources.
- Human interest stories are crowd pleasers.
- Do not shy away from controversial topics.
- Print out individual copy for each member.
 - Day and Date for orientation.
 - Pay close attention to font size.



Session Structure: <u>Main Activity</u>

- Each CST session centers around a suggested activity found within the manual.
 - Open to manipulation.
- Level A and Level B.
- Freedom to enrich the experience.
 - Integrate music, sensory stimulation (baking cookies in an oven).

Session Structure: Suggested Activities for Home/Closure

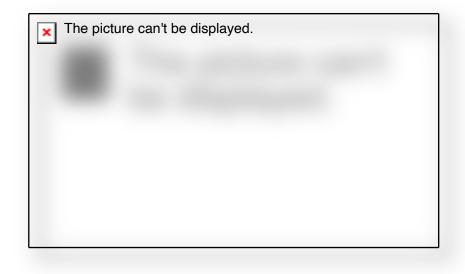
- Suggested activities for home
 - May include in take home handout or copy of news article read at beginning of session.
- Closure
 - Discuss time, day, and activity for next session.
 - Ask members for their opinions regarding the group session.

Updated Key Principles

1	Mental stimulation
2	New ideas, thought and associations
3	Using orientation, sensitively and implicitly
4	Opinions rather than facts
5	Using reminiscence as an aid to the here-and-now
6	Physical movement
7	Providing triggers and prompts to aid recall and concentration
8	Continuity and consistency between sessions
9	Implicit (rather than explicit) learning
10	Stimulating language
11	Stimulating executive function
12	Person-centred
13	Respect
14	Involvement and inclusion
15	Choice
16	Fun
17	Maximising potential
18	Building / strengthening relationships

1. Mental Stimulation

- Getting people's minds active and engaged.
- You might explain that you are trying to get them to exercise skills that may not be used so much and stimulate different parts of the brain. Some sessions will be harder than others, but trying hard = good mental exercise! It can be useful to explain the evidence for CST from research.
- When you plan sessions, the aim is to pitch activities so that people have to make an effort, but not too high (so they can potentially feel deskilled).



2. New Thoughts, Ideas and Associations.

- Often with people with dementia, we tend to talk about things from the past. While this is enjoyable for people, it often involves recalling information which has been over-rehearsed.
- The aim of CST is to continually encourage new ideas, thoughts and associations, rather than just recall previously learned information.
- Example faces session. Show more than one face and ask questions such as 'what do they have in common?' 'How are they different?' 'Who would you rather be?'

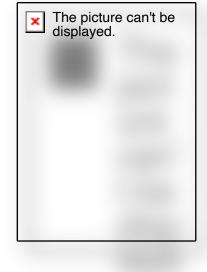
3. Using Orientation Sensitively and Implicitly

- Orientation needs to be done in a subtle, implicit way at the beginning of each session.
- Orientation information such as the date, name of group and group members, activity of the day and news headline should always be written on the 'RO board', and you might refer to the board in your discussion.
 "Do you think this weather is normal for July, or is it hotter / colder than usual?"
- Orientation can be used in sessions e.g. seasonal food, seasonal collage.



4. Opinions Rather Than Facts

- People will often be wrong. If we ask people for their opinions, then they may be amusing, sad, unusual, controversial or puzzling, but they cannot be *wrong*.
- Example: ask "what do you think of politicians?" rather than "who is prime minister?"
- Avoid questions beginning 'Who can remember...?'



5. Using Reminiscence As An Aid To The Here-And-Now

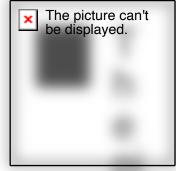
- Using past memories is an excellent way of tapping into a strength that many people with dementia have, in terms of recalling experiences.
- Ensure you know the background of the group members to avoid upsetting them when talking about past memories.
- Reminiscence can also be a useful tool towards orientation, a key goal of CST. E.g. comparing prices over time in 'Using Money'.

6. Physical movement

- Exercising motor skills through movement and games.
- Research has shown the importance of exercise and physical movement for people with dementia, and exercise should be integrates into sessions.
- Movement should be encouraged at the beginning of every session as part of the warm up activity, for example throwing a soft ball around when stating one's name or answering questions about preferences.
- The 'Physical games', 'Being creative' and 'Team games / quiz' sessions are good opportunities to include games which require the group to move around and use motor skills, for example through playing skittles or engaging in a gardening activity outside.
- Be sure to check for mobility problems in advance, adapt exercises accordingly and give people the extra support if required.

7. Providing Triggers to Aid Recall

- Using a Reality Orientation board is a useful way of triggering memories and aiding recall.
- Multi-sensory cues introduce visual images, sound, smell, taste and touch.
- Always have something to look at or touch aids concentration. E.g. Make multiple copies of materials rather than passing things round.



• Use nonverbal communication as well as verbal; your facial expression, tone of voice, posture and gesture will speak volumes!

8. Continuity and Consistency Between Sessions

- Memory and learning is supported through providing continuity and consistency between sessions.
- Examples:
 - Referring to the group name.
 - Running groups in the same room.
 - Starting sessions and ending sessions in a similar way.



9. Implicit (rather than explicit) Learning

- Ideally, people will not be too aware that they are learning and being stimulated, perceiving the groups more as 'fun activity groups'.
- Avoid asking direct questions.
- Avoid putting people 'on the spot'.

10. Stimulating Language

- Evidence from the research that language skills improve after CST.
- Sessions stimulate language, for example naming of people and objects, word construction and word association.

ABCDE FGHIJK LMNOP QRSTU UWXYZ

11. Stimulating Executive Functioning

- Executive functioning skills, particularly involving planning and organizing, are often very impaired in dementia.
- Several sessions exercise these skills, for example planning and executing stages of a task (making a cake in 'being creative', selecting food for a meal in 'food').
- Mental organization is exercised through the discussion of similarities and differences.



12. Person-Centred*

- Valuing people with dementia and their carers by treating them as they would want to be treated at all stages of the dementia.
- Treating people as individuals, e.g. through consideration of their histories, personality and coping mechanisms.
- Looking at the world from the perspective of the person with dementia, as the subjective experience of the individual is considered reality. E.g. through art or poetry.
- Providing a positive social environment in which the person with dementia can experience relative well-being.

13. Respect

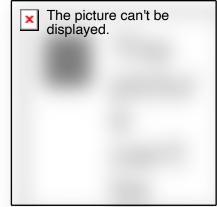
- Avoid doing anything to expose people's difficulties in the group.
- Get to know what is important to each individual.
- Value the diversity of views, opinions and beliefs within a group.
- Allow people to be different.
- Respect should be demonstrated with yourself and group members as well as amongst each other.

14. Involvement and inclusion

- If during the group, you find yourself doing most of the talking, or talking 'at' the group, stop!
- If people seem isolated or excluded, could this be due to hearing or vision problem?
- If the person is a little shy, encourage a more socially active group member to engage with them.
- If one person in the group has different opinions from others, ensure they are not rejected. Diversity of views is welcomed.

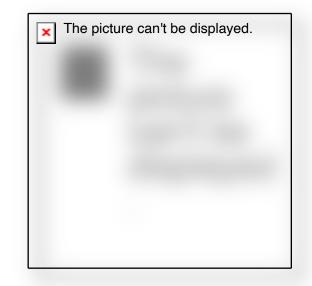
15. Choice

- The group program is not prescriptive.
- Group members should always be offered choices, geared to levels of ability or interests.
- Group members should become involved in making the group their own selecting a name for the group, choosing songs.
- The activities have been organized according to how demanding they are on the person's memory and other cognitive skills and ordered accordingly.



16. Fun

- Groups should provide a learning atmosphere which is fun and enjoyable.
- If members make comments about 'school', ask them what they liked and disliked about school, and reflect on whether the group leaders are taking on the role of 'teacher' too readily.
- Avoid using equipment that is childish.



17. Maximizing Potential

• People with dementia often function at less than their full potential, perhaps due to lack of stimulation or opportunity.

•Give the person time. Be careful not to overload them with information, and provide just enough prompting to enable the person to carry out the activity themselves.

•People with dementia are more likely to achieve their potential by 'doing' rather than sitting passively.

18. Building and Strengthening Relationships

- The group sessions will help members get to know each other better.
- They can strengthen relationships between the members and leaders.
- Assist members, join in, have fun.
- See it as a small group activity, away from some of the care-giving pressures.

CST in Action

CST Introduction Clip

When watching the DVD, think critically about:

- Key principles: Any demonstrated well? Any not used sufficiently?
- Facilitator: Style / manner, wording of questions, body language.
- Environment: Room, lighting and ambience, seating, presentation of materials.
- Activity: Suitability to group too easy / too challenging? Is it enjoyable?

CST in Action/Main Activity

CST Faces Clip

When watching the DVD, think critically about:

- Key principles: Any demonstrated well? Any not used sufficiently?
- Facilitator: Style / manner, wording of questions, body language.
- Environment: Room, lighting and ambience, seating, presentation of materials.
- Activity: Suitability to group too easy / too challenging? Is it enjoyable?

CST Training Video