# Group-based Cognitive Stimulation Therapy for dementia: A qualitative study on experiences of group interactions.

**Disclosure Statement**

The authors report no conflict of interest.

**Abstract**

**Objectives:** Cognitive Stimulation Therapy (CST) is an evidence-based group intervention shown to improve cognition and quality of life in dementia and is widely implemented across the NHS. However, no attempt has been made to understand the possible advantages, and/or disadvantages, of delivering CST in a group format. The main aim of the present study was to explore experiences of group interactions in CST and longer-term maintenance CST (MCST) groups.

**Method:** A total of twenty-one semi-structured in-depth interviews were conducted across four separate groups delivered in London, the East Midlands, South West and South East of England; including two CST and two MCST groups. Group members with mild to moderate dementia and facilitators from these groups were interviewed. Thematic analysis was used to analyse the data using NVivo software.

**Results:** The final analysis identified six themes: 'benefits and challenges of group expression', 'importance of companionship and getting to know others, 'togetherness and shared identity', 'group entertainment', 'group support' and 'cognitive stimulation through the group'. The inter-connecting relationship between these themes are synthesised and summarised.

**Conclusion:** Findings support the notion that therapeutic advantages inherent to the group format exist in group-based CST. New insights into the challenges related to a group format are also highlighted and discussed. Future research may benefit from exploring the relationship between the identified experiences of group interactions and clinical outcomes.

**Key words:**

Cognitive stimulation therapy, dementia, group therapy, qualitative methods

**Introduction**

Cognitive Stimulation Therapy (CST) is an evidence-based approach developed following Cochrane reviews of several psychosocial therapies for dementia (Spector, Davies, Woods, & Orrell, 2000; Spector, Orrell, Davies, & Woods, 1998). The aim of CST is to improve cognitive and social functioning by fostering a stimulating environment, which allows individuals to engage in various activities (Woods, Aguirre, Spector & Orrell, 2012). Based on the existing literature, the key principles outlined in the manual for group-based CST (Aguirre, Spector, & Streater, 2012) include mental stimulation, encouraging opinions rather than facts, providing triggers to aid recall, implicit rather than explicit learning, stimulating language and executive functioning, using orientation, involvement and person-centred care. CST typically involves five to eight people with mild to moderate dementia, and consists of 14 sessions delivered across a seven week time period. Longer-term, or 'maintenance CST' (MCST) (Aguirre et al. 2010; Aguirre et al. 2011), has also been found to be effective in improving quality of life and cognition (Orrell et al., 2014).

CST is the only intervention recommended by the UK National Institute of Clinical Excellence (NICE) for promoting cognition, independence and wellbeing for people with mild to moderate dementia (NICE, 2018). A recent systematic review found that group-based CST has

benefits on both cognitive functioning and self-reported quality of life (Lobbia et al., 2018). Lobbia and colleagues (2018) argued that specific benefits in language appeared to be due to activities designed to stimulate verbal skills. They also highlighted the importance of the group format, arguing that participants benefit from being encouraged to express themselves verbally through group interactions. This view is in accordance with the broader dementia literature in which group activities are seen as an important way of mitigating issues of loneliness prevalent in this clinical population (Cohen-Mansfield, Hai & Comishen, 2017).

The Medical Research Council complex interventions frameworks emphasise the importance of examining mechanisms of change in psychological interventions (Craig et al., 2008). In accordance with these guidelines, Spector and colleagues (2011) explored whether improvements found in clinical trials were also experienced by people with dementia, their carers and group facilitators in everyday life. 'Positive experiences of being in the group' was one of the two main qualitative themes reported in this study. An evaluation of a group CST pilot study with an Irish population of people with dementia also found that meeting others in similar situations increased confidence (Kelly et al., 2017). Similarly, a qualitative evaluation of CST for a Brazilian population with dementia identified the theme 'group activities' as an important facilitator of implementation (Bertrand et al., 2018).

In addition to these qualitative findings, a recent RCT found that individualised Cognitive Stimulation Therapy (iCST) delivered by carers had no benefit on cognitive functioning and quality of life for people with

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dementia compared to treatment as usual (Orrell et al., 2017). When compared with the literature on group-based CST, this further supports the notion that group mechanisms may be important for improved clinical outcomes.

Within the broader literature, mechanisms of therapeutic change inherent to the group environment are defined as 'group processes' (Garcia-Cabeza et al., 2011) and have been linked to positive clinical outcomes (Burlingame, Strauss, & Joyce, 2013; Yalom, 1985). These group processes are proposed to exist irrespective of the method-specific tasks implemented (Burlingame, MacKenzie, & Strauss, 2004; Burlingame et al., 2013).

However, to the authors' knowledge, no attempt has been made to specifically examine experiences of interactions between members in CST groups for a dementia population. Guidance given on the delivery of group-based CST, which encourages group interactions and relationship development through activities (Aguirre et al., 2011), is based on anecdotal clinical experience, not empirical research. Systematic examination of how group members experience interactions with others in group-based CST, including both positive and/or negative experiences, will therefore have important implications for the development, training and delivery of group-based CST.

To address this gap within the literature, the aim of the present study was to explore experiences of group interactions - referred to as group experiences - in CST and MCST groups. This included an exploration of general group experiences and the relationship between group experiences and CST principles and outcomes.

**Methods**

*Design*

A qualitative explorative design, with semi-structured interviews.

*Research team*

The research team included [INSERT INITIALS]. [INSERT INITIALS] conducted all interviews and had no prior contact with any of the participants. All researchers were involved in the data analysis and write up of the study.

*Sampling and participants*

A purposeful sampling approach was implemented where participants were sampled from across a geographically diverse range of areas within England to help identify shared dimensions and/or diverse variations. Recruitment took place in three independent branches of the same charity across the East Midlands, South West and South East of England, and a private homecare organisation within a multicultural borough of inner-city London. All groups were led by facilitators who received the standard one-day CST training course. Furthermore all facilitators had a number of years experience working with a dementia population and had prior experience delivering CST/MCST groups.

Furthermore, to maximise the representativeness of the sample, a sampling framework was prospectively developed, where group members were sought from at least two CST groups and two MCST groups, all run by separate group facilitators. It was agreed prior to recruitment that interviewing participants from at least four groups, with an estimated sample size of approximately 15 to 20, would be needed for a representative data set. Once data had been collected from four groups, the research team agreed that the data were sufficiently similar (i.e. sufficiently saturated) and therefore recruitment stopped.

Eligible group members were required to meet the following criteria, informed by previous CST research (Spector et al., 2003): i) mild-to-moderate dementia assessed by a clinician; ii) were able to see and hear well enough to participate in the group; iii) did not have a major physical illness or disability affecting participation; iv) were not diagnosed with a learning disability; v) attended at least one CST and/or MCST group. Eligible group facilitators were approached for an interview if they led and/or facilitated the CST and/or MCST group from which group members were recruited. Interviews were conducted with the facilitators of these groups to help contextualise descriptions of group interactions and validate the experiences of group members.

***Ethical Approval and consent***

Ethical approval was obtained through the Research Ethics Committee (12667/001) at [INSERT UNIVERSITY NAME].

*Interviews*

Two semi-structured interview schedules were developed, with non-leading broad questions (Smith, 1995) - one for group members and another for the group facilitators. The first author [INSERT INITIALS] developed an initial draft interview topic guide with [INSERT INITIALS]. Advice was sought from another clinical researcher, who is also experienced in qualitative research, CST and working with a dementia population. Specifically, advise was given on the content, order and delivery of the questions. Phrasing of questions was aided by feedback from service-users, including group members and group facilitators, during the interview process.

Three topics were delivered in a flexible manner: i) general experiences, including prompts on what the group was like and types of interactions with others, ii) the relationship between group experiences and CST principles, including prompts related to feeling included, respected and reminiscence, and iii) the relationship between group experiences and CST outcomes, including whether the group format had an impact on feeling mentally stimulated.

Specific prompts were included that could maximise responses from the perspective of a person with dementia, including personal and/or visual aids from the groups (Murphy, Jordan, Hunter, Cooney, & Casey, 2015). Interviews were audio-recorded using a dictaphone. Group members were compensated £10 cash for their time. Demographic information on age, gender and ethnicity was gathered and information on dementia status and/or diagnosis was requested. Potentially eligible participants were expected to have the capacity to provide informed consent to participate in

the study. However, an effort was made to give enough time for group members to reach a decision when they felt ready to.

### *Data Analysis*

A thematic analysis, as outlined by Braun and Clarke (2006), was followed during the data analysis. All interviews were first transcribed by [INSERT INITIALS] who familiarised himself with the data. Transcripts were imported onto NVivo qualitative coding software (NVivo for Mac Version 11) and re-read by [INSERT INITIALS] to further familiarise and immerse himself within the dataset. [INSERT INITIALS] then outlined initial ideas for a coding framework based on three transcripts. [INSERT INITIALS] then coded further transcripts against the initial coding-framework, where new codes were added and re-coded. [INSERT INITIALS], his primary, secondary supervisor and a fourth researcher ([INSERT INITIALS]) then engaged in a process of 'interpretative analysis' where meanings in the subthemes and/or themes were described (Braun & Clarke 2006). Themes were discussed and suggestions were made on how to re-organise the initial themes identified. Once the thematic structure had been finalised, [INSERT INITIALS] independently coded three transcripts against the final coding frame. A sufficient degree of internal homogeneity was explored, ensuring quotes assigned to the same theme were clearly related (Patton, 1990). External heterogeneity was also explored, ensuring quotes assigned to different sub-themes were clearly different from each other (Patton, 1990).

Several assumptions stated prior to the analysis guided the interpretation of themes. The first assumption was that an inductive, i.e.

bottom-up data-driven approach, was used to identify themes. The second assumption was that themes were identified on a semantic level, i.e. themes were identified based on the surface level meaning of spoken words. Finally, a realist epistemological approach was assumed, i.e. when coding statements, a unidirectional relationship between language, experience and meaning was assumed.

In accordance with criteria for guiding and evaluating qualitative research (Elliott, Fischer, & Rennie, 1999), several steps were taken to maximise the trustworthiness of the data. First, [INSERT INITIALS] participated in a reflective bracketing exercise (Tufford & Newman, 2012), where his beliefs, feelings and experiences related to the topic of group process research were reflected on. Second, consensus from multiple researchers was sought throughout the analysis. Third, testimonial validity was gathered from the group facilitators across each of the four groups via feedback on how closely related the interpretations made from the data were to their experiences of the group. Finally, to assess the approximate reliability of the coding [INSERT INITIALS] independently re-coded three transcripts using the established coding framework.

## Results

A total of 25 participants who met inclusion criteria were referred to this study; including 21 group members and four group facilitators from four separate groups. Three group members declined - two males who were not

interested in taking part and one female who was not interviewed due to poor health.

Data were therefore collected from 17 group members (nine male and eight female) and four group facilitators (one male and three female). Details of the CST and MCST groups and sample characteristics of the group members included in the analysis of this study are summarised in Table 1. The average age of the group members and group facilitators was 79 and 47 years respectively. Interviews lasted 35 minutes on average. Interviews with participant 10 and participant 17 were shorter due to their presentation on the day.

[INSERT TABLE 1]

The final analysis identified six themes of interactive group experiences: 'benefits and challenges of group expression', 'importance of companionship and getting to know others', 'togetherness and shared identity', 'group entertainment', 'group support' and 'cognitive stimulation through group interactions'. To help the reader judge the breadth of each theme, the total number of group members who referred to the identified themes and subthemes are highlighted in Table 2.

[INSERT TABLE 2]

**Themes**

### *Benefits and challenges of group expression*

Group members described group expression as the process through which they revealed themselves to others in the group. Benefits of group expression included being able to talk about thoughts, feelings or everyday conversations without feeling pressured to do so if they did not want to. Group members also noted they disclosed personal information to others. Some group members were happy to express the impact of their dementia diagnosis with others, although some preferred not to discuss their diagnosis.

> *"I've been going for memory tests to see what is happening in the brain…Well we haven't really spoken directly about that…I feel like that's a very personal thing and until you're ready to say, or to impart that information…I think there is a part of you that needs to be private." (Pt12_Group3_group member)*

Group members also described the challenges of expression within the group. This included difficulties of being able to express oneself amongst other members in the group, or that there were no opportunities to talk about their past in the group. However, it was noted that members overcame these challenges of group expression too.

> *"I don't feel as though I want to expose myself to other members...So I tend to keep quiet and say nothing. An introvert reaction."(Pt8_Group2_group member)*

*A few people who have come out of their shell, especially*

*[PARTICIPANT NAME], he has never talked so much ever*

*since the time that he has been here…he's really been talking in*

*the group. (Pt11_Group2_group facilitator)*

***Importance of companionship and getting to know others***

The company of the other group members and the social aspects of the

group were described as being important. Several group members

highlighted the benefits of company in the context of living alone. They also

described the impact this had on their social life outside group, whether this

was during, before or after the start of sessions or through friendships

developed in the group.

*"I enjoy coming here…it's company you need, human people,*

*not just telly." (Pt10_Group2_group member)*

Most group members reported that they experienced others as pleasant and

polite, and that there was a positive group atmosphere. This included getting

on well together and getting to know other group members. Several group

members reported that they got to know others through group activities and

four group members reported that they got to know others through group

conversation.

> *"Coming here, it's like a second family. You get to know them, and when you walk in they welcome you. I live on me own you see, so it's nice to be here." (Pt10_Group2_group member)*

> *"We throw this yellow thing here…You throw that to each other, and say the name of the person you are throwing it to. So, it gives you a chance to get to know everybody through the group." (Pt8_Group2_group member)*

Several members also stated that they did not feel as though they got to know others in the group and four members stated that they got to know others but only in the context of the group.

> *"I have got to know people, but not outside of this session." (Pt13_Group3_group member)*

### Togetherness and shared identity

Group members and facilitators reported feeling a sense of 'togetherness' amongst the group, described as a sense of belonging and unity. More specifically, it was noted that the activities and group facilitators in the session facilitated a togetherness.

> *"We would try it and get them to gel as a group and do different activities like the bridge building one…I think things like that do demonstrate they work together." (Pt16_Group3_Group facilitator)*

A sense of shared identity between members of the group was also described and several group members reported that this contributed to feeling comfortable amongst others.

> *"The whole group, we all had, problems I suppose…I suppose we were in the same boat." (Pt3_Group1)*

> *"We all know that our brains aren't what they used to be and we feel comfortable talking about that if we want to without being embarrassed about it…we're all about the same level, none of us is gaga and none of us is still like we used to be – it's a very comfortable situation and very comfortable group."*
> *(Pt13_Group3_group member)*

In addition to the positive experiences of a group bond, several factors were identified as challenges to developing a bond between group members. This included experiencing a sense of conflict and/or avoidance from other members of the group. However, reference was also made to cohesion amongst group members despite differences.

> *"Some of the people were very anxious to get benefit out of it… And there are people there who are more shy, and less speaking out." (Pt1_Group1)*

> *"There was another client, who was very quiet…Having said that, I don't think it got to the point where they in anyway they shouldn't be part of that group…it didn't stop them from continuing to contribute." (Pt5_Group1_Group facilitator)*

### Group entertainment

Several group members and facilitators identified having fun within the group and/or that being in a group with others was enjoyable. Humour was valued amongst group members and facilitators. Specific reference was made to laughter between group members.

> *"Oh it was fun…More fun because you were in a group…It is a matter of what you can contribute and how you can contribute it." (Pt15_Group3_group member)*

> *"It's great, tidy, clean and there's a little bit of humour, so there's a bit of humanity."(Pt1_Group1_group member)*

### Group support

The group was described as a source of support. This included being helped by the group as well as offering help to other members of the group.

> *"I think they had a tendency to pull themselves up as a group maybe…So if the other person wasn't feeling too great, they were quite a supportive group." (Pt5_Group1_group facilitator)*

*It was very satisfying…they [other group members] would say*

*to me 'no it's not that, it's something else' you know, and I*

*would say 'oh is that right'… when I got a question a wrong I*

*was helped. (Pt17_Group4_group member)*

***Cognitive stimulation through group interactions***

It was reported that the social aspects of the group promoted cognitive

function, including memory and attention skills. It was also noted that the

group format promoted brain functioning.

*"I have a bad listening memory, and I think seeing a group, and*

*other people saying things, somehow that registers better with*

*me than if I just sat talking one to one about the same thing."*

*(Pt13_Group3_group member)*

*"Company…it keeps your brain going doesn't it…you have to*

*think what you're saying.' (Pt7_Group2_group member)*

It was also reported that opinions and ideas were stimulated through sharing

information between members in the group. Furthermore, group members

also explained that they felt stimulated through the competition in the group.

*"Someone does make a suggestion and you think 'oh that's a*

*good idea'. (Pt9_Group2_group member)*

*"You don't want to be the one left out and not knowing quite so much, it's a challenge…being able to remember maybe a little bit more…You want to be, you still want to be competitive, it…helps you...to be in the group, and be competitive, and suddenly think 'oh yeah, I've got that right' or 'I've got more than somebody else'." (Pt12_Group3_group member)*

Conversely, several group members stated that they were either not sure or doubtful about whether the group promoted cognitive stimulation.

*I can't say that I've ever been mentally stimulated by it…I've come from a big family and have always had plenty of people to talk to so it hasn't made much difference. (Pt9_Group2_group member).*

***Synthesis: interconnecting nature of group experiences in CST/MCST***

The identified themes did not appear to be mutually exclusive. Rather they occurred in a patterned manner. Figure 1 summarises how the six themes possibly relate to each other. 'Togetherness and shared identity' and 'importance of companionship and getting to know others' were categorised as 'initial phase' mechanisms, which existed in the early stages of the group. Unlike the other group experiences reported, these themes were typically referenced in the context of pre-existing issues related to loneliness and isolation. Hence it is likely that group members valued relational and social

aspects of the group from the start by virtue of being there. This is highlighted in the quote below.

*"It's interesting, because if you live on your own, which I do now, it's so nice to be with other people who you can chat with." (Pt19_Group4_group member)*

By contrast, the theme 'cognitive stimulation through group interactions' was described as an experience which followed from the other five identified group themes. Hence it was conceptualised as the main 'output phase' theme in Figure 1. The quote below is an example of where being sociable with others (input phase) resulted in the group stimulation (output phase):

*"I've got some positive feedback from partners…they thought [group members] were stimulated...because they had a nice time and they had been sociable and they had communicated with other people." (Pt12_Group3_group member)*

The remaining themes – 'benefits and challenges of group expression', 'group support' and 'group entertainment' - were conceptualised as mediator mechanisms, which interacted with early phase and output phase themes. Group members and facilitators typically described a bidirectional

relationship between these group experiences. For example, the quote below highlights how group expression strengthened group relationships.

> *"Interviewer: Do you feel like you made friends in the group with the others?*
>
> *Pt12_Group4_group member: Oh yes I do...I think talking to them, laughing, sharing experiences. Talking about different things that we've done.*

Given that all group experiences can be experienced as early phase mechanisms, as well as output mechanisms, a cyclical relationship is conceptualised in Figure 2.1.

[INSERT FIGURE 1]

**Discussion**

To the authors' knowledge, this study is the first to focus on exploring experiences of interactions in group CST and MCST from the perspective of people with dementia and facilitators of these groups. In total, six themes of group experiences were identified - 'benefits and challenges of group expression', 'importance of companionship' and 'getting to know others, togetherness and shared identity', 'group entertainment', 'group support' and 'cognitive stimulation through group interactions'. The interconnecting nature of group experiences in CST/MCST is summarised.

*Therapeutic advantages of a group format in group-based CST*

In line with the literature (Cohen-Mansfield, 2018), the results from this study highlight the clinical benefits of group activities for people with dementia. In particular, findings support the notion that therapeutic advantages related to the group format exist in group-based CST (Spector et al., 2011). The theme 'togetherness and shared identity' is in line with findings from Bertrand and colleagues' (2018) who reported 'bonds' between group members helped facilitate the implementation of CST. Furthermore, the results support conclusions from Spector and colleagues' (2011) who also noted that people in CST groups experienced sharing a common difficulty related to their dementia diagnosis and/or memory difficulties as helpful.

The findings from the present study go beyond simply reporting that group members experienced a sense of bond. A clear distinction was made between experiencing a sense of 'togetherness' amongst group members, described as a belonging and unity, and 'shared identity', described as feeling as though members were in the same boat as each other. Furthermore, through a shared identity, group members experienced feeling more comfortable with others.

The themes 'benefits and challenges of group expression' and 'group entertainment' identified in the present study also support findings from Spector and colleagues' (2011) qualitative study. Furthermore, the theme 'importance of companionship and getting to know others', particularly the subthemes of companionship and positive relationships

between group members, support findings from Dickinson and colleagues'
(2017). However, unlike previous qualitative research on mechanisms of
CST, the present study considers the inter-connection between group
experiences. Dickinson and colleagues reported that positive interactions led
to improved self-esteem of the CST group members. Results from the
current study build on this further, highlighting the role of initial, mediator
and output phases of group experiences. Bertrand and colleagues' study also
described the stimulating impact of the group format. In line with evidence,
the theme 'cognitive stimulation through group interactions' in the present
study was described as an outcome, which followed early group processes –
including 'togetherness and shared identity' and 'importance of
companionship and getting to know others'.

*New insights into the challenges of a group format in CST*

Findings from the present study provide new insights into the challenges
associated with a group format in CST, including challenges of group
expression, not getting to know others and challenges to group bonds. These
findings are in line with the broader literature on group processes, including
research on group conflict and avoidance (MacKenzie, 1987) and negative
working group relationships (Johnson et al., 2006).

Despite reports of challenges associated with the group format, it is
possible that these challenges helped facilitate beneficial group experiences.
In the present study, group members and facilitators described how group
members overcame challenges of group expression and group cohesion. For
example, group facilitators explained how members came 'out of their shell'

despite being quiet or shy amongst other members. One possible explanation for this is that challenges within therapy act as a catalyst for learning and therapeutic change. Hence negative group experiences allow for positive experiences of groups.

***New insight into the interaction between non-specific and specific mechanisms in group-based CST***

Findings from this study also give new insight into the active ingredients of group-based CST – in particular the role of non-specific group factors. Knapp and colleagues (2016) argued that evidence on the effectiveness of group-based CST is attributable to "specific effects of CST rather than non-specific effects of attention or social interaction" (page 679). However, we argue that both specific effects of CST and non-specific effects of social interaction are important.

The data supporting the subtheme 'social aspects promoted cognitive and/or brain functioning' hint at a possible interaction between non-specific group effects and specific effects related to CST. It is possible that social interaction facilitated within the group increased engagement in specific CST tasks, which, in turn, promoted mental stimulation. This hypothesis is in line with Cohen-Mansfield's (2017) 'conceptual framework of group engagement'. This framework is based on the notion that a group format reduces loneliness in older adults as it promotes 'engagement' – i.e. the act of being occupied or involved with a given task or stimulus. This is also supported by research from Shankar and colleagues (2013), which

highlights a link between loneliness and poorer cognitive functioning in older adults.

*Future research*

Based on the themes identified in this study, future researchers could adapt existing measures or develop a new tool based on the themes identified to examine the relationship between group processes and established clinical outcomes in CST research. Future research would also benefit from understanding the relationship between generic group processes experienced in CST and theory-specific mechanisms of change related to the particular CST activities. Researchers may also benefit from using new video-annotation software technologies (Orfanos, Akther, Abdul-Basit, McCabe, & Priebe, 2017) to understand the moment-to-moment interactive processes.

*Clinical Implications*

Evidence supporting the use of a group format for psychological treatment of dementia has both economic and practical implications. Compared to individualised therapy, a group format may increase access to limited resources in dementia care settings. Findings from the present study also have implications on how group-based CST and/or MCST is delivered. The identified themes highlight the need to emphasise helpful experiences of a group format, in addition to the specific challenges associated with the group format. Training and delivery of CST may benefit from highlighting the identified group experiences to help prepare group facilitators to overcome these challenges.

*Strengths and Limitations*

This study has several strengths. Stringent measures were taken to optimise the trustworthiness and approximate reliability. Furthermore, themes were drawn from both facilitator and group member experiences. Finally, data were gathered from both CST and MCST data to maximise the representativeness of data. However, there are also several limitations to consider. Asking individuals with cognitive impairments to remember and recall their group experiences was challenging. This was evidenced by the difficulties that most group members had in recalling particular examples of events from the group. To address these challenges, visual memory aids from the group were used. Furthermore, interviewers were conducting the interviews in the room in which the CST was delivered for group members in Groups 2, 3 and 4. Despite attempts to support memory recall, it was not clear from the study whether group members were aware of, or were able to fully articulate, the effects of mechanisms of change that were not related to the group.

A further limitation was the lack of ethnic diversity of participants included in the study. Although representativeness was maximised by collecting data from a diverse geographical range in England, all the group members and facilitators were from a White British background.

*Conclusion*

The results support the notion that therapeutic advantages related to interactions fostered in the group format exist in group-based CST. New

insights into the challenges of the group format are also highlighted and discussed, in addition to the inter-connecting nature of the identified themes. Future research may benefit from adapting an existing measure or developing a new questionnaire-based measure to explore the relationship between the identified group processes and clinical outcomes.

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Table 1. Details of CST and MCST groups and sample characteristics

| Group ID (Location) | Group Details | Number of group members interviewed | Sex (% female) | Average Age (years) | Average Attendance (%) |
|---|---|---|---|---|---|
| Group 1 (London) | - CST group*<br>- 14 weekly sessions offered<br>- Referral through private company<br>- Facilitated by a clinical psychologist and specialist dementia nurse | 4 | 50% | 75 | 93 |
| Group 2 (East Midlands) | - MCST group<br>- 24 weekly sessions offered<br>- Referrals from charity day-centre where group was delivered.<br>- Facilitated by a day centre manager (NVQ level 5 in health and social care) and support worker. | 5 | 40% | 82 | 100 |
| Group 3 (South West England) | - MCST group<br>- 30 weekly sessions offered<br>- Referrals from charity day-centre where group was delivered.<br>- Facilitated a team lead (BSc Hons in dementia studies). | 4 | 50% | 80 | 82 |
| Group 4 (South East England) | - CST group<br>- 14 weekly sessions offered<br>- Referrals from charity day-centre where group was delivered<br>- Facilitated by a dementia service manager (NVQ level 3 in Health and Social Care) | 4 | 50% | 80 | 97 |

*NB: * = Qualitative data for participant 4 were collected 14 days outside of the week period of completing the project*

Table 2. Prevalence of themes across group members and facilitators

| Themes | Subthemes | Group 1 | | | | | Group 2 | | | | | Group 3 | | | | | | Group 4 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5* | 6 | 7 | 8 | 9 | 10* | 11 | 12 | 13 | 14 | 15 | 16* | 17 | 18 | 19 | 20 | 21* |
| Benefits and challenges of group expression (N=18) | Benefits of group expression (N=16) | X | X | X | X | X | X | X | X | X | | X | | | X | X | X | | X | X | | X |
| | Disclosed personal information (N=8) | X | | | | X | X | | | | | X | X | | | X | X | | | | | X |
| | Challenges of group expression (N=9) | X | | X | | | | | X | X | | | X | X | | X | | | X | X | | |
| Importance of companionship and getting to know others (N=20) | Importance of companionship and social aspects (N=17) | X | X | X | X | X | X | X | | X | X | X | X | X | X | | X | | | X | X | X |
| | Positive relationships between group members (N=19) | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X | | X | X | X | X |
| | Got to know other group members (N=18) | X | X | X | | X | X | | X | X | X | X | X | X | X | X | X | | X | X | X | X |
| Togetherness and shared identity (N=20) | Group togetherness (N=20) | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | X | X | X | X |
| | Shared identity (N=19) | X | X | X | X | X | X | X | X | X | | X | X | X | X | X | X | | X | X | X | X |
| | Challenges to group bond (N=12) | X | | X | X | X | | | | X | | X | X | | | X | X | | X | X | | X |
| Group Entertainment (N=16) | Group enjoyment (N=13) | | X | X | X | | X | X | | | | X | X | X | X | X | | X | | X | X | |
| | Laughing with others (N=11) | X | X | | X | X | X | | | | | X | X | X | | | | | | X | X | X |
| Group support (N=12) | Group support (N=12) | | | X | X | X | X | | | | | X | X | X | X | X | X | X | X | | | |

Table 2.2. continued

| Theme | Subtheme | Participants | | | | | | | | | | | | | | | | | | | | |
| | | Group 1 | | | | | Group 2 | | | | | Group 3 | | | | | | Group 4 | | | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Cognitive stimulation through group stimulation (N=17) | Social aspects promoted cognitive/brain functioning (N=13) | | | X | X | X | X | X | X | | | X | X | X | X | X | X | | | X | | X |
| | Stimulation through sharing opinions, ideas, experiences in group (N=15) | | | | | X | X | X | X | X | | X | X | X | X | X | X | | X | X | X | X |
| | Stimulation through group competition (N=6) | | | | | X | | | | | | X | X | | | | X | | | | X | X |
| | Not sure/doubtful if group helped stimulate (N=8) | | | X | | | X | | X | X | | | X | X | X | X | | | | | X | |

**Figure 1.** Flow diagram outlining the relationship between themes