

**Cognitive Stimulation Therapy groups for people with  
dementia: a qualitative study of group experiences**

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## **UCL Doctorate in Clinical Psychology**

### **Thesis declaration form**

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Signature:

Name: Stavros Orfanos

Date:

## Overview

Cognitive Stimulation Therapy (CST) is an evidence-based group intervention, which has been shown to improve cognition and quality of life in individuals with dementia. CST and longer-term Maintenance CST (MCST) are both widely implemented across the NHS. The broad objective of this project was to conduct the necessary groundwork to complete the next steps in developing and validating a measure of group process in CST for a dementia population.

**Part 1** systematically reviewed and assessed the literature on questionnaire-based measures of group process. Thirteen measures were described in the final analysis and a quality evaluation was undertaken using established criteria. The developed list highlighted a range of measures that can be used by clinicians and researchers seeking to assess either specific therapeutic group mechanisms, or overall group experiences in therapy.

**Part 2** qualitatively identified group processes from the perspective of group members and facilitators of CST and MCST groups. Twenty one semi-structured in-depth interviews were conducted. A thematic analysis approach identified six themes of group experiences: group expression, group bond, group entertainment, group relationships, group support and group stimulation.

**Part 3** is a reflective summary of the research conducted in this report. This included the influence of my personal interests and theoretical assumptions on the research process, a reflection on my experiences of conducting qualitative interviews and a discussion on possible areas of future work.

## **Impact Statement**

### **Impact of the literature review**

In the first part of this thesis, an up-to-date comprehensive list of thirteen questionnaire-based group process measures is presented. This is beneficial for both clinicians and/or researchers interested in monitoring, measuring and/or evaluating interactions between people in a therapeutic group setting. The psychometric properties of studies describing the scale development of the included group process questionnaires are outlined; in addition to the measurement details, number of items, mode of delivery and study characteristics. Specific recommendations are made on selecting a questionnaire aimed at measuring helpful group process mechanisms. Furthermore specific recommendations are made on selecting a measure of overall group process experiences. These findings have already been disseminated to a multidisciplinary team of clinical researchers, psychologists and psychiatrists at the Unit of Social and Community Psychiatry at the Newham Centre for Mental Health. To maximise the impact of these findings, the study will be submitted to a peer reviewed journal and presented at national conferences.

### **Impact of the qualitative study on group experiences in CST/MST**

The results from the qualitative study support the use of a group format when delivering CST and/or MCST for dementia. This has both economic and practical implications given that a group format may increase access to limited resources in dementia care settings. Findings also have implications

on the delivery of group-based CST/MCST. For example, the identified themes highlight which helpful group experiences should be emphasised by clinicians, in addition to the specific challenges associated with the group format. For example, it might be helpful for group facilitators to spend more time promoting positive group processes in the group introduction ball throwing task and/or introduction song. In doing so, group members may engage better in the main theme of the session.

These results have already been disseminated with the group facilitators from each of the four centres from which the data were collected. The feedback received about the project and the results was very positive. The group facilitators noted that CST/MCST groups were generally well received by group members and their carers. They gave several suggestions on how the outcomes from the study could be used to promote the development and delivery of routinely delivered group CST/MCST. It was agreed that an accessible summary of the study would be co-produced by the research team and group facilitators. This has been completed and disseminated across the four centres from which data were collected. It was agreed that this accessible summary would be used to encourage commissioners to fund future CST and MCST groups in the local areas. Furthermore, the accessible summary would also be used to support further recruitment and advertisement of the groups. Findings were also presented to a senior project manager of the general national branch of the Age UK organisation.

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## **Part 1: Literature Review**

**A systematic review and quality assessment of therapeutic group  
process questionnaires**

## Abstract

**Introduction:** The mechanisms of change inherent to interaction between members in psychological therapies delivered in groups are known as ‘group processes’. The measurement and understanding of group processes is important for both research and clinical practice. The aims of this study were to i) systematically review the literature on questionnaire-based group process measures, and ii) assess the psychometric scale development properties of these measures.

**Methods:** A systematic search of questionnaire-based measures of group process was conducted from four databases - PsycINFO, Medline, EMBASE and AMED. A quality assessment was undertaken using established criteria. Only studies that described the development of questionnaire-based scales were included.

**Results:** Seventeen studies which described thirteen measures were included in the analysis. Measures were categorised as either ‘therapeutic group process’ or ‘overall group process’ questionnaires. Several psychometric property criteria were not reported for most measures; notably only one paper was given a positive rating for content validity.

**Conclusion:** The developed list highlights a range of measures that can be used by clinicians and researchers seeking to assess either specific therapeutic group mechanisms, or overall group experiences in therapy. Further research would benefit from validating these measures. In particular studies should focus on developing the content validity of these scales by involving the target population in the item selection and/or reduction.

## Introduction

Psychological therapies are often delivered in groups involving two or more individuals. Due to increasing demands for inexpensive and accessible therapies (McCrone, 2008), groups are becoming an increasingly common approach in community and acute in-patient mental health settings (Burlingame, 2014; Coco, Tasca, Hewitt, Mikail, & Kivlighan, 2019). In addition to the pragmatic benefits of groups, factors inherent to a group environment are also valued on a clinical level. Therapists who deliver psychological therapies in groups often utilise social aspects of the group setting as an agent of clinical change (Coco, Gullo, Prestano, & Burlingame, 2015). The mechanisms of change inherent to interaction between group members are described as ‘group processes’ (Garcia-Cabeza, Ducaju, Chapela, & Gonzalez de Chavez, 2011). Burlingame and colleagues reviewed a number of meta-analyses and found that group processes exist irrespective of the method-specific tasks implemented (Burlingame, MacKenzie, & Strauss, 2004; Burlingame, Strauss, & Joyce, 2013).

The measurement and understanding of group processes is important for both research and clinical practice (Delucia-waack, 1997; Jensen et al., 2012). In terms of research, the Medical Research Council Framework (Campbell et al., 2007) guidance recommends that randomised controlled trials (RCTs) of complex interventions map mechanisms of change linked to desired outcomes. Hence trials of psychological therapies delivered in groups are increasingly seeking to measure mechanisms of change related to both the group process and proposed theory specific mechanisms (Priebe et

al., 2013). In terms of clinical practice, therapists delivering routine therapy groups are encouraged to monitor group processes for their own audit and/or evaluative purposes (Marmarosh, 2018). This is in accordance with the literature highlighting the relationship between group processes and therapeutic outcomes (Chapman et al., 2012). However, despite the importance of measuring group processes, selecting an appropriate measure of group process is widely recognised as a challenging task (Lieberman, Yalom, & Miles, 1973; Thayer & Burlingame, 2014).

Within the group therapy literature, two broad categories of group process measures exist. The first category of measures are questionnaire-based tools that seek to measure group processes as ‘phenomena’, where ‘some aspect or characteristic of the member, leader or group behaviour’ are described (Fuhriman & Burlingame, 1994b, p. 503). In doing so the degree, or intensity, to which pre-defined group mechanisms are present, or experienced, is typically rated on a Likert-type scale. Questionnaire-based measures of group phenomena are quick, inexpensive and easy to use (Burlingame et al., 2006). They can either be self-reported, rated by the group leader or rated by an independent observer. They can be used across multiple group sessions to either regularly track the progress of therapy or explore how group processes develop over time (Bakali, Wilberg, Klungsøyr, & Lorentzen, 2013).

The second category of measures are ‘behavioural coding tools’, which are used to describe and annotate discrete ‘interactive transactions’ between group members (Bales, 1950; Cahill, Barkham, Hardy, Gilbody, & Richards, 2008; Delucia-waack, 1997). The aim of this approach, also

referenced in the literature as ‘in-session coding’ (Delucia-waack, 1997) and/or ‘process analysis of interaction’ (Beck & Lewis, 2000), is to reliably measure classifications of behaviour occurring in a natural environment (Heath, Hindmarsh, & Luff, 2010). Behavioural coding tools have the advantage of being exploratory and theory building (Fuhriman & Burlingame, 1994a). However, they are often laborious and time-intensive for clinicians and/or researchers seeking to monitor group processes or link group processes with outcomes. Despite the fact that new technologies have been used to automatically annotate interactions in a clinical population (Lavelle, Healey, & McCabe, 2013), these methods are limited to interaction laboratories. The present study therefore focused on questionnaire-based measures, which assess pre-defined group process phenomena.

Yalom’s theoretical contributions on curative, or helpful, group factors have been highly influential within the field of group phenomena research, (Yalom & Leszcz, 2005; Yalom, 1985). Yalom described eleven beneficial mechanisms of change associated with clinical outcomes: including universality, altruism, instillation of hope, imparting information, corrective recapitulation of primary family experience, development of socialising techniques, imitative behaviour, cohesiveness, existential factors, catharsis, interpersonal learning-input, interpersonal learning-output/input and self-understanding (Yalom & Leszcz, 2005). MacKenzie’s construct of ‘group climate’ (MacKenzie, 1983) is also a commonly assessed group process phenomena (Johnson et al., 2006). Unlike Yalom’s curative factors, which describe individual helpful group experiences, the group climate



refers to the group environment as a whole - including the degree to which members are engaged with each other, avoidant or in conflict.

Within the literature only a few attempts have been made to collate information on group process questionnaires for clinicians and/or researchers interested in selecting an appropriate measure. The American Group Psychotherapy Association compiled an evidence-based 'self-evaluation kit', the CORE-R, aimed at aiding group therapists in their clinical practice (Strauss, Burlingame, & Bormann, 2008). This included a list of questionnaires that focused on measuring group therapeutic relationships (Johnson, Burlingame, Olsen, Davies, & Gleave, 2005). The measures in the CORE-R were chosen to represent one of three basic components of group phenomena outlined by Johnson and colleague's model of group therapeutic relationships (Johnson et al., 2005) - including Positive Bond Relationship, Positive Working Relationship and Negative Working Relationship (Johnson et al., 2005). This model has been supported by six separate studies, including over 3000 participants from over 500 groups, across four countries (Burlingame, 2010).

More recently, Sodano and colleagues conducted a comprehensive review of group process, dynamics and climate measures (Sodano et al., 2014). In their book chapter, they highlight a range of methodological approaches and tools available for measuring group processes. They also described the levels of reliability and validity for each approach. However, there are at least two important limitations within this literature. First, to the authors' knowledge, there has been no attempt to review the literature on group process measures using systematic methods to search and collect

data. Hence, existing non-systematic reviews are potentially subject to bias and errors in the study selection process (Egger, Davey-Smith, & Altman, 2008). Second, no attempt has been made to assess psychometric properties of studies describing the scale development of group process measures using standardised criterion. For example, Sodano and colleagues (2014) stated that measures included in their study must have at least a moderate level of reliability and construct validity. However, without explicit criterion definitions, what constitutes a moderate level of psychometric quality is not clear.

This study therefore sought to address these limitations by systematically reviewing and comprehensively appraising existing group process measures. In doing so, only articles that reported and/or evaluated the psychometric development of measures were included. Overall, the specific aims of the present study were to:

- 1) Develop an up-to-date summary of questionnaire-based group process measures used in a therapeutic group setting
- 2) To assess the psychometric properties of the identified questionnaire-based group process measures using an established set of quality criteria.

In doing so, this study sought to develop a list of measures that can be used by clinicians and researchers seeking to assess mechanisms of group process occurring in psychological therapies delivered in groups.

## Methods

### Search strategy

A systematic search of published questionnaires, which sought to measure group processes used within a group therapy setting, was conducted.

Systematic principles were followed for searching and screening. Table 1.1 summarises the three search term categories used, including ‘measure’ AND ‘group process’ AND ‘group therapy’, and the terms used within these categories.

Table 1.1. Search terms included in the literature review

Measure	Group therapeutic process	Group therapy
measur*.ti,ab.	(group* adj3 climate*).ti,ab.	(group* adj1 therap*).ti,ab
instrument*.ti,ab.	Cohesi*.ti,ab.	(group* adj1 psychotherap*).ti,ab
questionna*.ti,ab.	Alliance*.ti,ab.	(group* adj2 cogniti* adj2
scale*.ti,ab.	Empath*.ti,ab.	behaviour* adj2 therap*).ti,ab.
assessment.ti,ab.	(therap* adj2 relation*).ti,ab	(dynamic* adj2 group*).ti,ab.
reliabil*.ti,ab.	(therap* adj2 factors*).ti,ab	(group* adj2 analytic* adj2
validity*.ti,ab.	Engagement*.ti,ab.	therap*).ti,ab.
psychometric*.ti,ab.	(curative* adj2 climate*).ti,ab	(psychoanalytic adj2 therap*).ti,ab.
*patient health	(social* adj2 interact*).ti,ab	(tavistock adj2 group*).ti,ab.
questionnaire/ or	(interpersonal* adj2	(interpersonal adj2 group*
*psychometrics/	relation*).ti,ab	therap*).ti,ab.
	Synchron*.ti,ab.	(group* adj2 analysis*).ti,ab.
	(motion* adj3 analy*).ti,ab	exp Psychodynamic Psychotherapy/
	(nonverbal* adj2 behav*).ti,ab	(counsel* adj2group*).ti,ab.
	(gestur* adj2 behav*).ti,ab	exp group counseling/
	Interpersonal.ti,ab	exp Support Groups/
	(group* adj2 process*).ti,ab	*psychotherapy, group/ or *couples
	(group* adj1 experience*).ti,ab	therapy/ or *family therapy/ or
		*marital therapy/ or sensitivity
		training groups/

Constructs related to group processes were sourced from the current literature (Burlingame et al., 2004; Burlingame et al., 2013); including group climate, cohesion, alliance, empathy and therapeutic relationships. Four electronic databases were searched, including PsychINFO, Medline, EMBASE and AMED. Studies identified from the initial search were cross-referenced. A number of related journal articles were hand searched, including the International Journal of Group Psychotherapy and Group Therapy.

### **Eligibility Criteria**

Studies were *included* if:

- a) Group process was measured in the context of a therapeutic intervention or treatment. The group setting was defined as a situation involving more than two people other than the group leader/co-facilitator. Accepted definitions of a group process included group climate, cohesion, alliance, empathy and therapeutic relationships.
- b) Reference was made to scale development or the evaluation of psychometric properties, including reliability and /or validity, in the title or abstract.
- c) Studies were published in English.
- d) Studies were published in a peer-reviewed journal.

Studies were *excluded* if:

- a) They were a review article. Potentially relevant studies within the reviews were included in the grey literature hand search.

- b) Group process was measured in a specific context of family or couples therapy.
- c) Personal attributes of an individual in a group, for example group expectations or group leadership, were measured rather than group process phenomena related to interactions between group members as defined by Burlingame and colleagues (2013).
- d) Moment-to-moment interactions from segments of group sessions were measured using behavioural coding tools. This included any studies that involved the use of digital technologies, including video recordings equipment and/or other annotation software.
- e) There was a sample size of less than 50 participants, in accordance to Terwee and colleagues' (2007) established criteria on the psychometric properties of health outcome measures.
- f) Studies were only abstract publications or study protocols.

### **Data Extraction Procedure**

Titles and abstracts of studies were retrieved using the stated inclusion/exclusion criteria and search strategy. The lead researcher (SO) first screened the titles and abstracts. Following this, a second research assistant (EB) independently re-extracted 50% of the identified studies. Any ambiguity was resolved with the lead researcher's primary supervisor (AS). SO and EB then both independently reviewed all studies included in the full paper review stage using a structured format to extract relevant information. Any ambiguity was resolved with AS. Extracted information included details on the group process measure - including type of measure, number of

items, construct being measured, how to use measure and details on the development of measure. Any missing data were requested from study authors.

### **Appraisal of psychometric properties**

SO and EB independently conducted a quality appraisal of all studies which met the relevant inclusion/exclusion criteria. In doing so, SO and EB first independently conducted a quality appraisal from three randomly selected studies. At this stage, SO and EB reviewed and discussed their ratings together to ensure sufficient rater agreement. SO and EB then independently reviewed all the remaining papers and compared their ratings to ensure sufficient agreement. Any ambiguity was resolved with AS.

The quality assessment was undertaken using established criteria which assessed the development of questionnaire-based measures used in health (Terwee et al., 2007). In particular, these criteria assess the procedures used to develop questionnaires. Eight criteria categories were used to determine the methodological quality of studies aimed at developing and evaluating of group process measures. These criteria, and guidance on what constitutes good measurement properties, are outlined in the Table 1.2 below. Each item within the criterion was scored depending on whether there was an adequate design and appropriate reporting of statistics. If criteria for a given psychometric property were met, a 'positive rating' of '2' was given. If criteria were doubtful in design, where a clear description of the outlined aspects was lacking, or only partial criteria were met for a given psychometric property, an 'intermediate rating' of '1' was given. If

there was no information given on a given criteria, or criteria were explicitly not met, a 'no rating' of '0' was given. Total scores for each measure and each quality criteria category across all measures were given.

Table 1.2. Terwee and colleagues' (2007) criteria guidance on assessing development procedures

Property	Definition	Quality Criteria (Score / Definition)
Content validity		<hr/> <hr/>
Internal consistency		<hr/> <hr/>
Criterion validity		<hr/> <hr/>
Construct validity		<hr/> <hr/>



Table 1.2 continued.

Property	Definition	Quality Criteria (Score / Definition)
Reproducibility (Agreement)		
Reproducibility (Reliability)		
Responsiveness		
Floor and ceiling effects		
Interpretability		

*NB: MIC=minimal important change; SDC=smallest detectable change; LOA=limits of agreement; ICC=Intraclass correlation; SD=standard deviation. Doubtful design or method = lacking of a clear description of the design or methods of the study, sample size smaller than 50 subjects (should be at least 50 in every (subgroup) analysis), or any important methodological weakness in the design or execution of the study*

## Results

### Literature search

The search process is summarised in Figure 1.1 below. A total of 4975 papers were initially identified in December 2018 from the electronic searches; including PsycINFO (n=2333), Medline (n=1307), Embase (n=1234) and Amed (n=101). At the title screening stage, studies were excluded if they were duplications (n=1278), papers that were not written in English (n=246), were a review article (N=123) and were not studies published in a peer-reviewed journal, for example were either a conference paper, dissertation or poster presentation (n=576). Studies that did not make reference to a group process measure, group therapy and/or a group setting in either the title or abstract were also excluded (N=1162).

Of the 1590 abstracts remaining to be screened, 1482 studies did not make reference to the development, scale quality or the psychometric properties of a group process measure. A total of 108 studies were therefore included in the full paper review stage.

Studies identified in the full paper review stage were excluded if they consisted of a sample less than 50 participants (N=11), did not reference using a group process measure in a group therapeutic setting (N=5), measured group process in a specific family/couples therapy context (N=5), were not published in an English language (N=6), did not report the development and/or evaluation of a group process measure (N=8), measured personal attributes of an individual within a group (N=14), measured

moment-to-moment interactions (N=10), involved the use of technology and/or video analysis (N=26) and qualitatively measured group process (N=4). Two further studies were identified as duplicates and excluded. A total of seventeen studies, which outlined twelve group process measures, met the inclusion criteria. An additional study/measure was identified during the hand searching stage. Therefore a total of thirteen group process measures were reviewed and included in the psychometric assessment.

### **Group process measures**

Six questionnaires focused on measuring helpful group processes associated with clinical outcomes and were categorised as ‘therapeutic group process’ measures. These measures included the Group Cohesiveness Scale (Wongpakaran, Wongpakaran, Intachote-Sakamoto, & Boripuntakul, 2013), Therapeutic Factor Inventory (Joyce, MacNair-Semands, Tasca, & Ogrodniczuk, 2011; Lese & MacNair-Semands, 2000; MacNair-Semands, Ogrodniczuk, & Joyce, 2010), Group Cohesion Scale (Treadwell, Lavertue, Kumar, & Veeraraghavan, 2001), Group Attitude Scale (Evans & Jarvis, 1986), Curative Climate Instrument (Fuhriman, Drescher, Hanson, Henrie, & Rybicki, 1986) and the Scale for Evaluation of Group Counselling (Murillo, Shaffer, & Michael, 1981). The characteristics of the six ‘therapeutic group process’ questionnaires are summarised in Table 1.3. Three versions of the Therapeutic Factor Inventory were identified and were therefore separately described in Table 1.3.

The remaining seven questionnaires measured group processes more broadly, including both positive and negative group experiences, as well as individual and group level mechanisms. Hence these questionnaires were categorised as ‘overall group process’ measures. This included the Group Observational Measurement of Engagement (Cohen-Mansfield, Hai & Comishen, 2017), Factors Aspecific and Specific in Group Therapy (Marogna & Caccamo, 2014), Social exchange scale (Brown, Tang, & Hollman, 2014), Ferrara Group Experiences Scale (Caruso et al., 2013), Group Questionnaire (Krogel et al., 2013), Group Sessions Rating Scale (Quirk, Miller, Duncan, & Owen, 2013) and Group Climate Questionnaire (MacKenzie, 1981; MacKenzie, 1983). The characteristics of the seven ‘overall group process’ questionnaires are summarised in Table 1.4. Two versions of the Group Climate Questionnaire were identified and were therefore separately described in Table 1.4.

Sixty-nine percent of studies described self-report questionnaires. The majority of questionnaires (61%) were rated on either a five-point or seven-point Likert-type scale. The identified questionnaires were developed across a diverse range of therapeutic orientations and clinical and non-clinical populations. The number of items ranged from four items (Group Cohesiveness Scale) to 79 items (Scale of the Evaluation of Group Counselling).

### **Quality of measures**

The assessment of the psychometric properties of the thirteen included measures are summarised in Table 1.5. Scores for each of the eight categories outlined by Terwee and colleagues (2007) are given, in addition to total ‘measure’ and total ‘category’ scores. Based on the total measure scores, the Group Cohesiveness Scale (Wongpakaran et al., 2013), Therapeutic Factor Inventory-Short (MacNair-Semands et al., 2010), Therapeutic Factor Inventory-19 (Joyce et al., 2011), Group Questionnaire (Krogel et al., 2013) and Group Sessions Rating Scale scored highest in terms of their scale development quality. However, all of these measures scored zero for content validity. All measures except for the Social Exchange Scale (Brown et al., 2014) demonstrated good internal consistency.

Figure 1.1 Search process of literature

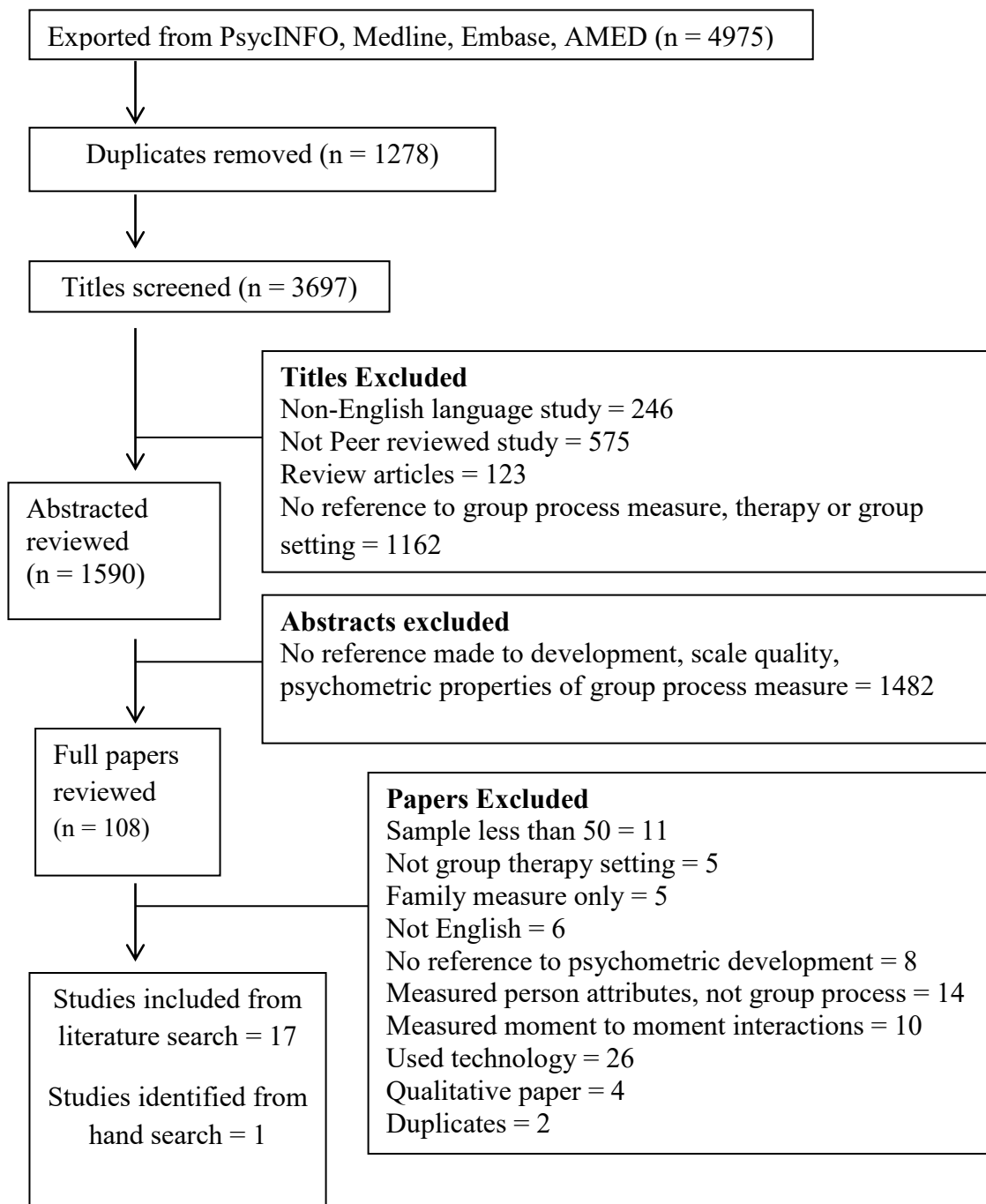


Table 1.3. Characteristics of measures in the ‘therapeutic group process’ category

Measure	Study	Measurement details	Number of items / delivery	Group characteristics, sample size, location
Group Cohesiveness Scale	(Wongpakaran et al., 2013)	Measures the degree to which members of the group feel engaged with each other as a whole. This includes whether members accepted, trusted, liked/cared each other, revealed personal information and felt a sense of participation.	Seven-items / self-report, observer-rated, five-point Likert scale.	Psychiatric inpatient group psychotherapy setting (N=96, 44% female), Thailand.
	(Lese & MacNair-Semands, 2000)	<i>Therapeutic Factor Inventory</i> : Measures Yalom’s 11 curative group factors; including instillation of hope, universality, imparting information, altruism, corrective recapitulation of the primary family group, development of socialising techniques, imitative behaviour, interpersonal learning, group cohesiveness, catharsis, existential learning.	99-items / self-report, seven-point Likert scale	Counselling and support groups for undergraduate/graduate college students, USA (N=77, 76% female)
Therapeutic Factor Inventory	(MacNair-Semands et al., 2010)	<i>Therapeutic Factor Inventory-Short</i> : Measures four broad therapeutic factors more globally; including instillation of hope, secure emotional expression, awareness of relational impact and social learning.	44-item / self-report, seven-point Likert scale.	Self-awareness groups (N=174, 65% female) at a day treatment program, Canada.
	(Joyce et al., 2011)	<i>Therapeutic Factor Inventory-19</i> : Also measures four broad therapeutic factors more globally; including instillation of hope, secure emotional expression, awareness of relational impact and social learning.	19-item / self-report, seven-point Likert scale.	University counselling groups, outpatient and inpatient groups. Total of 52 groups, (N=379, 61% female), USA and Canada.

Table 1.3. continued.

Measure	Study	Measurement details	Number of items / delivery	Group characteristics, sample size, location
The Group Cohesion scale-Revised	(Treadwell et al., 2001)	Measures cohesion among group members in terms of interaction and communication. Items include whether group members felt free to share information, feelings of unity and togetherness and receptiveness to feedback.	25-items / self-report, four-point scale	Eight experiential training courses (N=110) cognitive and psychodramatic techniques, USA.
Group attitude scale*	(Evans & Jarvis, 1986)	Measures attraction to group, defined as an individual's desire to identify with and be an accepted member of the group. Focuses on evaluating group member feelings about the group rather than behaviour in the group.	20 items / self-report, nine-point Likert Scale	26 groups (N=178); unstructured/ semi-structured growth, assertion-training, Gestalt, community health groups, USA.
Curative Climate Instrument	(Fuhriman et al., 1986)	Measures four of Yalom's curative group factors. Subscales include: 1) cohesion (forces within a group that draw it together); 2) catharsis (emotional expression of self); 3) interpersonal learning (receiving information about behaviour from other group members) and 4) insight (seeing and experiencing self in a new way).	20 items / self-report, five-point Likert scale	Outpatient therapy or personal growth groups (N=161); veteran, community mental, counselling, centres, USA
Scale for the Evaluation of Group Counselling	(Murillo et al., 1981)	Measures group counselling experiences. Based on Yalom's curative group factors, including 1) satisfying experience (catharsis, cohesiveness, group satisfaction, counsellor effectiveness, openness); 2) interpersonal learning (altruism, interpersonal learning, cohesiveness); 3) increasing self-confidence (instillation of hope, universality)	79 items / self-report, five-point Likert scale	18 counselling groups for personal growth, weight reduction, assertion training and stress management, USA (N=99)

\* Made reference to three earlier scale development studies although these were not published as peer-reviewed articles, hence not included.



Table 1.4. Characteristics of measure in the ‘overall group process’ category

Measure	Study	Measurement details	Number of items / delivery	Group characteristics, sample size, location
Group Observational Measurement of Engagement	(Cohen-Mansfield, Hai & Comishen, 2017)	Measures engagement on both individual level (in terms of duration, participation and attitude) and group level (in terms of total group participation, positive interactions and negative interactions)	Eight items / observer-rated, including five, six and seven-point rating scales	Activity groups (N=105, 65% female) delivered in nursing units, senior day centres and independent living facilities, Canada.
Factors Aspecific and Specific in Group Therapy	(Marogna & Caccamo, 2014)	Measures therapeutic group factors that are specific (related to a theoretical model used by therapist) and non-specific (not related to a theoretical model/specific technique used by therapy).	41-items / self-report, five-point Likert scale	52 group therapies (N=167, 39% female); range of mental health diagnoses from mental health centres, family clinics psychiatric hospitals, Italy
Social exchange scale*	(Brown et al., 2014)	Measures social exchange during self-help support group meetings. Seven subscales assess: 1) emotional support provided; 2) experiential information provided; 3) emotional support received; 4) experiential information received; 5) unwanted behaviours received; 6) humour exchanged; and 7) exchanges outside meetings.	29 items / self-report	18 parenting self-help groups (N=194, 99% female); all parent-led, USA.
Ferrara Group Experiences scale	(Caruso et al., 2013)	Measures core experiences of patients (therapeutic or not) during single or course of group therapy session within a community mental health context. Five subscales assess: 1) sharing of emotions and experience; 2) cognitive improvement; 3) group learning; 4) difficulties in open expression; and 5) relationships	20 items / self-report, five-point Likert scale	Community setting; psychodynamic, psychosocial rehabilitation, psycho-educational, expressive, body-oriented groups (N = 166 / 65% female), Italy

Table 1.4. continued.

Measure	Study	Measurement details	Number of items / delivery	Group characteristics, sample size, location
Group Questionnaire	(Krogel et al., 2013)	Measures the quality of therapeutic relationship in groups across member-member, member-leader and member-group relationships Consists of three subscales: positive bonding (cohesion, engagement and emotional bond), positive working (agreement on therapeutic tasks/goals), and negative relationship (conflict and empathic failure).	30-item / self-report, seven-point Likert scale	Outpatient university counselling centre, non-patient process groups (N=486, 65% female) delivered in the USA.
Group Sessions Rating Scale	(Quirk et al., 2013)	Measures group alliance in terms of: 1) relationships (feeling respected and understood or not); 2) goals (working topics of interest or not); 3) acceptability of approach (whether group approach/leadership was adequate enough or not); 4) overall fit (whether group was suitable or not)	Four item visual analogue scale.	Five open therapy groups for issues related to substance abuse (N=105, 58% female)
Group Climate Questionnaire	(MacKenzie, 1981)	<i>Group Climate Questionnaire</i> : Measures group environment. Eight subscales assess; 1) engagement, 2) disclosure, 3) support, 4) conflict, 5) challenge, 6) practicality, 7) cognition, and 8) control.	32 items / self-report, observer-rated, seven-point Likert scale	Psychiatric outpatient psychotherapy, supportive, activity and social groups, (N=119, 56% female)
	(MacKenzie, 1983)	<i>Group Climate Questionnaire-Short</i> : Measures group environment. Three subscales assessed; 1) engagement, 2) conflict and 3) avoidance.	12 items / self-report, observer-rated, seven-point Likert scale	12 therapy groups (N=75, 60% female), USA.

\*Consisted of two studies, part two are reported in this review.

Table 1.5. Psychometric quality scores for the 13 included measures

Group construct measured	Measure	Content Validity	Internal consistency	Criterion Validity	Construct Validity	Reproducibility		Responsiveness	Floor /ceiling effects	Interpretability	<b>Total scores</b>
						a.	b.				
<b>Therapeutic group process measures</b>	Group Cohesiveness Scale	0	2	2	1	0	2	0	0	0	<b>7</b>
	TFI	0	1	0	0	0	0	0	0	0	<b>1</b>
	TFI-Short	0	2	0	2	0	0	1	0	1	<b>6</b>
	TFI-19-item	0	0	0	1	1	1	1	0	2	<b>6</b>
	Group Cohesion Scale-Revised	0	1	0	0	0	0	1	0	1	<b>3</b>
	Group attitude scale	0	1	1	2	0	0	1	0	0	<b>5</b>
	Curative Climate Instrument	1	2	0	0	0	0	0	0	1	<b>4</b>
	Scale for the Evaluation of Group Counselling	0	1	0	0	0	0	0	0	0	<b>1</b>

*NB: a = Responsiveness Agreement; b = Responsiveness Reliability; TFI = Therapeutic Factor Inventory; GCQ = Group Climate Questionnaire*

Table 1.5. continued.

Group construct measured	Measure	Content Validity	Internal consistency	Criterion Validity	Construct Validity	Reproducibility a.      b.		Responsiveness	Floor /ceiling effects	Interpretability	<b>Total scores</b>
<b>Overall group process measures</b>	Group Observational Measurement of Engagement	0	1	0	0	0	0	1	0	0	<b>2</b>
	Factors aspecific and specific in group therapy	0	2	0	2	0	0	0	0	0	<b>4</b>
	Social exchange scale	2	0	0	1	0	0	0	0	0	<b>3</b>
	Ferrara group experiences scale	1	2	0	0	0	0	0	0	0	<b>3</b>
	Group Questionnaire	0	2	0	2	0	0	0	0	1	<b>5</b>
	Group Sessions Rating Scale	0	2	0	2	0	0	1	0	1	<b>6</b>
	GCQ	0	1	0	1	0	0	0	0	0	<b>2</b>
	GCQ-Short	0	1	0	0	0	0	1	0	1	<b>3</b>
<b>Total category scores</b>		<b>4</b>	<b>21</b>	<b>3</b>	<b>14</b>	<b>1</b>	<b>3</b>	<b>7</b>	<b>0</b>	<b>8</b>	

NB: a = Responsiveness Agreement; b = Responsiveness Reliability; TFI = Therapeutic Factor Inventory; GCQ = Group Climate Questionnaire

## Discussion

To the authors' knowledge, the present study was the first to systematically review the literature on group process measures. Furthermore, this study was the first to use a clearly defined set of quality criteria to assess the psychometric properties of questionnaire-based group process measures. A list of measures that can be used by clinicians and/or researchers seeking to assess mechanisms of group process in group psychological therapies are presented and discussed. A total of thirteen questionnaire-based tools were organised into two categories. The first category outlined measures which assessed beneficial mechanisms of change relevant to clinical outcomes. This category included six measures and was titled 'therapeutic group process measures'. The second category of measures assessed overall group processes beyond helpful mechanisms, including positive and negative group experiences. This category included seven measures and was titled 'overall group process'.

The analysis of the psychometric properties highlighted several categories of quality criteria that were not reported. Only one measure, the Social Exchange Scale (Brown et al., 2014), was given a positive rating for 'content validity', regarded by Terwee and colleagues (2007) as the most important psychometric property. Twelve measures were given a 'no rating' for the 'reproducibility agreement' criterion, where no information was given, or criteria were explicitly not met. Therefore the ability for the identified measures to assess change over time and longitudinal validity is limited or unclear. This is important when considering the applicability of

these measures when assessing therapeutic change. Furthermore all measures scored a ‘no rating’ for the ‘floor and ceiling effects’ criterion, making interpretation of the content validity further difficult.

### **Measuring beneficial group interactions**

The findings from this study give insight into six measures that assess mechanisms of change inherent to beneficial, or helpful, group interactions. Three out of six measures within this category measured aspects of Yalom’s proposed curative factors (Yalom & Leszcz, 2005; Yalom, 1985). From this list, the Therapeutic Factor Inventory-Short (TFI-S) (MacNair-Semands et al., 2010) and Therapeutic Factor Inventory-19 (Joyce et al., 2011), are arguably the most suitable instruments available for evaluating what group members find helpful about their group experience. Compared to the Group Cohesiveness Scale and the Curative Climate Instrument, the TFI-S and TFI-19 measure Yalom’s curative factors more comprehensively. In terms of the reported psychometric properties, the TFI-S and TFI-19-item scored on par with the other measures identified. The TFI-S demonstrated good internal consistency, construct validity, responsiveness and interpretability and the TFI-19 demonstrated some evidence of reproducibility and responsiveness.

Within the group therapy literature, the TFI-S is valued as a reliable and simple tool (Strauss et al., 2008) and features in the AGPA’s CORE-R battery (Burlingame et al., 2006; Strauss et al., 2008). However the TFI-S has more items than several other questionnaires in this category. The shorter TFI-19 is therefore arguably a more accessible choice of measure.

Furthermore the TFI-19 (Joyce et al., 2011) has been validated cross-culturally in a Japanese population (Kageyama, Nakamura, Kobayashi, & Yokoyama, 2016).

The Group Cohesiveness Scale also appears to be a suitable measure of helpful group processes. It had the highest total psychometric quality score and was the only measure which had a positive criterion validity score. Furthermore, it consists of only seven-items. However, this measure is specifically focused on measuring group engagement and is therefore possibly too limited to be used alone.

### **Measuring overall group process**

The findings from this study highlight seven questionnaires which measure ‘overall group process’ – including both supportive and challenging group experiences. The Group Questionnaire (GQ) (Krogel et al., 2013) is arguably the most suitable questionnaire available for researchers seeking to measure group processes beyond those experienced as curative. An important strength of this measure is that it was developed to measure Johnson and colleagues’ empirically robust theoretical model of group relationships (Johnson et al., 2005). The GQ was designed to combine concepts of ‘interpersonal structure of relationships’, including member-leader, member-member and member-group, and the ‘quality of the therapeutic relationship’ in groups, including group cohesion, alliance, group climate and empathy. Findings from the present study suggest that the GQ has good internal consistency and construct validity. These findings are also consistent with analyses from Thayer and Burlingame who also

replicated the GQ's factor structure and correlated the GQ with measures from which it was originally developed (Thayer & Burlingame, 2014).

The GQ is referenced in a previous review of measures related to group process, dynamics and interventions (Sodano et al., 2014). In this review, it is noted that population specific norms from Krogel and colleagues' sample (Krogel et al., 2013) - including inpatient, non-clinical and counselling centre groups - allow for the comparison of GQ scores with relevant normative group scores. A more recent study further supported the GQ factor structure (Janis, Burlingame, & Olsen, 2018). Janis and colleagues (2018) used results from six GQ studies conducted across a diverse clinical and nonclinical sample of 2479 participants further supporting the implementation of unique GQ norms.

Findings from this current study highlight that popular measures are not necessarily psychometrically robust. The Group Climate Questionnaire-Short (GCQ-S) (MacKenzie, 1983) has been cited as the most commonly used and extensively validated group process measure in the group psychotherapy literature (Burlingame et al., 2004; Johnson et al., 2006; Strauss et al., 2008). It has been used in 46 group psychotherapy studies across different populations and group therapeutic orientations, with 15 studies linking the GCQ subscales to outcomes (Johnson et al., 2006). Furthermore, like the TFI, it is also recommended in the AGPA's CORE-R battery of group process measures (Burlingame et al., 2006; Strauss et al., 2008). However findings from the present study highlight that the Group Climate Questionnaire (MacKenzie, 1981) and the Group Climate Questionnaire-Short (MacKenzie, 1983) have relatively low scale



development quality scores compared to other available tools. The discrepancy between the GCQ-S' low psychometric properties and high popularity might be due to the fact that the GCQ-S is an extremely user-friendly tool, consisting of only 12 items and can be flexibly used by either a group member, group leader or observer (DeChavez, Gutierrez, Ducaju, & Fraile, 2000).

### **Limitations**

This present study is limited to questionnaire-based measures of group process phenomena and does not include moment-to-moment behavioural coding tools (Davis, Budman, & Soldz, 2000) and/or open-ended qualitative measures of group process (Strauss et al., 2008). Questionnaires are likely to be the most appropriate approach for clinicians who have busy practices, or researchers seeking to incorporate feedback on group processes during ongoing groups (Burlingame et al., 2015; Slone, Mathews-Duvall, & Kodet, 2015). However, behavioural coding tools (Bales, 1950; Cahill et al., 2008; Delucia-waack, 1997) have the advantage of reliably measuring fine-grain interactive behaviours often too subtle to the human eye. Furthermore, they can be measured and analysed using automated digital technologies (Heath, Luff, & Sanchez, 2007). Compared to questionnaires, behavioural coding tools are a more bottom-up exploratory approach, where simple behavioural categories and/or statements can be combined or aggregated to form multiple variations of interactive behaviours (Davis et al., 2000). Hence this approach might be more suitable for researchers and/or clinicians seeking to identify less understood group processes (Fuhriman & Burlingame, 1994a).

A second limitation of the present study is that the appraisal of psychometric properties was limited to single studies that reported scale development. It was not within the scope of the study to include any additional follow-up studies, or validation studies for a more thorough quality assessment. To address this limitation, the present study reported ratings for each of the eight quality criteria for all included measures, as recommended by Terwee and colleagues (2007).

A third methodological limitation to be considered is that a high number of studies did not meet inclusion criteria and were excluded during the screening stages. Whilst systematic principles were followed for searching and screening potentially relevant studies, the search term strategy may have been too comprehensive. Identifying measures that met inclusion criteria was therefore a challenging task. To address this limitation, stringent inter-rater procedures were followed. A second rater re-extracted 50% of the studies initially identified and independently reviewed all studies included in the full-paper review stage. Furthermore, both the lead researcher and an independent researcher completed all quality ratings. Future researchers may benefit from refining the search strategy to reduce the number of irrelevant studies and minimise risks of error at the screening stages.

### **Implications for clinicians and researchers measuring group processes**

To aid researchers and/or clinicians in their decision making process, the identified questionnaires are organised into ‘therapeutic group process measures’ and ‘overall group process’ categories. The Therapeutic Factor Inventory-Short (MacNair-Semands et al., 2010), or Therapeutic Factor

Inventory-19 (Joyce et al., 2011), and the Group Questionnaire (Krogel et al., 2013), are recommended questionnaires from these respective categories.

Findings highlight areas of future research for those interested in developing measures of group process phenomena. In particular, the results demonstrate the importance of testing the psychometric properties of existing group process measures. To date, none of the identified studies referenced absolute measurement error. Furthermore all included studies failed to define a minimal important change. Therefore evaluating the interpretability of the identified measures was a challenge – in particular their applicability to assessing therapeutic change. If these psychometric properties were evaluated, it is recommended that researchers report these important criteria.

It is also recommended that when selecting a group process measure, clinicians and/or researchers consider issues related to content validity – described as the degree to which group process concepts of interest are adequately represented in the chosen questionnaire (Terwee et al., 2007). Terwee and colleagues (2007) state that authors should provide a clear description of the measurement aim, target population, concepts, item selection and item reduction. In terms of item selection/reduction, it is specifically noted that ‘the target population should be involved during item selection’ (page 35) to meet these criteria. Brown and colleagues’ (2014) were the only authors who explicitly reported that they involved the target population in their paper on the development of the Social Exchange Scale. Future researchers seeking to use and/or adapt a given group process

measure would benefit from ensuring that items are piloted with the clinical population of interest first.

Current guidance for measuring and monitoring group processes in group therapies recommends questionnaire-based instruments (Bernard et al., 2008). However, as noted, future researchers would benefit from reviewing relevant behavioural coding tools, which allow for a bottom-up exploration of less defined group processes. The present study gives insight into how behavioural coding tools can be systematically identified and evaluated in future studies - including strategies for searching, screening and appraising results from the group therapy literature. Whilst qualitative methods are less commonly reported within the literature, this approach also has the advantage of being a theory-building and is also recommended within group therapy guidelines (Strauss et al., 2008). In the CORE-R it is argued that it is important to gain a “qualitative perspective on group experiences” (page 1233) when measuring group processes (Strauss et al., 2008). In line with this guidance, a ‘critical incidence’ approach, where group members are asked about what incidents in the group were critical to them using a series of open-ended questions may also be a helpful exploratory approach too (Strauss et al., 2008). Depending on the resources available, we argue that future researchers seeking to identify and measure group process mechanisms would benefit from using a combination of questionnaire-based, behavioural coding and qualitative approaches.

## **Conclusion**

A list of thirteen questionnaire-based group process measures were described and evaluated, providing a valuable source of reference for clinicians and researchers. The Therapeutic Factor Inventory-Short (MacNair-Semands et al., 2010) and Therapeutic Factor Inventory-19 (Joyce et al., 2011) are recommended for those seeking to assess beneficial mechanisms of change relevant to clinical outcomes. However, if one is interested in measuring overall group processes, then Group Questionnaire (Krogel et al., 2013) is recommended as the most appropriate measure. This might be more relevant in an exploratory study seeking to identify both beneficial and challenging aspects of group interactive mechanisms relevant to clinical outcomes.

Future studies should consider validating these measures further. In particular studies should focus on developing the content validity of these scales. Furthermore, future research would benefit from considering behavioural coding tools, as well as qualitative methods when measuring therapeutic group process.

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## **Part 2: Empirical Paper**

### **Cognitive Stimulation Therapy groups for people with dementia: a qualitative study of group experiences**

## Abstract

**Introduction:** 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 empirically examine group processes in CST groups, or longer-term Maintenance CST (MCST) groups, to understand the possible advantages, and/or disadvantages, of a group format. The specific aim of this study is to explore which group processes can be qualitatively identified from the perspective of participants attending group-based CST and MCST.

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

**Results:** The final analysis identified six themes of group experiences: group expression, group bond, group entertainment, group relationships, group support and group stimulation. A proposed model of group processes in CST/MCST is outlined.

**Discussion:** Findings support the notion that therapeutic advantages inherent to the group format exist in group-based CST/MCST. New insights into the challenges of a group format are also highlighted and discussed, in addition to the inter-connecting nature of the identified themes. Future research may benefit from exploring the relationship between the identified group processes and clinical outcomes.



## **Introduction**

Group Cognitive Stimulation Therapy (CST) is the only intervention recommended by the UK National Institute of Clinical Excellence for promoting cognition, independence and wellbeing for people with mild to moderate dementia (NICE, 2018). The aim of CST is to improve cognitive functioning through a stimulating environment where individuals are encouraged to engage in a range of activities and discussions (Spector et al., 2003). It is predominately delivered as a group-based intervention involving five to eight people with mild to moderate dementia, consisting 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 developed and found to be effective in improving quality of life and cognition (Orrell et al., 2014).

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). Based on the existing literature, the key principles outlined in the manual for group-based CST (Aguirre, Spector, & Streater, 2011) 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. A recent systematic review of eight randomised controlled trials (RCTs) and

four pretest-posttest studies found that group-based CST has benefits on both cognitive functioning and self-reported quality of life (Lobbia et al., 2018). However, despite its efficacy and cost-effectiveness (Knapp et al., 2006), relatively little research has sought to empirically measure how CST works. NICE guidance currently recommends that CST should be delivered in a group format (NICE, 2018). However the positive and/or negative clinical implications of doing so are unclear.

In accordance with guidance from the Medical Research Council complex interventions framework (Craig et al., 2008), several qualitative studies have examined mechanisms of change in CST in recent years (Bertrand et al., 2018; Spector, Gardner, & Orrell, 2011). One common finding is that mechanisms inherent to interactions fostered within the group environment are important for clinical outcomes in CST. For example Spector and colleagues (2011) explored whether improvements found in clinical trials were also qualitatively 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. Participants stated that they enjoyed the conversational aspect of the group, which provided an opportunity to listen to others and normalise their experience of dementia. A more recent evaluation of a group CST pilot study with an Irish population of people with dementia 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 this study, the group format is

described as a key factor that facilitated stimulation through peer support and bonds between group members.

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 dementia compared to treatment as usual (Orrell et al., 2017). Despite other possible explanations for why iCST delivered by carers did not work in the same way as group-based CST delivered by clinicians, this finding lends support to the notion that group mechanisms are important for improved clinical outcomes.

Within the broader literature, group processes are defined as mechanisms of change inherent to the group environment (Garcia-Cabeza et al., 2011) and have been linked to positive clinical outcomes (Burlingame, Strauss, & Joyce, 2013; Yalom, 1985). Burlingame and colleagues reviewed a number of meta-analyses and found that group processes exist irrespective of the method-specific tasks implemented (Burlingame, MacKenzie, & Strauss, 2004; Burlingame et al., 2013). Hence they argue that common therapeutic advantages of the social environment fostered within the group appear to exist across different treatment orientations with varying therapeutic models.

Research from Cohen-Mansfield and colleagues is a rare example in which group interactions in a dementia population have been examined (Cohen-Mansfield, Hai, & Comishen, 2017; Cohen-Mansfield, 2018). They developed a ‘conceptual framework of group engagement’ of group therapeutic activities for persons with dementia (Cohen-Mansfield et al

2017). In this framework, environmental attributes, personal attributes and group activity content are key factors proposed to influence group member engagement. However, to the authors' knowledge, no attempt has been made to specifically examine group processes in CST/MCST groups for a dementia population. In particular, little is understood about the possible disadvantages of a group format for CST and/or MCST in addition to therapeutic advantages. Qualitative research from Johanson and Werbert suggests that positive group experiences are often accompanied by negative group experiences of the same theme (Johansson & Werbart, 2009). However, 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 identification of which group processes in group-based CST are experienced positively and/or negatively will therefore have important implications in the development, training and delivery of group-based CST. Importantly, if helpful, or unhelpful group processes can be systematically identified, they can then be enhanced, or reduced, to ensure optimal effectiveness.

To address this gap within the literature, the present study used semi-structured in-depth interviews to explore the following research question: *Which group processes can be qualitatively identified from the perspective of people attending group CST/MCST and the group facilitators of CST/MCST?*

## **Methods**

### **Setting**

Recruitment took place in three independent Age UK charities across the East Midlands, South West and South East of England, and a private homecare organisation within a multicultural borough of inner-city London, which provides training and therapeutic interventions.

### **Sampling**

A purposeful sampling approach was implemented due to the widely accepted difficulties in recruiting individuals with a dementia diagnosis in research who have participated in a non-NHS setting. Participants were therefore recruited depending on which CST groups were identified first and which group members and/or facilitators were available to be seen from these groups. 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. Furthermore, participants were sampled from across a geographically diverse range of areas within England to help identify shared dimensions and/or diverse variations. Data were also sought from both private and charity organisations to increase the representativeness of the sample.

In accordance with the developed sampling framework, it was agreed prior

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. Furthermore, in line with the literature (Morgan, 1996) this sample size was deemed sufficient to achieve data saturation to the extent where additional interviews were adding little new information. However, this was closely monitored during recruitment.

### **Inclusion Criteria**

Participants included in this study were group members involved in CST and/or MCST groups, and group facilitators who led the groups. As outlined in previous studies (Spector et al., 2003), eligible group members with dementia who had attended a CST and/or MCST group were required to meet the following criteria:

- i) Mild-to-moderate dementia assessed by a clinician prior to joining the CST/MCST group.
- ii) Were able to see and hear well enough to participate in the group and make use of the material in the programme.
- iii) Did not have a major physical illness or disability which could affect participation.
- iv) Did not have a diagnosis of 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 group experiences and validate the experiences of group members.

### **Ethical Approval**

Ethical approval was obtained through the Research Ethics Committee at University College London; see Appendix A.

### **Procedure**

#### *Recruitment*

All potentially eligible group members were first approached by a member of their clinical care team. This included either a member of staff from the centre where the CST/MCST group was delivered, or by the clinician delivering the CST/MCST group. This clinician and/or staff member explained what the proposed research project was about and gave group members a Participant Information Sheet to keep (see Appendix B for details). If interested in taking part in the study, or finding out more information, the clinician and/or staff member asked whether or not the group member would be happy to be approached by the lead researcher (SO).

If group members had given their consent to be contacted, SO arranged a meeting to discuss details outlined in the Participant Information

Sheet. This was done within one week of completing the CST or MCST intervention. All group members were approached at their treatment location. Group members had already received the Participant Information Sheet, therefore SO sought consent on the day they were approached; see Appendix C for details of the consent form used. SO ensured that group members understood the information included in the Participant Information Sheet and consent form - including their right to withdraw at any point without having their care or services affected - before asking the participants to sign the consent form.

### *Gaining Consent*

Eligible group members were those in the mild-to-moderate stages of dementia. Hence 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. Furthermore the research was explained in a considerate manner. If they had difficulties understanding what the research would involve, SO continued to explain the research to them in a more accessible format. Interviews lasted approximately between 30 to 45 minutes and were audio-recorded using a dictaphone. At the end of the interview, group members were compensated for their time with £10 cash. Demographic information on age, gender and ethnicity was gathered and information on dementia status and/or diagnosis was requested.



### *Monitoring of well-being*

The mental well-being of the group members, including verbal and nonverbal signs of distress or suicidal thoughts, were also monitored throughout the research procedure. If there were any signs of serious risk issues, the interviewer was prepared to stop the interview, and if necessary, immediately contact emergency medical care and the referring clinician and/or agency. All of those who were interviewed were reminded that their participation in the interview was completely voluntary, and they were free to withdraw from the group without giving any reason and without their current treatment being affected.

### **Interview**

A semi-structured interview was developed in accordance with the main aim of this study and guidance from the literature (Smith 1995). SO developed an initial draft interview topic guide with his primary and secondary supervisors - both of whom are clinical researchers experienced in delivering and analysing in-depth interviews and working with a dementia population. Advice was sought from another clinical researcher (JS), who is also experienced in qualitative research, CST and working with a dementia population. Specifically, JS advised on the content, order and delivery of the questions; including how to incorporate 'probes'. Appropriate phrasing of questions using language understood by the interviewee was aided by feedback from service-users, including group members and group facilitators, during the interview process.

As outlined within the literature on qualitative research, guidance was followed on the key strategies for the meaningful inclusion of persons with dementia (Murphy, Jordan, Hunter, Cooney, & Casey, 2015). Therefore specific prompts were included that could maximise responses from the perspective of a person with dementia. This consisted of personal and/or visual aids from the CST/MCST groups (Murphy et al., 2015). Furthermore, consideration was given to ensuring interviews ended on a high and that group members were not left with a sense of confusion, failure or exclusion (Murphy et al., 2015).

Two final semi-structured interview schedules were developed - one for group members (see Appendix D) and another for the group facilitators (see Appendix E). Both sought to include broad and non-leading questions. The first section sought to explore general group experiences, the second section examined the relationship between group experiences and CST principles, and the final section explored the relationship between group experiences and CST outcomes. These topics were delivered in a flexible manner.

## **Data Analysis**

### *Thematic analysis approach*

A thematic analysis approach was used (Braun & Clarke, 2006) where themes were identified from patterned responses across multiple interview transcripts. Relevant patterns of responses were considered within each of the four separate CST/MCST groups from which data were collected, and

across the entire dataset (i.e. from all interview transcripts). In accordance with Braun and Clarke (Braun & Clarke, 2006), flexibility was retained when assessing the 'prevalence' of a theme, however patterns identified across at least two participants within a group were considered possible themes. The following guidance for a thematic analysis, as outlined by Braun and Clarke (2006), was followed during the data analysis.

1. All interviews were first transcribed by SO as a way of familiarising himself with the data. The transcripts were then imported onto NVivo qualitative coding software (NVivo for Mac Version 11). SO re-read all interviews after the transcripts were loaded onto NVivo to further familiarise and immerse himself within the dataset.
2. A broad coding framework was then discussed and generated by SO and his second supervisor (CC). SO and CC independently reviewed three interview transcripts that were randomly selected from the first CST group from which data were collected. SO and CC then tentatively outlined their initial ideas for a coding framework based on these transcripts.
3. SO then coded further transcripts against the initial coding-framework, where new codes were added and re-coded.
4. SO, his primary, secondary supervisor and a fourth researcher (LG) then engaged in a process of 'interpretative analysis' (Braun & Clarke 2006) where meanings inherent in the subthemes and/or themes were described. During this process, themes were discussed and suggestions were made on how to re-organise the initial themes

identified. Therefore themes and subthemes were revised and modified against the coding frame.

5. Once the thematic structure had been finalised, a fourth researcher (LG) independently coded three transcripts against the final coding frame. This was done in order to establish the trustworthiness of the themes extracted. In doing so, a sufficient degree of internal homogeneity was explored, ensuring quotes assigned to the same theme were clearly related (Patton, 1990). Furthermore, external heterogeneity was also explored, ensuring quotes assigned to different sub-themes were clearly different from each other (Patton, 1990).

### *Assumptions*

Thematic analysis seeks to be theoretically flexible, where it is not tied to a particular epistemological approach (Braun & Clarke, 2006). Hence, a number of assumptions stated prior 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.

### **Subjectivity Statement**

A bracketing exercise (Tufford & Newman, 2012) was conducted in which SO was interviewed by three trainee clinical psychologists; please see Appendix F for a full summary of this exercise. The aim of this interview was to encourage SO to reflect on his beliefs, feelings and experiences related to the topic of group process research in CST/MCST groups for dementia. This exercise sought to ensure that SO's existing theory and own values were reflected on. Furthermore it sought to ensure that SO represented the experiences and actions of the group members and facilitators in a trustworthy manner. SO reflected that his interests with group process research began in 2011 when he first began developing ideas for a PhD project in his early twenties. Between 2013 and 2016, he completed a PhD entitled 'Group Treatments for Schizophrenia: Identifying and linking group interactions and group experiences with outcomes' at Queen Mary University of London. During this time he took an interest in developing and delivering psychological interventions in groups across both community and acute in-patient settings. He developed an interest in utilising the clinical benefits of therapeutic mechanisms inherent in the interactive processes fostered within groups.

### **Trustworthiness and approximate reliability**

In accordance with the criteria for guiding and evaluating qualitative research outlined by Elliot and colleagues (Elliott, Fischer, & Rennie, 1999), SO sought to maximise the trustworthiness of the observations reported in this study and the approximate reliability of the data analysis. In

doing so, SO participated in a reflective bracketing exercise as discussed above. SO also sought to address the trustworthiness of the interpretations drawn from the qualitative data by seeking consensus from multiple researchers throughout the thematic analysis process. Guidance was also sought to ensure that the data were coherently presented, and that themes were grounded in examples. Testimonial validity was also gathered from the group facilitators across each of the four groups. In doing so, feedback was gathered on how closely related the interpretations made from the data were to their experiences of the group. Finally, an additional researcher checked the identified themes and subthemes against three transcripts (14% of the data).

## **Results**

Data were collected from group members and group facilitators who completed two separate CST groups, delivered in London and South-East England, and two separate longer-term maintenance CST (MCST) groups, delivered in the East Midlands and South West of England. Once data collection from four groups had been achieved, the principle researcher (SO) and his supervisors agreed that the data collected were sufficiently similar and therefore recruitment stopped.

A total of 25 participants were referred to this study; including 21 group members (11 males and 10 females) and four group facilitators (one male and three females). Of the 21 group members, three declined (two male and

one female participant) as they were not interested in taking part and one female group member was not interviewed due poor health. All four group facilitators consented to being interviewed. In total, data were collected from 21 participants; including 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 and facilitators included in the analysis of this study are summarised in Table 2.1.

The interviews lasted 35 minutes on average. Interviews with participant 10 and participant 17 were shorter due to their presentation on the day. This is reflected in the coverage of themes from these participants, as highlighted Table 2.2 below. One participant requested that their husband was present in the interview and one participant requested that a member of staff was present during their interview.

The final analysis identified six themes of group experiences - group expression, group bond, group entertainment, group relationships, group support and group stimulation. See Appendix G for examples of how initial codes were clustered into subthemes and themes. To help the reader judge the breadth of each theme, the total number of group members who made reference to the identified themes and subthemes are highlighted in Table 2.2.

Table 2.1. Details of CST and MCST groups and sample characteristics

Group ID (Location)	Group Details	Pt	Sex	Age	Attendance (%)
Group 1 (London)	- CST group - 14 weekly sessions offered - Referral through private company	1	Male	Late	100
		2	Male	Mid	86
		3	Female	Early	86
		4**	Female	Early	100
		<b>5*</b>	<b>Male</b>	<b>52</b>	<b>86</b>
Group 2 (East Midlands) (Nottingham)	- MCST group - 24 weekly sessions offered - Referrals from charity day-centre where group was delivered.	6	Male	Early	100
		7	Female	Late	100
		8	Male	Mid	100
		9	Female	Late	100
		10	Male	Late	100
<b>11*</b>	<b>Female</b>	<b>39</b>	<b>92</b>		
Group 3 (South West England) (Cornwall)	- MCST group - 30 weekly sessions offered - Referrals from charity day-centre where group was delivered	12	Female	Late	63
		13	Female	Mid	88
		14	Male	Mid	100
		15	Male	Mid	75
		<b>16*</b>	<b>Female</b>	<b>39</b>	<b>100</b>
Group 4 (South East England) (Tunbridge Wells)	- CST group - 14 weekly sessions offered - Referrals from charity day-centre where group was delivered	17	Female	Mid	100
		18	Male	Late	86
		19	Female	Late	100
		20	Male	Mid	100
		<b>21*</b>	<b>Female</b>	<b>57</b>	<b>100</b>

NB: Pt = Participant, Age: 'early' = 60-69 years of age, 'mid' = 70-79 years of age, 'late' = >80 years of age

\* = Group facilitator, \*\* = Qualitative data for participant 4 were collected 14 days outside of the week period of completing the project



Table 2.2. Prevalence of themes across group members and facilitators

Themes	Subthemes	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*
Group Expression (N=19)	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		
Group relationships (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
	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
	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
Group Bond (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	
	Shared identity (N=19)	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*
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	
	Stimulation through sharing opinions, ideas, experiences in group (N=15)					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	

*NB: \* = Group facilitator*

## **Theme one: Group expression**

Group members described group expression as the process through which members revealed themselves to others in the group. The theme group expression was subcategorised into a) benefits of group expression and b) disclosure of personal information and c) challenges of group expression.

### *1.a) Benefits of group expression*

Group members and facilitators described the benefits of group expression. This included the advantages of having the opportunity to express themselves in the group – i.e. talk about personal history, thoughts, feelings or everyday conversations – without feeling pressured to do so if they didn't want to.

*“It's nice to have a small group to feel like you can say something” (Pt19\_Group4\_group member)*

### *1.b) Disclosure of personal information*

Group members disclosed personal information in the group. Some group members were happy to express the impact of their dementia diagnosis with the groups, although others expressed a preference not to discuss their diagnosis.

*“They were quite happy to express that they have this dementia and how it makes them feel.” (Pt5\_Group1\_Group facilitator)*

*“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)*

### *1.c) Challenges of group expression*

Group members described the challenges of expression within the group. This included references to 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.

*“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)*

However, five group members described how they overcame the challenges of group expression.

*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)*

## **Theme two: Group relationships**

The theme group relationships referred to the development of relationships between group members and included three subthemes: a) importance of companionship and social aspects, b) positive relationships between group members and c) got to know other members in group

### *2.a) Importance of companionship and social aspects*

The company of the other group members and the social aspects of the group were described as being important.

*“I enjoy coming here...it’s company you need, human people, not just telly.” (Pt10\_Group2\_group member)*

More specifically, five group members highlighted the benefits of company in the context of living alone.

*“It’s just nice to be in a crowd...when you live on your own nobody can get you talking.” (Pt19\_Group4\_group member)*

Furthermore, nine group members/facilitators explained that the group had an impact on their social life outside group. Group members explained that this was either before or after the group started, or through friendships developed in the group.

*“Pt16\_Group3\_group facilitator: “They were chatting about it this morning. And I wasn’t part of it...It was early on...because there were a few that turned up early...without our input, they’re happy to chat.”*

*“Interviewer: So you noticed that they do interact with each other outside of the group.  
Pt16\_Group2\_group facilitator: Yeah.”*

## *2.b) Positive relationships between group members*

The development of positive relationships between group members was identified as a subtheme, which was divided into three further subgroups. Thirteen group members reported that they experienced others as pleasant and polite, and that there was a positive group atmosphere.

*“Well they were friendly and polite...They were all decent and correct, no problems, no agitation.” (Pt2\_Group1\_group member)*

Ten group members reported that all they got on well together, and that there was a sense of respect between them.

*“I get on with everybody...I think everybody gets on.”  
(Pt6\_Group2\_group member)*

*“We respect each other’s opinions.” (Pt9\_Group2\_group member)*

Finally, thirteen group members reported developing friendships with other group members within the context of the group.

*“I’m friends with everybody here, but they don’t come to my house because they don’t live near me. And I don’t go to theirs, not unless I’m taken. Because I can’t get out unless I’m taken.”  
(Pt8\_Group2\_group member)*

#### *2.c) Got to know other members of the group*

Group members and facilitators commented on how members in the group got to know each other.

*“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)*

More specifically, eight 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.

*“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)*

*I find it quite interesting to see whether there is anything to be gleaned by sharing their experiences...Just by talking to people,*

*and looking at what they've done. (Pt18\_Group4\_group member)*

Conversely, eight members stated that they didn't 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 wouldn't say there is anything that is in the actual business of the group, the talking or, erm, that helps us each to get to know each other. I mean you glean things from what they say, if they ask a question or respond to a statement." (Pt13\_Group3\_group member)*

*"I have got to know people, but not outside of this session." (Pt13\_Group3\_group member)*

Six group members reported that they had already new members from the group prior to the group starting.

*"I've always been close to [PARTICIPANT NAME], I've know him quite a few years – about five years...and I've know the staff about five years." (Pt6\_Group2\_group member)*

### **Theme three: Group bond**

The theme group bond was described as an overall sense of cohesion or togetherness between the group as a whole. This theme was subdivided into three subthemes: a) group togetherness, b) shared identity and c) challenges to bond.

### 3.a) Group togetherness

A sense of 'togetherness' amongst the group included a sense of belonging and unity.

*"Well, you feel like you belong in the group and you all join in with whatever is happening." (Pt7\_Group2\_group member)*

More specifically, it was noted that both activities and group facilitators in the session facilitated a sense of togetherness.

*Interviewer: Do you remember if there was a song involved, singing a song?*

*Pt18\_Group4: Yes, the 'na-na-nas'. That was good, getting us to join in. It's quite a good way of actually getting a group together...to do something of common interest.*

*"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)*

Sadness about group ending and/or missing members of the group after the session finished was also reported.

*"I enjoy coming, and enjoy meeting up with them. So I mean, if it broke up, I would be disappointed." (Pt9\_Group2\_group member)*

### 3.b) Shared identity

A sense of shared identity between members of the group was also described. Reference was made to feeling as though group members were 'in the same boat' as each other.



*“The whole group I think, we all had, erm, problems I suppose. Because, otherwise we wouldn't have been here...I suppose we were in the same boat.” (Pt3\_Group1)*

*“I think maybe they recognised they were all in the same boat. There was that element of that recognition and acknowledgement...they would say ‘we're all nutty’ or ‘oh well we're all crazy’, and ‘oh you can't rely on us to remember anything’, ‘not old codgers like us’...it was quite self deprecating, but they said it with a smile.”  
(Pt21\_Group4\_group facilitator)*

More specifically, ten group members reported feeling comfortable with others through shared identity.

*“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...when everybody is in a similar situation - we're all about the same level, none of us is gaga and none of us is still like we used to be – erm, it's a very comfortable situation and very comfortable group.” (Pt13\_Group3\_group member)*

### *3.c) Challenges to 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.

*“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)*

Explicit reference was made to differences being felt between group members.

*“I think the guys, I think they'd have a lot more problems and things really. They were quite a lot older as well.”  
(Pt3\_Group1\_group member)*

*“And the two fellas were a mixed value, and I say that guardedly because one of them certainly was not the sharpest knife in the box...they hadn't been around much most of them, unlike myself” (Pt18\_Group4\_Group3)*

However, three group members also made specific reference to feeling a sense of cohesion amongst group members despite differences.

*“There was another client, who was very quiet, and sometimes it was very difficult to hear what she had to say....Having said that, I don't think it got to the point where they in anyway, erm, felt that they shouldn't be part of that group...it didn't stop them from continuing to contribute.” (Pt5\_Group1\_Group facilitator)*

#### **Theme four: Group entertainment**

##### *4.a) Group enjoyment/fun*

Several group members and facilitators identified having fun within the group and/or that being in a group with others as enjoyable and fun.

*“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)*

##### *4.b) Laughing with others*

Humour was valued amongst group members and facilitators. Several group members made specific reference to having a laugh with others in the group.

*“It's great, tidy, clean and there's a little bit of humour, so there's a bit of humanity.”(Pt1\_Group1\_group member)*

*“You get a lot of laughs, and you share, you can share laughter.” (12\_Group3, group member)*

### **Theme five: 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)*

### **Theme six: Group stimulation**

The theme group stimulation referred to the degree to which group members were stimulated through the group format. This theme was categorised into four subthemes: a) social aspects stimulated cognitive and/or brain functioning, b) stimulation through sharing ideas, experiences and opinions in the group c) stimulation through group competition and d) uncertain whether group promoted stimulation.

#### *6.a) Social aspects promoted cognitive/brain functioning*

It was reported that the social aspects of the group promoted cognitive function, including their memory and attention skills.

*“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)*

*“We'd all join in...I learnt to mix...yeah, I think I mixed pretty well...you have to learn how to listen to other people.” (Pt7\_Group2\_group member)*

More specifically, it was noted that the group format promoted brain functioning.

*“Company...it keeps your brain going doesn't it...you have to think what you're saying.” (Pt7\_Group2\_group member)*

*“Families told us that the people were naturally tired when they got home because they had used their brain in a much more positive way than they would do if they hadn't had that kind of stimulation. Erm, there was a feeling mood probably had slightly lifted as well because they were in that social environment.” (Pt5\_Group1\_group facilitator)*

#### *6.b) Stimulation through sharing opinions, ideas and experiences within group*

It was also reported that opinions and ideas were stimulated through sharing information between members in the group.

*“Someone does make a suggestion and you think ‘oh that's a good idea’...just some things to do...you're interested in, and you think ‘oh that's a good idea’.” (Pt9\_Group2\_group member)*

#### *6.c) Stimulation through group competition*

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

*“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)*

*6.d) Not sure, doubtful if group helped stimulate*

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)*

## **A proposed model of group processes in CST/MCST**

The results suggest that the six identified group experiences were not mutually exclusive. Rather these experiences appeared to occur in a patterned manner. Figure 2.1 is a tentative model in which the six themes relate to each other. In this model, group relationships and group bonds 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 proposed 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 group stimulation 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 2.1. 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 - 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?”*

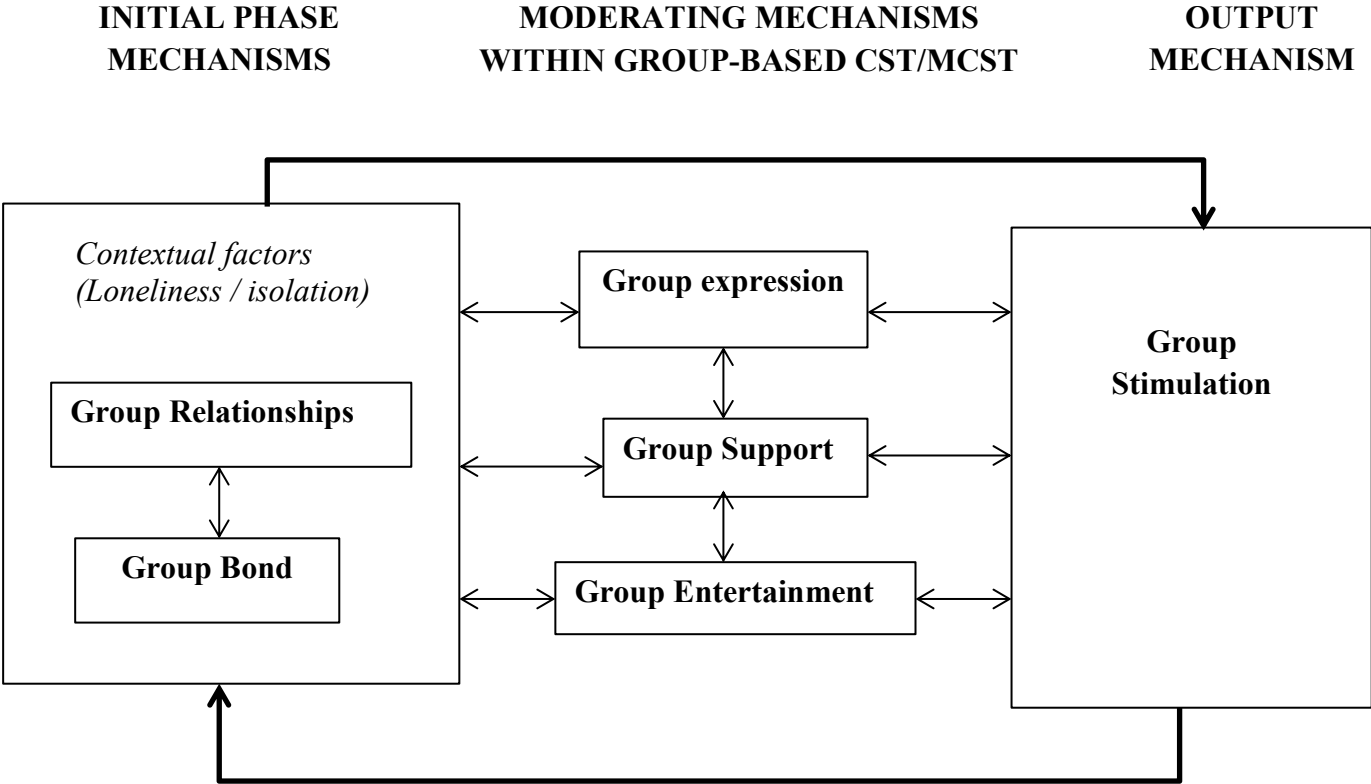
*Pt12\_Group4\_group member: Oh yes I do...*

*Interviewer: In what way did you make friends?*

*Pt12\_Group4\_group member: 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.

Figure 2.1. Flow diagram outlining the relationship between themes





## **Discussion**

This study sought to explore the theoretical underpinnings of group-based CST/MCST. To the authors' knowledge, this study was the first to focus on identifying group processes from the perspective of group members with a dementia diagnosis attending group CST and the facilitators of these groups. In total, six themes of group experiences were identified - group expression, group bond, group entertainment, group relationships, group support and group stimulation. A proposed model of group processes in CST/MCST is outlined. Group relationships and group bond were conceptualised as 'initial' phase mechanisms and group stimulation was conceptualised as the main 'output' mechanism. The remaining group experiences - group expression, group support and group entertainment - were conceptualised as moderating mechanisms.

### **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. More specifically, findings from the present study support the notion that therapeutic advantages inherent to the group format exist in group-based CST (Spector et al., 2011). The theme group bond is in line with findings from Bertrand and colleagues' (2018) qualitative evaluation of CST for a Brazilian population. Bertrand and colleagues found that 'bonds' between group members during group activities were experienced as a facilitator of the implementation of CST. The experiences of group bond are

also in line with Spector and colleagues' (2011) study which investigated whether improvements found in clinical trials were also experienced in everyday life. Like Bertrand and colleagues, Spector and colleagues also reported that group members with dementia in the CST groups experienced sharing a common difficulty related to their dementia diagnosis and/or memory difficulties. However, unlike previous research, the findings from the present study go beyond simply reporting that group members experienced a sense of bond. Importantly, 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. More specifically, through a shared identity group members experienced feeling more comfortable with others.

The themes group expression and group entertainment identified in the present study also support findings from Spector and colleagues' (2011) qualitative study. Spector and colleagues reported that the conversational aspect fostered within the group format, i.e. listening to others and feeling able to talk, was valued. Furthermore, they found the group was experienced as enjoyable and fun. In line with these findings, group members in the present study described having fun with other group members, and reported that it was beneficial to have a space to express themselves in the group without feeling pressured to do so if they didn't want to. Furthermore, the experiences reported in the theme group relationships – in particular within the subthemes companionship and social aspects, positive relationships between group members and got to know other members – support findings

from Dickinson and colleagues' (2017) qualitative study exploring the views and experiences of dementia care providers of CST. In accordance with their study, the current findings also highlighted the value of being afforded the opportunity to engage in social interactions.

Unlike previous qualitative research on mechanisms of CST, findings from the present study consider 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 present 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 group stimulation in the present study was described as an outcome, which followed early group processes – including group bond and group relationships.

### **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. This includes challenges associated with group processes, 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, which has identified several challenges associated with a group format in psychological therapies delivered in groups. This includes 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. This finding supports research where quantitatively measured beneficial group mechanisms and hindering group mechanisms were assessed in 489 group members from 78 group interventions (Lietaer & Dierick, 2015). In their study, Lietaer and Dierick found a strong correlation between hindering and therapeutic group mechanisms – i.e. the high ratings of therapeutic group mechanisms were associated with high ratings of hindering. 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 non-specific group mechanisms in CST**

Findings from this study also give new insight into non-specific group factors in CST. Knapp and colleagues (2006) 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). This was based on evidence from Spector and colleagues’ (2000) Cochrane Review of Reality Orientation, which found that social groups had no benefit to cognition. However five of the six themes identified in this study - group expression, group bond, group entertainment, group relationships,

group support - are consistent with the literature on generic therapeutic group mechanisms of change (Burlingame et al., 2004; Burlingame et al., 2013). Group stimulation appeared to be the only theme which gave insight into how specific features of CST may have contributed to participants' experiences.

On closer inspection, the data supporting the subtheme 'social aspects promoted cognitive and/or brain functioning' (see pages 83 and 84 of this thesis) hint at a possible interaction between non-specific group members and specific effects related to CST. The group context appeared to change how members interacted and therefore promoted a different cognitive process to communication with others. The relationship between non-specific and specific mechanisms can be further understood by comparing evidence across iCST and group-based CST. A qualitative study found that iCST for dementia delivered by carers was experienced as stimulating and enjoyable (Leung, Yates, Orgeta, Hamidi, & Orrell, 2017). This was despite no beneficial effect of iCST compared to treatment as usual and low levels of treatment adherence (Orrell et al., 2017). In contrast, group-based CST has been linked to benefits on both cognitive functioning and self-reported quality of life (Lobbia et al., 2018), and sessions are typically well attended.

One hypothesis is that the combination of group-based non-specific CST mechanisms and CST specific activities increases group member engagement. This in turn, promotes CST specific mechanisms to take place, including cognitive stimulation in the group. Hence increased stimulation happens through a process of group engagement and scaffolding. This is in

line with Cohen-Mansfield's model on a 'conceptual framework of group engagement' of group therapeutic activities for persons with dementia (Cohen-Mansfield et al., 2017). In this framework, specific group activity content is proposed to be a key factor that influences group member engagement (Cohen-Mansfield, 2018).

### **Future research**

The findings from this study highlight several areas of future research. First, the results from the current study provide the necessary groundwork to complete the next steps of developing and validating a questionnaire-based group process measure appropriate for a dementia population. To our knowledge, such a measure, which can be used to assess group processes in CST, does not exist. However, based on the themes identified in this study, future researchers can appropriately adapt an existing measure or develop a new tool. In doing so, future research would benefit from empirically examining the relationship between the quantitatively measured group processes and established clinical outcomes in CST research – for example pre-post changes in Alzheimer's Disease Assessment Scale-Cognition subscale (ADAS-Cog) (Rosen et al 1984) and/or changes in the Quality of Life-Alzheimer's Disease scale (QoL-AD) (Logsdon et al 1999).

Second, future research would benefit from exploring the relationship between 'therapeutic' and 'hindering' group mechanisms in group-based CST/MCST. Evidence in the broader group psychotherapy literature has found that groups have distinct developmental stages, where

engagement is often higher in the beginning and end of therapy, whereas conflict between group members is low at the beginning, high during the middle and low again at the end of groups. Therefore monitoring group mechanisms - using either a new or adapted questionnaire-based measures suitable for this population - at each of these three distinct stages of the group could help understand the relationship between 'therapeutic' and 'hindering' factors. Furthermore monitoring group processes after each CST/MCST session may help disentangle distinct beginning, middle and end developmental stages of the group.

Third, future research would benefit from understanding the relationship between generic group processes experienced in CST and theory-specific mechanisms of change related to the particular CST activities. Future research may benefit from using new video-annotation software technologies (Orfanos, Akther, Abdul-Basit, McCabe, & Priebe, 2017) to understand the moment-to-moment interactive processes. More specifically, identifying therapeutic group mechanisms at the very initial stages of the group, before theory-specific mechanisms are introduced, may help disentangle generic group mechanisms from theory-specific mechanisms.

Finally, future research may benefit from specifically exploring similarities and/or differences in group experiences between group facilitators and group members. In the present study, all themes were prevalent across both group members and facilitators. However, two subthemes were reported only by group members, not group facilitators – 'not sure if group helped stimulate' and 'challenges of expression'. One

hypothesis is that challenging group process mechanisms experienced by group members with dementia in CST/MCST may not be easily noticeable from the perspective of group facilitators.

### **Clinical Implications**

Findings from the present study have important implications for the non-pharmacological treatment of dementia. First, 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. Second, findings from the present study 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. Whilst the manual for group-based CST (Aguirre et al., 2011) encourages group interactions and relationship development through activities, little guidance is given on how to manage the challenges associated with group expression, getting to know other members of the group and challenges to developing bond between group members.

Training and delivery of CST may therefore benefit from highlighting these group experiences to help prepare group facilitators how to overcome these challenges. In doing so, group facilitators may benefit from referring to an accessible summary of the results, included in Appendix H, to support future groups. More specifically, it might be helpful for group facilitators to acknowledge difficulties in being able to express



oneself amongst other members in the group and to ensure that each member of the group has opportunities to talk about their past if they wanted to. Furthermore, counter to clinical intuition, it might be helpful for group facilitators to monitor possible conflict or avoidance in the group, and spend more time emphasising the opening ice-breaker tasks, for example the group introduction ball throwing task, or song, rather than the main theme.

### **Limitations**

One limitation of this study relates to the difficulty of asking individuals with cognitive difficulties to remember and recall their group experiences. This was evidenced by the difficulties that most group members had in recalling particular examples of events from the group. Furthermore, some group members reported challenges in remembering the specific question that was asked in the interview. To address these challenges, the interviewer followed guidance from Murphy and colleagues (2015) on how to effectively involve persons with dementia in qualitative research. This included use of visual aids from the group and conducting the interviews in the room in which the CST was delivered for group members in Groups 2, 3 and 4.

However, 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. This therefore limits the ability to which findings from this study were able to delineate from non-specific group mechanisms and theory specific CST effects. One way of addressing this issue is to specifically

explore group facilitator feedback about specific CST mechanisms in the qualitative analysis and whether these resonate with aspects of group member experiences.

A second limitation relates to the lack of ethnic diversity of participants included in the study, all of which were from a White British background. Hence it is arguably difficult to generalise the present findings across other black and minority ethnic groups. To maximise the representativeness of the sample, data were collected from a diverse geographical range in England. Furthermore, whilst it is possible that an ethnically diverse sample is missing from the present study, the sample is nonetheless reflective of CST research more broadly in the UK. Hence, it is arguably not misrepresentative of participants sampled in CST research.

A third possible limitation relates to the lack of opportunities to interview group members who had dropped out of either CST or MCST groups. A sampling framework which stratified group members as either 'attenders' or 'dropouts' may have given a more broad perspective of group experiences. However, given the difficulties in recruiting a dementia population, this was not within the scope of the project.

## **Conclusion**

The results support the notion that therapeutic advantages inherent to the group format exist in group-based CST/MCST. 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. It is argued that future research may benefit from exploring the relationship between the

identified group processes and clinical outcomes. Findings from this study provide the necessary groundwork to complete the next steps in either developing and validating a new questionnaire-based measure of group process, or adapting an existing measure, suitable for a dementia population attending group-based CST/MCST. Using a newly developed questionnaire-based group process measure, it is suggested that future studies should explore the relationship between therapeutic and hindering group mechanisms, in addition to generic group processes and theory specific mechanisms of change.

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### **Part 3: Critical Appraisal**

The following critical appraisal is a reflection on the process of conducting the research outlined in this thesis. A ‘thesis journal’ kept throughout the research process and a ‘bracketing exercise’ conducted with three other Trainee Clinical Psychologists at UCL have been used as reflective guides. The first section considers the impact of my personal interests and theoretical assumptions on the research process, and how I sought to manage this through a process of reflexivity. The second section is a reflection on my experiences of conducting qualitative interviews with individuals with a diagnosis of dementia. The final section is a discussion on possible areas of future work.

### **Impact of personal interests and theoretical assumptions**

In qualitative research, it is recognised that the assumptions and experiences held by researchers impact the research being conducted. The process of considering how previous clinical and personal experiences contribute to the development and interpretation of research is known as ‘reflexivity’ (Willig, 2013). Willig (2013) distinguished between ‘personal reflexivity’ and ‘epistemological reflexivity’. Personal reflexivity involves reflecting upon ways in which our own values and interests impact the research process. Epistemological reflexivity involves reflecting on the theoretical assumptions made during the various stages of the research.

### **Personal Reflexivity: impact of my values**

In this section I consider how my values and beliefs about group processes have impacted the research process of my thesis. This includes a reflection on i) my personal experiences of group processes, ii) the implications of being a researcher in an 'insider' role, iii) my motivation to improve services for isolated participants and iv) how I address the risks of imposing my own beliefs and experiences.

#### *Personal experiences of group processes*

Prior to starting this thesis, I held the belief that it is important for clinicians and researchers to understand how to utilise group processes in therapy.

This was based on personal experiences of group processes from past clinical, research and educational settings. I gained first hand knowledge of the impact of group processes through facilitating and co-facilitating a number of groups. This has been in a clinical and research context across both in-patient and community mental health settings involving a variety of clinical populations. I have also experienced being a 'group member' in an educational group setting. For example I am currently a Trainee Clinical Psychologist within a group cohort of 51 peers. I have also participated in several training workshops with smaller groups of five to eight participants, which resemble the size of typical therapeutic groups. In terms of expertise with the literature, I have published several peer-reviewed journal articles within the field of group process research. I have also completed a PhD, which sought to identify and link group processes with outcomes in group therapies for individuals with a diagnosis of schizophrenia, using both

quantitative and qualitative methods. The group process mechanisms described by group members and facilitators of group CST/MCST were therefore familiar to me. Berger notes that researchers who can relate to the experiences of those being interviewed are positioned within an ‘insider-role’ (Berger, 2015).

#### *Implications of an ‘insider-role’ position*

It is argued that researchers in an ‘insider-role’ position have a unique advantage of understanding the topic area and are able to pick up on more nuanced reactions of participants (Kacem & Chaitin, 2006). For example, as a Trainee Clinical Psychologist in a group of 52 trainees, I have experienced the benefits of having a shared identity within my cohort and feeling supported by others when stressed. I have also experienced first hand a sense of power in being able to share information in a group. It is possible that through these experiences, I was able to pick up on these group mechanisms more easily in the present study.

However, despite the possible advantages, I was also aware of the negative implications of an insider role position – in particular the possible risks of imposing my own beliefs and experiences onto group members and facilitators (Floyd & Arthur, 2012). Hence my researcher self-involvement risked preventing a deeper understanding of the data (Berger, 2015).

#### *Motivation to improve services for isolated individuals*

The decision to pursue this project was also influenced by my personal motivation to improve services for individuals who are typically isolated

and cut off from their communities. Professionally, I have developed this interest through several years of research working with adults with a diagnosis of schizophrenia who expressed high levels of negative symptoms. However, on a personal level, I come from a cultural background where family and community are highly valued. As a British Greek-Cypriot, community and social cohesion are central to my ethnic heritage.

When developing this thesis, I was aware that loneliness amongst a dementia population has been well documented in the literature (Lara et al., 2019). It is therefore possible that a bias existed in this present thesis where I was motivated to identify the mechanisms of change related to social interaction.

#### *Addressing the risks of imposing own beliefs and experiences*

Details on how the trustworthiness and approximate reliability of the data analysis were ensured are outlined in page 69 of this thesis. However, in addition to this, several steps were taken to address the possible risks of imposing my own beliefs and experiences. When selecting a thesis topic for my doctoral training, I was open and honest to potential supervisors about my interests in building on my existing expertise within the area of group process research. During the development of the topic guide for interviews, expert advice was sought from an independent clinical psychologist at UCL with extensive experience in qualitative research and working with an older adult population (JS). More specifically, input was given on how to ensure that questions being asked were broad, but also relevant to the specific

CST/MCST interventions. During the data collection period, I sought to make an explicit effort to maintain a position of curiosity at all times during the interview process. In doing so, an explicit attempt was made not to make any assumptions about what possible positive or negative group experiences participants experienced. Regular meetings with my primary and secondary supervisors helped ensure I supported participants in telling their stories during data collection.

### **Epistemological reflexivity: theoretical assumptions**

Details on the theoretical assumptions of the qualitative data analysis in this thesis are summarised in page 68 of this thesis. This next section is an extended reflection on challenges and/or limitations of these assumptions and the steps taken to overcome these difficulties.

#### *Realist epistemological approach*

The theorised meaning of the data in this study were conceptualised in accordance with assumptions of a 'realist' epistemological approach. This is where a unidirectional relationship between spoken words and meaning was assumed. Hence coded statements were developed based on the direct words used, rather than interpreted meanings of these words. However one challenge with this assumption is that most group members were unable to easily access their 'realities' due to cognitive difficulties associated with dementia. The following quotes are examples which highlight cognitive difficulties related to language and memory.

*Interviewer: what aspects of it was stimulating?*

*“Participant 3\_Group1\_Group member: ...it was erm (pause), trying to get my words – that’s the dementia...Erm, yeah, I think, let me just see. Erm, no, because it wasn’t a long, it wasn’t long really. But, erm, I think it really, sort of helped, because you know, it’s, what’s the words, just trying to get my words.”*

*Interviewer: What sort of formalized discussion do you have?*

*Pt13: It depends what someone...really with the speakers, asking them about what they’ve told us. If we have any questions about, and (pause), I have to admit, this is how my brain is, I can not remember what we’ve been talking about this morning...It will come back to me I expect, but at this moment in time, this is how my brain is, I have no idea what they were talking to us about this morning.*

A conscious effort was therefore made to use visual aids and memory prompts. Close attention was paid to what group members ‘said’ and ‘did’ to ensure group members who were having difficulties recalling their experiences or finding the right words had a voice. Where appropriate, interviews were conducted with either a family member or staff member present to help support group members. Hence a ‘co-creative’ approach to deriving meaning from experiences was acknowledged, where interactions between the interviewer and interviewee were shaped in a reciprocal and dynamic manner. This approach is arguably in contrast to assumptions of a pure realist epistemological approach. Rather, in accordance with a constructionist epistemological approach, such as Constructivist Grounded Theory (Charmaz, 2006), it was acknowledged that ‘contextual factors’ impacted the meaning derived from coded statements. Furthermore, it was also acknowledged that data were likely to be influenced by other contextual factors such as the social desirability bias (Randall & Fernandes, 1991). Hence, in a co-creative manner, participants were encouraged throughout



the interview process to give their honest feedback about their group experiences.

#### *Identifying themes on a semantic level*

Another theoretical assumption was that themes were identified on a semantic level, which were based on the surface level meaning of spoken words. This is in contrast to identifying themes on the latent level, which looks for underlying ideas or assumptions beyond what is said. My supervisors and I considered using an Interpretive Phenomenological Analysis (IPA) (Smith & Osborn, 2004) approach to conduct an in-depth analysis that deduced meaning beyond a realist level. However, it was agreed that a latent level approach such as IPA would not allow me to explore generic experiences across a diverse and representative sample of participants within multiple CST/MCSTs groups. Rather, IPA would have been more suitable if seeking to understand the group experiences of a particular sub-set of individuals, or example group members of a specific CST group or groups that were delivered in a specific location.

#### *Inductive approach*

The primary approach to identifying themes was inductive. One challenge of this assumption was that themes were also impacted by deductive top-down theory driven influences. Importantly, prior knowledge on the subject area was likely to have had a bottom up deductive influence on the data analysis. For example, this is reflected in the interview topic guide, where the literature on the therapeutic principles of CST helped shape the prompts

used in the interview. My external supervisor and I both have extensive experience in researching group process. In accordance with knowledge on pre-existing conceptual frameworks, this expertise is likely to have influenced what themes were more or less recognisable. To manage this challenge and maintain an inductive approach to the data analysis, the aim of the study was kept broad to exploring participant's experiences of the group. However, whilst an effort was made to sustain an inductive approach during the data-analysis, it was acknowledged that my prior knowledge may have also had an implicitly deductive influence on the coding process.

### **Experiences of the interview process**

The empirical study presented in this thesis was my second experience of a qualitative research project and the first time I conducted semi-structured qualitative interviews with individuals who have a diagnosis of dementia. Whilst rewarding and stimulating, it was certainly an experience which had challenges. In this section I will reflect on these challenges and how I sought to manage them.

#### *Gaining informed consent*

Ethical challenges related to conducting qualitative research with individuals with a dementia diagnosis have been documented within the wider literature (Pesonen, Remes, & Isola, 2011). A particular issue is obtaining consent from individuals with dementia, given their potential

compromised decision-making ability (Beuscher & Grando, 2009).

Therefore when seeking consent, I sought to follow current guidance from the British Psychological Society (2018) and Mental Capacity Act (2005) regarding consenting people with cognitive impairments. In doing so, a caregiver (including either a member of staff or family member) was asked to witness the informed consent process where possible. Furthermore, appropriate care was taken in explaining what the research would involve.

#### *Managing communication difficulties*

A further challenging aspect of the interview process was managing communication difficulties group members presented due to their dementia. This included reduced attention, concentration lapses, difficulty finding words, repeating phrases, fatigue, memory loss and/or decreased abstract reasoning. In line with guidance from the literature, I developed strategies to promote effective communication and optimal responses when interviewing individuals with dementia (Beuscher & Grando, 2009). This included being mindful of how quickly I was speaking and explicitly being aware of whether my voice was loud and clear enough.

#### *Meaningful inclusion*

Guidance was also followed on how to meaningfully include persons with dementia in semi-structured interviews (Murphy, Jordan, Hunter, Cooney, & Casey, 2015). This involved the use of visual aids and prompts to help trigger memories and support responses. Furthermore, prior to interviewing group members, I engaged in a 'debrief meeting' with the group facilitator

and made notes on what tasks group members completed. I also gathered information about the specific idiosyncrasies of each group – for example the group name, what song was sung and any other information that can be used to help prompt memories about the group experience. On reflection, I initially found it difficult to make a conscious effort to use visual or verbal prompts. Doing so was a very different interview style from what I had learnt through my past experiences of conducting interviews with individuals with a diagnosis of schizophrenia. In the past, I sought to be as neutral and inductive as possible without offering too many prompts to not bias the data. However, supervision from both my internal and external supervisors proved to be critical in helping me make this adjustment in my qualitative interview approach. Feedback from family members who were present during the interviews in the first group also encouraged me to use personal ‘memory hooks’.

### *Recruitment difficulties*

Another challenge related to the interview process was that participants were recruited from geographically diverse locations. Given the significant cost in time and money to travel across England, I felt pressure to ensure that the interviews were conducted in an orderly and timely fashion with little margin for error. To address this challenge, a significant amount of time was involved in preparation leading up to the interviews. This involved support from family members and staff at day centres from where data were being collected.

### *Rewarding aspects of the interview process*

In addition to its challenges, there were several rewarding aspects to the interview process. It was particularly satisfying to receive positive feedback regarding the interviews from the group members and facilitators. The qualitative research process gave group members an opportunity to express their opinions about the group. This helped acknowledge and validate their experiences and overall I was given very positive feedback about the interview process from group members and their carers.

### **Implications for future work**

Through this project, I have gained an understanding of how individuals with dementia value group processes in CST/MCST – in particular the opportunity to develop relationships with others. I therefore believe that future research within the field of dementia would benefit from exploring the clinical impact of group processes further. This is relevant for future research in group-based CST/MCST as well as other group therapies for this clinical population. For specific details on the implications of the findings from the systematic literature review and the qualitative empirical study, please see pages 42 to 43 and pages 96 to 97 respectively.

### **Measuring group processes using a questionnaire-based measure**

One area for future research is the development and validation of a questionnaire-based measure of group processes for a dementia population. The findings from this thesis provide the important groundwork needed to develop such a tool. The themes identified provide a theoretical model from which pre-defined group process phenomena, relevant to a dementia population, can be assessed in a systematic and empirically robust manner. Furthermore findings from the literature review highlight possible candidates of therapeutic group process questionnaires and overall group process questionnaires that can be adapted for a dementia population.

#### *Psychometric property considerations*

When developing a group process questionnaire appropriate for a dementia population, we recommend that individuals with a diagnosis of dementia should be explicitly involved in item selection and reduction. Furthermore, the degree to which items are understandable and relatable should be explicitly evaluated. Doing so will ensure that sufficient content validity - defined as the extent to which concepts of interests are comprehensively represented by items in the questionnaire - is achieved. Developing a measure that can be used as a self-report tool as well as an observer-rated measure might also be particularly relevant for a dementia population. Findings from this study show that group members in CST/MCST groups were able to recall their experiences of the group. However, language and cognitive deficits associated with dementia meant that reporting their experience was, in some cases at least, challenging. Therefore measuring

group processes from an observer perspective might be helpful in understanding and validating experiences of group members in more depth.

### *Measuring group processes over time*

Importantly, questionnaires allow for group processes to be easily assessed or monitored across time. Within the broader group therapy literature, psychological therapies delivered in groups have been shown to have developmental cycles which can be characterised by distinct early, middle and end phases (Kivlighan & Kivlighan, 2013). The degree to which group members are engaged in the early stages has been reported to be particularly important for clinical outcomes at the end of treatment (MacKenzie, 1994). Future studies should therefore consider measuring group process mechanisms in the early stages of treatment. Doing so might give valuable insight into tasks and activities which optimise early engagement important for beneficial clinical outcomes.

### **Using video-annotation software to observationally measure group mechanisms**

My earlier research on measuring group processes in group therapies for schizophrenia involved the use of novel video-annotation software to observationally measure group mechanisms (Orfanos, Akther, Abdul-Basit, McCabe, & Priebe, 2017). The qualitative findings from this study provide a theoretical foundation from which a bottom-up, behavioural coding tool can be developed using similar video annotation software techniques. In doing

so, group process mechanisms in CST can be observationally identified by independent raters, who are blind to group outcomes. The advantage with this approach is that novel mechanisms of change can be identified and monitored in a fine-grained manner. However, these approaches are time and resource intensive. Furthermore, more development is required for technologies which measure behavioural changes automatically.

#### *Group processes outside therapy*

One further area of research is to explore group process mechanisms in a dementia population beyond a ‘therapy’ setting. I believe that many of the identified themes from the qualitative study – in particular group relationships and group bond – can be enhanced outside a small closed group therapeutic setting. For example, the day centres from which participants were recruited often involve large portions of unstructured group time. These centres may benefit from training staff on basic principles of group processes. This may help enhance interactive mechanisms that are positively experienced and minimise challenge associated with a group setting. Staff may also benefit from training on how to use questionnaire-based measures of group process to monitor mechanisms during unstructured group time.



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## Appendix

### Appendix A: Ethical approval confirmation from UCL

<p>UCL RESEARCH ETHICS COMMITTEE OFFICE FOR THE VICE PROVOST RESEARCH</p>	
<p>26<sup>th</sup> February 2018</p> <p>Dr Aimee Spector Research Department of Clinical, Educational and Health Psychology UCL</p> <p>Dear Dr Spector</p> <p><b><u>Notification of Ethics Approval with Provisos</u></b> <b><u>Project ID/Title: 12667/001: A qualitative study of participant-reported experiences of Cognitive Stimulation Therapy groups for people with dementia</u></b></p> <p>Further to your satisfactory responses to the Committee's comments, I am pleased to confirm in my capacity as Joint Chair of the UCL Research Ethics Committee (REC) that the data collection element of your study has been ethically approved by the UCL REC until 1<sup>st</sup> January 2019.</p> <p>Ethical approval is subject to the following conditions:</p> <p><b><u>Notification of Amendments to the Research</u></b> You must seek Chair's approval for proposed amendments (to include extensions to the duration of the project) to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing an 'Amendment Approval Request Form' <a href="http://ethics.grad.ucl.ac.uk/responsibilities.php">http://ethics.grad.ucl.ac.uk/responsibilities.php</a></p> <p><b><u>Adverse Event Reporting – Serious and Non-Serious</u></b> It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator (<a href="mailto:ethics@ucl.ac.uk">ethics@ucl.ac.uk</a>) immediately the incident occurs. Where the adverse incident is unexpected and serious, the Joint Chairs will decide whether the study should be terminated pending the opinion of an independent expert. For non-serious adverse events the Joint Chairs of the Ethics Committee should again be notified via the Ethics Committee Administrator within ten days of the incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Joint Chairs will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.</p> <p><b><u>Final Report</u></b> At the end of the data collection element of your research we ask that you submit a very brief report (1-2 paragraphs will suffice) which includes in particular issues relating to the ethical implications of the research i.e. issues obtaining consent, participants withdrawing from the research, confidentiality, protection of participants from physical and mental harm etc.</p>	

In addition, please:

- ensure that you follow all relevant guidance as laid out in UCL's Code of Conduct for Research: <http://www.ucl.ac.uk/srs/governance-and-committees/resgov/code-of-conduct-research>
- note that you are required to adhere to all research data/records management and storage procedures agreed as part of your application. This will be expected even after completion of the study.

With best wishes for the research.

Yours sincerely



**Professor Michael Heinrich**  
**Joint Chair, UCL Research Ethics Committee**

Cc: Dr Stavros Orfanos & Dr Catherine Carr

## Appendix B: Participant information sheet



### PARTICIPANT INFORMATION SHEET

#### **A qualitative study of participant-reported experiences of Cognitive Stimulation Therapy groups for people with dementia**

##### **Invitation to participate in a research study**

You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this information sheet.

##### **What is the purpose of the study?**

In recent years, Cognitive Stimulation Therapy (CST) has shown to be an enjoyable and beneficial therapy for people with memory problems. However, the importance of delivering this intervention in a group format is less clear. The aim of this project is to therefore explore people's group experiences of CST in a short interview.

##### **Why have I been chosen?**

You have been invited to take part because you have recently participated in at least 10 sessions of either CST, or a longer version of CST called 'maintenance' CST.

##### **Do I have to take part?**

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect the standard of care you receive.

##### **What will happen to me if I take part?**

If you decide to take part, you will be asked to participate in a short interview, which will last approximately 20 to 40 minutes long with a researcher. You will be asked general questions about how you found the CST group you participated in, and what your experiences of the group were like. There are no right or wrong answers to any of these questions.

Usually, the researcher will come to either your home or the home of your relative/friend, but will be happy to meet you elsewhere if you would prefer.

**Expenses**

Any travel expenses incurred by yourself or your ~~care-giver~~ will be reimbursed.

**What are the possible disadvantages and risks of taking part?**

We anticipate that the interviews will be brief and enjoyable. You will also be given opportunities to take a break or finish the interview if you become tired or distressed. If the intervention really does not suit you, you are free to finish at any point.

**What are the possible benefits of taking part?**

If you decide to take part in this study, we hope that you will find the opportunity to give feedback about your experience of CST enjoyable and enriching. The information that we get from this study may help us to treat people with memory problems better in the future, so you will be making a valuable contribution.

**Will my taking part in the study be kept confidential?**

We will ask for your permission to send your GP a letter explaining that you have agreed to take part in the study. All personal information collected about you during the course of the study, including your name, age, gender and diagnosis, will be kept strictly confidential. All data is stored without any identifying details under secure conditions.

**What will happen if I don't want to carry on with the study?**

You will be free to withdraw from the study at any time, without giving a reason. Withdrawing from the study will not affect the standard of care you receive. We will need to use any data collected in the study, up to the point of withdrawal.

**What if something goes wrong?**

If you wish to make a complaint about any aspect of the way you have been approached or treated during the course of this study, the normal UCL complaints procedures should be available to you. If you are unhappy or dissatisfied about any aspect of your participation, we would ask you to tell us about this in the first instance, so that we can try to resolve any concerns and find a solution.

**Who is organising and funding the research?**

The research is organised and funded by University College London. This funding covers the running costs of the research project and is led by Dr Stavros Orfanos, who is Trainee Clinical Psychologist at University College London.

**Consent form for use of audio-recordings**

Interviews will be audio taped. The purpose of audio recording is to help evaluate what is being discussed in detail. You may at any point request that audio recording device is stopped or withdraw your consent from the study. At this stage the recording will be destroyed.

**What will happen to the results of the research?**

The results will be published in relevant health journals. No participants will be identified in any publication arising from the study, without their written consent. We will make arrangements for participants to be informed of the progress of the research and the results through newsletters and local meetings.

**Who has reviewed the study?**

All research that goes through UCL's ethics review process is looked at by an independent group of people, called PaLS ethics committee at UCL. This is done to protect your safety, rights, well-being and dignity. This study has been reviewed and been given a favourable opinion by UCL.

**Who can I contact for further information?**

For more information about this research, please contact:

*Dr Stavros Orfanos,*  
*Trainee Clinical Psychologist,*  
*Department of Clinical, Educational and Health Psychology,*  
*University College London*  
*1-19 Torrington Place, London, WC1E 7HB*

*Phone: 020-7679-1897*  
*Email: stavros.orfanos.16@ucl.ac.uk*

**Thank you for considering taking part in this research study!**



## Appendix C: Consent form



### Participant Consent Form

Participant Identification Number for this study \_\_\_\_\_

#### A qualitative study of participant-reported experiences of Cognitive Stimulation Therapy groups for people with dementia

Name of Researcher:.....

Please Initial Boxes

1. I confirm that I have read and understand the information sheet (Version 1) for the above study and have had the opportunity to ask questions.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my medical care or legal rights being affected.

3. I consent to the processing of my personal information, including age, gender and diagnosis of dementia, for the purposes explained to me. I understand that such information will be handled in accordance with all applicable data protection legislation.

4. I understand that all information given by me or about me will be treated as confidential by the research team and that all efforts will be made to ensure that I cannot be identified

5. I agree to take part in the above study, and I will participate in an interview with a member of the research team as part of this study. I understand the direct/indirect benefits of participating.

6. I agree that my anonymised research data may be used by others for future research, and that no one will be able to identify me when this data is shared.

7. I consent to my interview being audio recorded, and understand that the recordings will be destroyed within 10 years and that all transcriptions of recordings will be stored anonymously using password-protected software.

**Name of Participant**

Date

Signature

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name of Person taking consent  
(if different from the researcher)

Date

Signature

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Researcher**

Date

Signature

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Appendix D: Final topic guide for group members

### Interview Topic Guide (for group members)

*Overall topic guide should be as exploratory as possible, therefore start with the 'broad' questions identified below. However, take note of the 'more specific prompts' within each section, which are specifically relevant for CST groups.*

#### Topic 1: generally exploring experiences of group processes

**Broad question: What was the group like for you?**

- o Good / Positive experience? Bad / Negative experience? What way? How?

**More specific prompts: Did you mix/interact with others during the group?**

- o Yes/No? Why not? How? Examples? When?
- o Did you get to know others? Make friends?
- o Were you helped by others? Did you trust others?
- o Did you feel similar to others? How was talking to other people with dementia? How did it compare to day to day interactions?
- o Did you feel involved or included?
- o What did you talk about? Feelings/life problems?
  
- o **If no, why not? Did you have the chance to talk to others?**
  - Hard to say what you wanted with others?
  - Did you ever feel afraid to talk about problems?
  
- o **Impact on your social life outside the groups?**

#### Topic 2: Highlighting CST principles: exploring whether group processes had an impact on these?

**Broad question: Can you tell me about the activities you did in the group; was there an impact of these activities in a group with others?**

- o Examples? Specific sessions you can describe this (how you would interact)?

**More specific prompts (if needed)**

- o Did you feel mentally stimulated (active, engaged) – for example during sessions on food; childhood memories; music; number/word games?
- o Did you have chance to discuss new things – for example during the sessions on faces session; current affairs sessions; opinions rather than facts?
- o Helped to remember things / reminiscence - for example remembering past memories?
- o Respect; involvement; inclusion; choice – for example during any creative activities; cookery, seasonal collage, clay modeling?

3) Highlighting CST outcomes (cognition / quality of life): exploring whether group processes had an impact on these?

**From when you joined the groups, has anything changed for you?**

- Was the group 'mentally stimulating' (cognitive impact)?
  - o Did group help with memory?
  - o What? Why? How
  
- Help you feeling a bit better about things (quality of life)?
  - o Feel any different overall? General well-being?
  - o What? Why? How
  
- No: why not?

## Appendix E: Final topic guide for group members

### Interview Topic Guide (for group facilitators)

*Overall topic guide should be as exploratory as possible, therefore start with the 'broad' questions identified below. However, take note of the 'more specific prompts' within each section, which are specifically relevant for CST groups.*

#### Topic 1: generally exploring experiences of group processes

**Broad question: What was the group like?**

- Good / Positive experience? Bad / Negative experience? What way? How?

**More specific prompts: Did you feel that group members mixed/interacted with each other during the group?**

- Yes/No? Why not? How? Examples? When?
- Did group members get to know each other? Make friends?
- Did group members help each others? Trust each other?
- Did the group members report/demonstrate feeling similar to each other?
- Did group members report/demonstrated being involved/included?
  
- What did group members talk about? Feelings/life problems?
- **If not, why not? Did you have the chance to talk to others?**
  - Hard to say what you wanted with others?
  - Did you ever feel afraid to talk about problems?
  
- Was there an overall **sense of engagement**? Did members try to understand why they did the things they did? Was there a sense of participation? Did members challenge each other in their efforts to sort things ok?
  
- Was there an overall **sense of avoidance**? Avoidance of important issues? Did group members depend on the group leader for direction? Did group members appear to do things in the way the though would be acceptable to the group?
  
- Was there an overall **sense of conflict**? Friction/anger between members? Distance? Withdrawal? Evidence of rejection/distrust between group members? Did members appear to be tense/anxious?
  
- **Did group members report/demonstrate that the group had an impact on their social life outside the groups?**

## Topic 2: Highlighting CST principles: exploring whether group processes had an impact on these?

**Broad question: Can you tell me about the activities that happened in the group; did group members participate in these activities together? If so, was there an impact of group members participating in these activities with each other?**

- Examples? Specific sessions you can describe this (how you did group members interact)?

*More specific prompts (if needed)*

- Did group members report feeling mentally stimulated (active, engaged) – for example during sessions on food; childhood memories; music; number/word games?
- Did you they have chance to discuss new things – for example during the sessions on faces session; current affairs sessions; opinions rather than facts?
- Were group members helped to remember things / reminiscence - for example remembering past memories?
- Were group members respect; involved; included; given choice – for example during any creative activities; cookery, seasonal collage, clay modeling?

## 3) Highlighting CST outcomes (cognition / quality of life): exploring whether group processes had an impact on these?

**Did you notice any changes in group members by the end of treatment; if so, were any of these changes impacted by the group format of the intervention?**

- Was the group 'mentally stimulating' (cognitive impact)?
  - Did group help with memory?
  - What? Why? How
- Help group members feeling a bit better about things (quality of life)?
  - Did group ~~members~~ report feeling any different overall? General well-being?
  - What? Why? How
- No: why not?

## **Appendix F: Notes from Bracketing exercise write up**

### *What brought you to this topic?*

- Topic looks at group process in group CST, interested in exploring group experiences of being in group CST.
- Broadly speaking, looking at exploring group experiences from 4 CST groups.
- A prior interest in group process because of PhD studies. Wish to continue this whilst on clinical training. Approached a few different tutors and projects and Amy Spector agreed to work with him she has an interest in group processes in CST. This was in the context of a recent individual CST trial which didn't have same outcomes of group CST, so fit with her current research interests.
- Interest in group processes also began prior to PhD – when finished undergraduate degree, had a job as a support worker with people with Autism.
- Lead researcher has a musical background so put together a group for creative arts to help engagement and communication. Through these groups then applied to be a research assistant on RCT that looked at effectiveness of body oriented psychotherapy – creative arts for people with negative symptoms of schizophrenia. Working with people cut off from communities, seen as 'difficult to reach' in one to one therapies. Gathered lots of data and began PhD project from this.
- Lead researcher is interested in developing novel interventions and improving mental health services, and thinks there is lots of room or scope for populations who don't have access to psychotherapies, room for mode of delivery of therapy, rather than the type of therapy. So interested in non-specific therapeutic approaches, more about the mode of delivery. Therapies ultimately do the same thing and act as a vessel through which relationships can be built. This happens more between a group of people rather than one on one.
- Recognises potential difficulty to disentangle self from literature already familiar on.
- With the current research project, Lead researcher feels he is trying with the interviews to be as inductive as possible but also acknowledges that he is familiar with some background on which mechanisms are important.

### *How do you disentangle the knowledge you already have?*

- Tried to be as transparent as possible when developing topic guide and bring in people who have different perspectives ie. Experts in dementia population.
- Try to make sure questions were broad enough, but also have hooks within them. Also reflecting on own background and what he brings.
- Tried to bracket personal experience and knowledge of literature already existing.

### *Own experience of groups?*

- Have never been involved in group CST but have been involved in art psychotherapy group, CBT groups within PhD, also as AP in community and inpatient settings.

- And in your personal life, noticed anything about group processes? Clinical sense no, but education and workshops and training groups, yes. You realise the power of being able to share information in a group and this happens independently from the focus of the group. Big evidence about imparting information to each other, this featured in topic guide but trying not to directly ask these questions, but be led by the participants themselves as much as possible.

*How do you feel about older adults?*

- Never worked with this population and found it more challenging than expected.
- More experience with population of people experiencing psychosis – had expectations that there might be some similarities and interview style could easily be transferred.
- Lead researcher sees his style as sometimes enthusiastic which might be relevant, but also some big differences, so had guidance from supervisor who is an expert in working with dementia population and looking at literature.
- A lot of respect for the population and Lead researcher generally likes older adults, but found it to be an eye opener in terms of working clinically and academically with this population.
- Used anchoring of questions, i.e. conduct the interview in the room where the group happened, use props from the group. Be mindful of language, speak more slowly to consider cognitive difficulties.

*Participants' perception of you?*

- It came up about being young. They gave their group a name, used a song I didn't recognise, they saw me as of a different generation and they clarified things in response to this. Lead researcher maintained his curiosity and interest in generational differences to manage this.
- Also reflected on ethnicity, all participants were white British, they might have perceived my ethnicity as different to theirs unsure of impact on interviews. Lead researcher felt he has not been as actively reflective about this.

*Any thoughts on what you might find? What do you think you might find that might be negative, difficult, or clash with your ideas?*

- Big assumption was it would be easy to communicate as result of previous experiences. I didn't have enough awareness of some of the challenges which impacted on interview style in terms of anchoring the interview.
- Will be mindful of the degree to which take semantic vs latent approach i.e. Taking at face value vs reading through the lines. Mindful of fact I had to anchor what was said and what was remembered based on the cues used.

*How do you think you (not) sharing participants' experiences/background will influence recruitment... interviews.... analysis?*

- Age difference – tried to remain as curious as possible, being different age helped to stay curious because there was more difference. Maybe they would be



- dismissive, because thought I wouldn't know about it. Unsure to know about this. Maybe saw me less on their wavelength. Possible they might have withheld.
- Also position as 'academic' maybe they wanted to highlight their employment history or their knowledge. Maybe this shaped their answers differently than if they were talking with a peer. Perhaps did this as saw me in an expert role and wanted to rebalance the power?

**Appendix G: Example of how initial codes were clustered into themes**

Activities in group helped re-learn memories	Group helped memory	Group support
Easier to remember in group format		
Group helped memory		
Group tasks triggered past memories		
Helped Alzheimer's		
Helped to feel empowered for rest of day		
Listening helps with memory		
Learnt from group	Gave each other ideas	
Gave each other ideas		
Interesting ideas from others		
Learnt new routine		
Learnt to mix		
Sharing knowledge with group		
Group helped each other	Group helped each other	
Helped by group		
Helped others in the group		
Helped through extending knowledge		
Supported each other emotionally	Group support	
Supported each other unconsciously		
Support in context of memory difficulties		

## Appendix H: Accessible Summary of Qualitative Study

### Group Cognitive Stimulation Therapy

**This document is a summary of a research study conducted by University College London in 2019.**

#### **What was the aim of the study?**

This study aimed to explore people's experiences of interacting with others in a group therapy called Cognitive Stimulation Therapy (CST). This group involves 14 or more sessions of themed activities, which typically run twice weekly. This study also examined people's experiences of a longer-term version of CST called Maintenance CST.

#### **What did the study do?**

A researcher recorded short interviews with people participating in these groups, including the group leaders. In total, 21 short interviews were included in the study. This was from two separate CST groups delivered in London and South-East England, and two separate longer-term Maintenance CST groups, delivered in the East Midlands and South West of England. Interviews were recorded using an audio-recording device. Using scientific methods, the researcher and his supervisors examined what was said in these interviews closely. They focused on the feedback given on the group interactions.

#### **What did the study find?**

Overall, group members and leaders were very positive about the groups. Group members said that the group helped them **express** themselves, although sometimes this was hard too. They said they were able to talk about personal information if they wanted to, but were also happy not to if they didn't want to.

People valued the **company of others** in the group. They said they developed positive relationships with others. Some recognised that it was hard to get to know others but many described feeling a **bond in the group**. They said they felt similar with others and that they were in the same boat together. Here are some of the things people said:

*“It’s nice to have a small group to feel like you can say something”*

*“It’s just nice to be in a crowd, when you live on your own nobody can get you talking.”*

*“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.”*

The group was also described as **entertaining and fun**. Many said that they enjoyed having a laugh with others in the group. They also said that they **felt supported in the group**. Finally, people said that the **group was stimulating** and that it helped their brain. Here are some of the things people said:

*“You get a lot of laughs, and you share, you can share laughter.”*

*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.*

*“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.”*

### **What did the study conclude?**

Overall, people reported that they valued doing CST and longer-term Maintenance CST in a group and found it to be a good experience.