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# Delivering cognitive analytic consultancy to community mental health teams: Initial practice-based evidence from a multi-site evaluation

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**Objectives.** This study sought to employ the hourglass model to frame the methodological evolution of outcome studies concerning 5-session cognitive analytic consultancy (CAC).

**Design.** Pre-post mixed methods evaluation (study one) and mixed methods case series (study two).

**Methods.** In study one, three sites generated acceptability and pre-post effectiveness outcomes from N = 58 care dyads, supplemented with qualitative interviewing. The client outcome measures included the Clinical Outcomes in Routine Evaluation Outcome Measure, Personality Structure Questionnaire, Work and Social Adjustment Questionnaire, Service Engagement Scale, and the Working Alliance Inventory. Study two was a mixed methods case series (N = 5) using an A/B phase design with a 6-week follow-up. Client outcome measures were the Personality Structure Questionnaire, Clinical Outcomes in Routine Evaluation Outcome Measure, and the Working Alliance Inventory, and the staff outcome measures were the Working Alliance Inventory, Maslach Burnout Inventory, and the Perceived Competence Scale.

**Results.** In study one, the cross-site dropout rate from CAC was 28.40% (the completion rate varied from 58 to 100%) and full CAC attendance rates ranged from 61 to 100%. Significant reductions in client distress were observed at two sites. Qualitative themes highlighted increased awareness and understanding across care dyads. In study two, there was zero dropout and full attendance. Clients were significantly less fragmented, and staff felt significantly more competent and less exhausted.

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Potential mechanisms of change were the effective process skills of the consultant and that emotionally difficult CAC processes were helpful.

**Conclusions.** Cognitive analytic consultancy appears a promising approach to staff consultation, and testing in a clinical trial is now indicated.

# **Practitioner points**

- CAC is a suitable method of consultation for care dyads struggling to work effectively together in CMHTs.
- Staff feel more competent and clients feel less fragmented following CAC, and the benefits of CAC
  appear to be maintained over follow-up time.
- CAC processes can be difficult for care coordinator and client, but this is not an impediment to change.

The work of community mental health teams (CMHTs) is to provide care to service users who present with complex clinical disorders, and this work often means also navigating the challenging relationships that ensue (Kerr, Dent-Brown, & Parry, 2007; Onyett, Pillinger, & Muijen, 1995). For example, clients can repeatedly self-harm or present in crisis to the CMHT, but then go onto reject the help that is on offer from the team (Dunn & Parry, 1997). This can be particularly difficult if the client is typically fragmented in their presentation and personality, in that they may present in markedly differing states or modes at differing times and with different staff in the CMHT (Ryle, Leighton, & Pollock, 1997). This can in turn create the conditions for team splitting, inter-professional blame cycles, and anxiety-driven practice (Foster & Roberts, 1999). Poor therapeutic alliances can result in a 'double impact' for service users in terms of contending with a mental health problem, in the context of ongoing difficult interpersonal dynamics with the CMHT (Howgego, Yellowlees, Owen, Meldrum, & Dark, 2003). Ongoing tensions and ruptures in the alliance are not always acknowledged and repaired, therefore perpetuating the cycle (Charman, 2004). Without organizational support, CMHT staff can be left feeling highly stressed, burnt-out and demoralized (Ryle & Kerr, 2002), with associated high sickness, vacancy, and turn-over rates (Evans et al., 2006). In this context, CMHTs have been asked to demonstrate improved outcomes, whilst simultaneously achieving financial savings via increased efficiency (e.g., DoH, 2014). Organizational consultation interventions that support teams and their service users in their work are a priority, due to the promise of better outcomes/efficiency, with consultation acknowledged as a key aspect of senior psychological posts (BPS, 2012).

The evaluation of organizational interventions is a challenging task as the intervention may change both the patient and the care system and so the direction of change is hard to ascertain (Murta, Sanderson, & Oldenburg, 2007). There is a nesting of possible outcomes concerning consultation, in terms of the patient, the team, and the organization. In terms of the patient, the outcomes may be symptom based (e.g., use of the CORE-OM to measure distress; Evans *et al.*, 2000), process based (e.g., to assess whether the alliance improves with the care coordinator, then use the Working Alliance Inventory, Horvath & Greenberg, 1989) or concern their satisfaction with consultation received (e.g., use the Client Satisfaction Scale, Attkisson & Greenfield, 1994). In terms of the team, outcomes may relate to job satisfaction (e.g., Job Description Index; Stanton *et al.*, 2002), burnout (e.g., Maslach Burnout Inventory, Maslach, Jackson, & Leiter, 1996), or team climate (e.g., Team Climate Inventory, Anderson & West, 1998) and can also be process based (e.g., whether the worker feels the alliance has improved; Working Alliance Inventory – staff version, Tracey & Kokotovic, 1989). In terms of the organization, then the outcomes are

concerned with service efficiency (e.g., attendance, dropout, discharge, and need for further intervention), service costs, and safety indices (e.g., number of admissions, number of suicides). As evaluations need to access multiple nested outcomes and as each outcome source may have its own methodological strength and weakness, mixed methods evaluations of organizational consultation are promoted as a useful middle ground (Abildgaard, Saksvik, & Nielsen, 2016).

Cognitive analytic consultancy (CAC; Carradice, 2013a) provides such an organizational intervention, with the approach grounded in the theory, principles, and practice of cognitive analytic therapy (CAT; Ryle & Kerr, 2002). The purpose of CAC is to enable care dvads (i.e., the care coordinator from the CMHT and the service user) to develop a better/ deeper understanding of the dynamics of their care relationship, and then develop better ways of relating and reciprocating (Kellett, Wilbram, Davis, & Hardy, 2014). The approach of CAC therefore locates difficulties in care dyad reciprocation rather than solely in the client (Ryle & Kerr, 2002). Cognitive analytic consultancy is targeted at complex clients who are seen as unsuitable for psychological therapies by CMHT staff or for whom, if offered, poor outcomes would be anticipated from psychological therapies (Carradice, 2013a). Cognitive analytic consultancy involves offering five consultancy sessions to the care dyad, with sessions predominantly focussed on the 'here and now' roles and patterns enacted in the care relationship (Mitzman, 2010). Cognitive analytic consultancy culminates in the co-creation of a 'contextual care map' (i.e., sequential diagrammatic reformulation; SDR), charting the key client-team and client self-management relational patterns. These care maps use reciprocal roles (RR) and reciprocal role procedures (RRPs) as guiding theoretical principles (Ryle, 2004). Helpful change and coping methods (i.e., 'exits' in the language of CAT) are added to the SDR in the latter sessions. Exits might be team based (e.g., setting boundaries, responding to crisis calls in a different manner or being more consistent) or client based (e.g., supporting increased capacity for selfreflection, better self-control, and working towards the integration of dissociated states; Carradice, 2013a). The aim of CAC is that the SDR informs and also updates formal care planning for patients in CMHTs, in a relationally-informed manner to therefore enable improved day-to-day case management by the team (Carradice, 2013b).

Despite CAT as a psychotherapy now being delivered in many countries with an associated (but slow) expansion in its evidence base (Ryle, Kellett, Hepple, & Calvert, 2014), the consultation version of the model does not seem to have been evaluated as thoroughly (Calvert & Kellett, 2014). The evidence that does exist is typically restricted to providing CAC indirectly to teams (e.g., Dunn & Parry, 1997; Kerr, 1999) and focuses on psychoeducative elements of supporting teams in providing more relationally informed care (e.g., Carradice, 2004; de Normanville & Kerr, 2003; Thompson et al., 2008). Cognitive analytic consultancy is welcomed by CMHTs and viewed as helpful by care coordinators (Freshwater, Guthrie, & Bridges, 2017; Styring, 2010). A small quasiexperimental study in an assertive outreach team (Kellett et al., 2014) found that offering CAC had no benefit on client outcomes, but did markedly improve organizational outcomes (i.e., overall team climate and practices significantly improved). In this small trial, it is worth noting that the CAC was 'indirect' in terms of three sessions being conducted with care coordinators to produce the SDR, supported by initial team teaching on the model and team-based supervision. Evaluations of direct CAC are therefore a rarity in relation to the popularity of this approach in Secondary Care.

Salkovskis (1995) describes the evaluation, evolution, and dissemination of clinical interventions using a three-stage 'hourglass' model. This acknowledges that the first stage of building an evidence base should be defined by the initial use of a range of uncontrolled

evaluations which increase in methodological sophistication. This evidence is used as a platform for progression to stage two of the model of conducting clinical trials. The final stage of the hourglass results in large-scale dissemination programmes (i.e., evidencebased practice) of treatment protocols and guidelines and associated clinical audit. The Improving Access to Psychological Therapies programme is an example of the hourglass model, concerning the scaling up of the dissemination of the depression and anxiety NICE guidelines (taken from clinical trial evidence) and the auditing of associated recovery rates in routine practice (Clark, 2011). The hourglass model can be integrated into the Medical Research Council's updated (2019) guidelines on new treatment development (which states a four-stage cyclical process of development, feasibility, evaluation, and implementation), but the hourglass is seen as more bespoke and appropriate for psychological therapies (Salkovskis, 1995). The extant CAC outcome evidence would be at stage one of the hourglass and is mainly limited to uncontrolled evaluations of indirect CAC. The present evidence is also located at the first stage of the hourglass model, but is concerned with the delivery of direct CAC and also shows methodological progression within stage one (via two connected studies). Study one aimed to present evidence of CAC acceptability, summarize pre-post outcomes, and gain qualitative feedback from three NHS Trusts. Evident design issues were then addressed by completing a more methodologically sophisticated formal mixed methods case series in study two. Study two aimed to index the effectiveness of CAC in comparison to a baseline, utilize sessionby-session analysis, generate follow-up data, and explore possible mechanisms of change through a qual-quant synthesis. Therefore, the overall aim was to demonstrate use of the hourglass model in shaping the evaluation of CAC as on organizational intervention in Secondary Care.

# Method

Service evaluations (study one) and the case series (study two) were conducted in Secondary Care NHS-based services providing care to individuals from clusters 4 (non-psychotic-severe) to 7 (enduring non-psychotic disorders-high disability; DoH, 2014). The three NHS Trusts in study one had permission to complete the service evaluations from their clinical governance structures, and the case series had formal NHS ethical approval (15/YH/0336). Study one's methodological short-comings were rectified in study two via (1) establishing a baseline to compare the CAC against, (2) assessing shape of change during CAC (3) generating follow-up data, and (4) completing a formal qualitative analysis.

# Intervention: Cognitive analytic consultancy

Cognitive analytic consultancy was offered based on the following criteria: (1) client considered unsuitable for individual therapy by the clinical team and (2) the CMHTs were experiencing difficulties in working with the client. Selection criteria were kept intentionally broad, in order to capture typical CMHT populations and to ensure external validity (Reiss & Judd, 2014). CAC was delivered by psychological therapists with a range of professional training, but all were trained to practitioner level by the Association of Cognitive Analytic Therapy and in receipt of ongoing CAC supervision. CAC has been manualized and was delivered according to the five-session protocol, with this involving consecutive three-way meetings (typically lasting 1 hr) between care dyad and CAC practitioner (Carradice, 2013b). Short pre- and post-consultation briefings also took place

solely with the care coordinator. CAC is structured as follows: (session 1) using a '24-hr clock' to learn about the client's typical day, with the aim of understanding the client's current roles and patterns; (session 2) using the psychotherapy file to elicit CAT snags/ traps/dilemmas and key problematic states; (session 3) risk analysis; (session 4) drawing together all assessment information to co-produce a SDR; and (session 5) planning for change, via exit identification for team and client.

#### Design, measures, and analysis: Study one

The three Trusts all used pre-post designs with additional semi-structured qualitative interviewing of care dyads. CAC acceptability outcomes were uptake, dropout, and further intervention rates. Site one used the following measures: Clinical Outcomes in Routine Evaluation Outcome Measure (CORE-OM; Barkham et al., 2013), Personality Structure Questionnaire (PSQ; Pollock, Broadbent, Clarke, Dorrian, & Ryle, 2001), Work and Social Adjustment Questionnaire (WSAS; Mundt, Marks, Greist, & Shear, 2002), and the Service Engagement Scale (SES; Tait, Birchwood, & Trower, 2002). Site two used the Clinical Outcomes in Routine Evaluation-10 (CORE-10; Barkham et al., 2013). Site three used the Clinical Outcomes in Routine Evaluation-18 (CORE-18; Barkham et al., 2013) and the Working Alliance Inventory (WAI; Horvath, 1994). The measures were selected to evaluate clinical outcomes for CAC across a range of indices. The CORE-OM (full version), CORE-18, and CORE-10 (short-form versions) are valid and reliable measures of general psychological distress (Barkham et al., 2013; Evans et al., 2002); the WSAS is a valid and reliable measure of disability (Thandi, Fear, & Chalder, 2017), and the SES captures engagement with services and has good test-retest reliability and is internally consistent (Tait *et al.*, 2002). Pre-post change in outcomes was assessed via t-tests in the larger samples in site 1 (N = 21) and site 2 (N = 25) and Wilcoxon Z scores in the smaller sample (site 3, n = 11). Effect sizes were interpreted with Cohen's (1992) power primer;  $d \ge 0.20$  is a 'small' effect,  $d \ge 0.50$  is a 'medium' effect, and  $d \ge 0.80$  is a 'large' effect. A chi-square test was used to assess whether dropout rates differed between sites.

#### Design, measures, and analysis: Study two

The case series used a prospective small N mixed methods approach (Davis, 2005), utilizing an A-B with follow-up design (Kazdin, 2011). Mixed methods are complementary through gaining different types of knowledge concerning the area of interest, addressing weaknesses associated with each approach, and then strengthening findings/conclusions via triangulation (Yeasmin & Rahman, 2012). Care dyad outcomes were collected over three phases: baseline (A), CAC (B), and follow-up (FU). The baseline comprised three time points (time 1-3), the consultation phase of four time points (time 4-7), and a single follow-up was conducted at 6 weeks (time 8). The design therefore created an 8-point time series of three distinct phases as measures were taken at each time point. In the case series, the measures used were extended to also include staff outcomes, in order to broaden to outcomes assessed. Client outcome measures were the PSQ (Pollock et al., 2001), CORE-10 (Barkham et al., 2013) and the client short version of the WAI (WAI-Sc, Tracey & Kokotovic, 1989). The PSQ was the primary client outcome measure and is a measure of identity disturbance and fragmentation. The PSQ has sound psychometric properties (Bedford, Davies & Tibbles, 2009). Staff outcome measures were the short therapist version of the WAI (WAI-St; Tracey & Kokotovic, 1989), Maslach Burnout Inventory (MBI; Maslach et al., 1996), and the Perceived Competence Scale (PCS: Deci & Ryan, 1985). The PCS was the primary staff outcome measure. The WAI is a measure of the alliance from either patient or therapist's perspective and has sound psychometric properties (Horvath & Greenberg, 1989). The MBI is a psychometrically valid measure of burnout (Kokkinos, 2006) and has three subscales of emotional exhaustion (EE), personal accomplishment (PA), and depersonalization (DP). The PCS is a measure of perceived clinical competence; the internal reliability of the PCS has been found to be above .80 in two studies (Williams & Deci, 1996; Williams, Freedman, & Deci, 1998). Individual rates of change during CAC in the case series were calculated using the reliable change index (Jacobson & Truax, 1991) to enable the calculation of reliable improvement (i.e., when the final score used in the calculation fell within community norms), and reliable and clinically significant improvement (i.e., when the final score met reliable change criteria and also fell within community norms).

Qualitative interviews using the Change Interview (Elliot & Rogers, 2008) were conducted 2 weeks after the follow-up. Staff and clients were interviewed separately. The Change Interview explores the degree and origin of any change processes occurring as a result of an intervention, and has been previously used in a CAT mixed methods study (Kellett & Hardy, 2014). Quantitative outcomes were analysed at individual (i.e., reliable and clinically significant change rates) and at a group level (i.e., change between the phases using Wilcoxon *Z* scores). Baseline stability was assessed via *t*-tests comparing T1 and T3 of the baseline. To explore mechanisms of change during CAC, the qualitative data were initially analysed separately, then followed by sequential mixed model analyses on the whole data set (Creswell & Plano Clark, 2007). This process of analyses is supported by and allows one type of data to be transformed into another in order to synthesize results (Driscoll, Appiah-Yeboah, Salib, & Rupert, 2007).

Transcripts were initially analysed using thematic analysis, which involved reading and rereading each transcript, then individually coding and clustering codes according to themes, checked against the original transcripts (Braun & Clarke, 2006). This was done for all clients and then the data compared with the themes emerging from the associated Care Coordinator. This iterative and inductive process provided more nuanced information (Thomas, 2003). Themes were supported by reporting the number of times participants made reference to an area and by extracts from the transcript to aid transparency in the generation of theme development. JG also kept a reflective journal to ensure transparency in the analytic process (based on the description by Ortlipp, 2008), and this was supervised by SK. Degree of inter-rater agreement was assessed via kappa scores, with percentage agreement rates reported instead of confidence intervals, because of the small numbers of items being rated (McHugh, 2012). Client and staff second ratings were made by a trainee clinical psychologist. The second rating of one randomly selected client transcript revealed inter-rater agreement of  $\kappa = .73$ , p < .01 (83% agreement; McHugh, 2012) and one staff transcript an inter-rater agreement of  $\kappa = .69$ , p < .001 (72%) agreement; McHugh, 2012). This suggested a moderate level of agreement between raters, so no changes were made to the themes or coding template.

The term 'quantitizing' describes the process of transforming coded qualitative data into quantitative data and 'qualitizing' to describe converting quantitative data to qualitative data (Driscoll *et al.*, 2007; Tashakkori & Teddlie, 2010). Figure 1 presents a diagrammatic summary of how the triangulation was achieved. Quantitative subgroups of 'recovered' versus 'not recovered' clients (i.e., reliable and clinically significant change on the PSQ at follow-up) were created. These subgroups were then qualitized (named QUAL-quant) by thematic analysis. One randomly selected recovered and non-recovered client

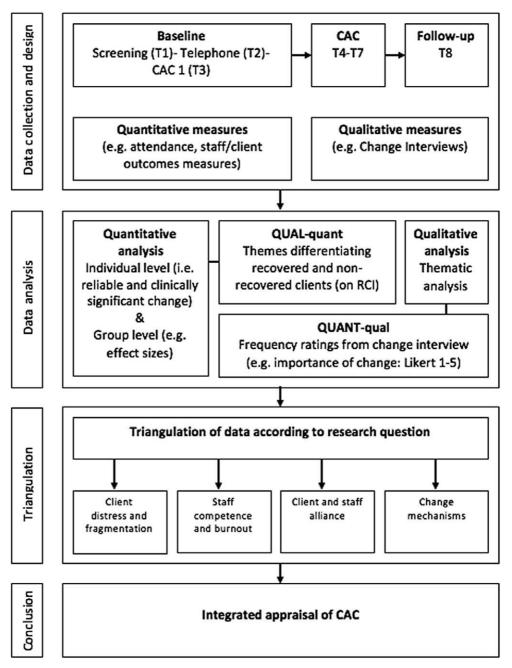


Figure 1. Visual summary of how the synthesis of the data was achieved in study two.

were double rated by a second trainee clinical psychologist. Moderate inter-rater agreement was achieved for both the recovered ( $\kappa = .72$ , 80% agreement, p < .01) and non-recovered clients ( $\kappa = .74$ , 80% agreement, p < .001). Qualitative data were quantitized by reporting the identified changes from the Change Interviews and summarizing via reporting their frequencies (named QUANT-qual).

Triangulation of the quantitative, qualitative, QUANT-qual, and QUAL-quant data was conducted via a four-stage protocol (Farmer, Robinson, Elliott, & Eyles, 2006). First, findings from the different data sources were sorted according to the research question. Second, a convergence code was applied. Where findings were confirmatory, themes were coded as to whether they broadly agreed and added depth (i.e., 'confirmatory: convergent and expansion') or findings broadly agreed and added breadth (i.e., 'confirmatory: convergent and complementary'). Some findings were discrepant in that they contradicted each other. Third, convergence codes were rated blind by a third trainee clinical psychologist ( $\kappa = .60$ , 67% agreement, p < .05) indicating a moderate level of agreement. After discussion between raters, complete agreement was achieved on all six codes. A table was produced to demonstrate a unified summary.

# Results

Results are organized into two sections: (1) quantitative and qualitative outcomes from study one summarizing acceptability and effectiveness outcomes and (2) study two's case series with a mixed methods synthesis.

## Study one

Table 1 contains the demographics for service users, CAC acceptability outcomes, and the service outcomes across the three sites. The most common presenting problem referred for CAC in site one was severe anxiety, depression, or other disorder (10/21). The most common presenting problem at site 2 was depression (14/25) and in site 3 was emotionally unstable personality disorder (9/12). In site 1, 80.76% of CAC offered was completed; at site 2, the completion rate was 58.13%; and in site 3, all the CAC interventions were completed. The cross-site dropout rate was 28.40%, and there was no difference between sites in terms of the dropout rate,  $\chi^2$  (2) = 1.53, p = .46. Full consultation 5-session attendance was high across the three sites: site one 13/21 (61.90%), site two 22/25 (88.00%), and site three 12/12 (100%). At site one, CAC duration was extended to up to eight sessions in 8/21consultations. Continued care coordination was the most common service outcome across the sites (50.00%), followed by either the client being discharged from the mental health service (31.03%) or referred onto further therapy (18.96%). Where continued care coordination was the outcome, CAC was integrated into formal care plans in all cases.

Table 2 contains the psychometric outcomes from study one. In two of the three sites, CAC produced a significant reduction in client distress (CORE outcomes), with effect sizes ranging from small to large (d + 0.38-0.82). There was not a significant increase in service engagement (site one) or the working alliance (site three). The PSQ demonstrated significantly reduced client fragmentation in site 1. Thematic analysis across the sites illustrated the common CAC themes of staff and clients having greater understanding (site one and two) and clarity (site three). Clients felt that CAC provided better pattern awareness (site two and three), and in site one, the SDR was noted by clients and staff as specifically useful in this regard. In sites two and three, a theme was reported related to change in terms of facing up to challenges (site two) and identifying exits and increasing self-care (site three).

	Referred ( <i>N</i> )	Completed ( <i>N</i> )	Presenting problem/cluster (N)	Mean age (SD)	Gender (M/F)	Sessional attendance rate	Service outcome
Site one	26	21	Cluster 5 (severe anxiety, depression, or other disorder) = 10 Cluster 6 (severe and recurrent depression and anxiety resistant to treatment) = 2 Cluster 7 (Severe anxiety and depression that are very disabling) = 2 Cluster 8 (personality disorder) = 5	39.61 (14.30)	5/16	<ul> <li>I-4 sessions = 0</li> <li>5 sessions = 13</li> <li>6 sessions = 4</li> <li>7 sessions = 3</li> <li>8 sessions = 1</li> </ul>	Continued care coordination N = 9 Discharged N = 5 Therapy referral N = 7
Site two	43	25	Bipolar disorder = 2 Major depression = 14 Psychotic episodes = 1 Complex PTSD = 5 Anxiety = 3	44.80 (10.07)	/ 4	I-4 sessions = 3 5 sessions = 22	Continued care coordination N = 14 Discharged $N = 9$ Therapy referral $N = 2$
Site three	12	12	Emotionally Unstable Personality Disorder = 9 Bipolar disorder = 2 Obsessive Compulsive Disorder = 1	39.63 (10.64)	2/10	I-4 sessions = 0 5 sessions = 12	Continued care coordination N = 6 Discharged N = 4 Therapy referral N = 2

# Table 1. Demographics, attendance, and service outcomes from study I

Site one	Pre-CAC	Post-CAC	t-Value	D	Staff themes	Client themes
Personality Structure Questionnaire	32.19 (5.84)	25.29 (7.52)	3.74*	0.82	82 Increased understanding Better understanding CAT model (subthemes: power CAT model (subthemes	
CORE-OM	72.10 (27.93)	50.95 (28.20)	3.20*	0.69	of the SDR, emotional impact,	of the SDR and emotional impact),
WSAS	23.14 (8.92)	16.90 (7.77)	3.36*	0.73	ZPD and people processes)	Timing
Client experience questionnaire	12.08 (4.89)	10.38 (4.03)	1.38	0.32	Timing Moving forwards	Change
Service engagement scale (staff)	12.67 (5.28)	11.00 (4.71)	1.13	0.32	Client change	
Site two	Pre-CAC	Post-CAC	t-Value	D	Staff theme	Client theme
CORE-10	19.90 (7.71)	14.68 (8.06)	6.23*	0.67	Helpful	Better understanding
					Client self-awareness	Pattern awareness
					Client change	Unsure of timing
					Change own practice	Facing up to challenges
						Want more sessions
Site three	Pre-CAC	Post–CAC	z-score	D	Staff theme	Client theme
CORE-18	45.18 (8.53)	41.82 (15.45)	-0.82	0.38	Increased clarity	Pattern recognition
Working Alliance Inventory (client)	52.82 (14.76)	56.00 (16.73)	-I.26	-0.22	Identifying exits	Identifying exits
Working Alliance Inventory (staff)	54.27 (10.20)	56.64 (6.20)	-0.46	-0.23	Understand own response Client self-awareness Increase in confidence	Increasing self-care Appreciative Structure of CAC

 Table 2. Psychometric and qualitative outcomes from study I

Note. \*p < .01.

### Study two

Seven care dyads were referred and screened. Two dyads were not taken on due to other care needs taking priority. The case series therefore consisted of N = 5 care dyads (two males and three female white British clients, all with white British female care coordinators). The mean age of the clients was 57.00 (SD = 6.2), and diagnoses ranged from chronic relapsing depression (N = 1), mixed anxiety/depression (N = 3) to emotionally unstable personality disorder (N = 1). All clients at screening scored above the caseness cut-off score on both the CORE-10 (group mean = 26.60, SD = 6.8) and PSQ (group mean = 34.60, SD = 3.9). All five consultations were completed, with each care dyad attending all of the sessions offered.

## Individual-level outcomes

Four of the five clients were discharged from the mental health service after completing CAC, with the final client discharged 1 year post-CAC. Table 3 summarizes the reliable and clinically significant change rates in the case series. Two clients had a reliable and clinically significant PSQ score reduction between screening and follow-up. There was no evidence of any reliable and clinically significant change for any of the care coordinators.

### Group-level outcomes

Table 4 contains the mean phase scores, associated comparisons, and CAC effect sizes from study two. *t*-tests between time point 1 and time point 3 were used to test baseline stability. There was no significant difference in CORE-10 scores, t(4) = 0.00, p = 1.0, PSQ scores, t(4) = 0.406, p = .706, or the alliance from the clients, t(4) = 2.389, p = .075, or

	Screening (T1) to termination (T7)				reening (1 ollow-up		Termination (T7) to follow-up (T8)		
Measure	RI	CSI	RCSI	RI	CSI	RCSI	RI	CSI	RCSI
CORE-10	I	I	I	2	2	2	0	I	0
PSQ	I	I	I	3	2	2	2	1	I
WAI-Sc	_	_	_	_	_	_	_	_	_
WAI-St	_	_	_	_	_	_	_	_	_
PCS	_	_	_	_	_	_	_	_	_
MBI:EE	0	Ι	0	0	I	0	0	0	0
MBI:DP	0	0	0	0	0	0	0	0	0
MBI:PA	0	0	0	0	0	0	0	0	0

**Table 3.** Individual change rates (N = 5) from study 2

Notes. CSI = clinically significant improvement; RCSI = reliable and clinically significant improvement;RI = reliable improvement; TI = time point I (screening session); T7 = time point 7 (end of CAC);T8 = time point 8 (follow-up); -sign in the table means not possible to calculate.

CORE-10: RCI significant if > 6; PSQ: RCI significant if > 4.17; MBI-EE (emotional exhaustion subscale): RCI significant if > 14.85; MBI-DP (depersonalization subscale): RCI significant if > 9.76; MBI-PA (personal accomplishment subscale): RCI significant if < 12.19; CSC for CORE-10 (general psychological distress) if pre-score  $\geq$  11 and post-score < 11; CSC for PSQ if pre-score  $\geq$  27 and post-score < 27; CSC for MBI-EE if pre-score  $\geq$  18.75 and post-score < 18.75; CSC for MBI-DP if pre-score  $\geq$  7.04 and post-score < 7.04; CSC for MBI-PA if pre-score < 32.62 and post-score  $\geq$  32.62.

Measure	Baseline M (SD)	CAC M (SD)	Baseline to CAC z-score	Follow- up M	Baseline to follow-up z-score	CAC to follow-up z-score	TI – T7 Cohen's <i>d</i> (95% Clª)	Effect size category <sup>b</sup>	T I - T8 Cohen's <i>d</i> (95% CI)	Effect size category <sup>b</sup>
CORE-10 (Client)	25.60 (1.73)	25.00 (4.26)	-0.14	21.60	-1.48	-0.94	-0.41 (-14.26, 5.86)	Small	-0.65 (-14.17, 4.17)	Medium
PSQ (Client)	33.80 (0.69)	31.50 (1.95)	-2.03*	27.20	-2.02*	-I.83	(-13.46, 5.46)	Medium	(-17.12, 2.32)	Large
WAI (Client)	67.10 (4.23)	70.10 (9.79)	-0.14	77.80	-1.75	-2.02*	(-0.33,12.33)	Large	(-0.19, 13.79)	Large
WAI (Staff)	51.40 (0.50)	51.50 (2.95)	-0.14	56.00	-0.94	1.75	0.29	Small	-0.32 (-14.02, 23.62)	Small
PCS (Staff)	13.50 (0.20)	16.05 (1.17)	-1.75	19.20	-2.02*	-I. <b>76</b>	I.07 (-0.21, 8.21)	Large	(-1.19, 12.79)	Large
MBI: Emotionally Exhausted (Staff)	18.73 (1.63)	14.70 (2.81)	-2.02	10.80	- <b>2.02</b> *	-2.02*	-0.45 (-8.64, 1.84)	Small	-0.89 (-12.17, -1.43)	Large
MBI: Depersonalized (Staff)	3.90 (0.90)	3.20 (0.57)	-1.84	2.40	- I.83	-0.92	-0.18 (-2.97, 2.17)	_	-0.53 (-4.03, 1.63)	Medium
MBI: Personal Accomplishment (Staff)	31.60 (2.16)	30.35 (0.82)	-0.14	32.20	-0.4I	-0.4I	-0.05 (-6.93, 8.13)	-	0.27 (-2.54, 7.34)	Small

**Table 4.** Group change scores comparing phases from study 2

Note. Baseline = time point I to time point 3; CAC = time point 4 to time point 7; follow-up = time point 8; CI = confidence interval; M = mean; SD = standard deviation.

<sup>a</sup>Cohen *d* effect sizes calculated using the formula: (T7 mean – T1 mean)/average standard deviation, with positive treatment effects being reflected by a positive effect size, and vice versa.

<sup>b</sup>Effect size categories use Cohen's (1992) guidelines:  $d \ge 0.20$  is a 'small' effect,  $d \ge 0.50$  is a 'medium' effect, and  $d \ge 0.80$  is a 'large' effect.

\*p < .005.

care coordinators perspective, t(4) = 0.044, p = .967. There was no significant change in staff baseline competence, PCS t(4) = -0.59, p = .587, emotional exhaustion, t(4) = -0.121, p = .909, depersonalization, t(4) = 0.389, p = .717, or sense of personal accomplishment, t(4) = -1.572, p = .191. These results indicated that the baselines were stable, in order to enable comparison with subsequent CAC outcomes.

There was a significant reduction in client fragmentation on baseline-CAC and baseline-follow-up phase comparisons, and the PSQ effect sizes were large. Staff felt significantly more competent when comparing baseline and follow-up phase mean scores, and the PCS effect sizes were large. Staff reported feeling significantly less emotionally exhausted by their work over time. Care dyad sessional primary and secondary outcomes are presented in Figures 2 and 3. This graphing illustrates the dual trend of improvements in the alliance during CAC from both care coordinators and client's perspectives. There was a significant improvement in the alliance (small effect size) for the client on CAC to follow-up phase comparisons. The follow-up data suggested neither continued improvement nor deterioration following CAC.

#### Qualitative: The staff and client experience of CAC

The number of times each staff and client participant made reference to a particular theme is represented in Table 5 with representative quote examples. Thematic analysis of staff interviews found five superordinate themes (1) the relationship prior to CAC (comprising two subthemes of 'stuckness' and 'interpersonal difficulties'), (2) helpfulness of the SDR, (3) change processes (comprising four subthemes of 'noticing change in the client', 'feeling more positive/insightful', 'the process of CAC being difficult', and 'learning from the consultant'), (4) the model (comprising two subthemes of 'not speaking being difficult' and the 'consultant's approach'), and (5) following CAC (comprising two

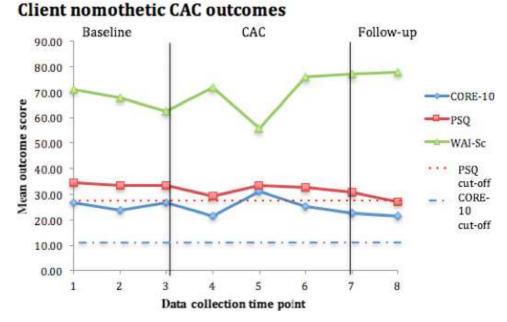


Figure 2. Client cognitive analytic consultancy sessional outcomes in study two.

	Theme	Staff I	Staff 2	Staff 3	Staff 4	Staff 5	Quotations
la	Stuck before CAC $(n = 12)$	5	I	5	I	0	'It felt like we were a bit stuck on where we were at and which is why I asked'. (Staff I)
Ιb	Interpersonal difficulties $(n = 21)$	9	3	0	8	Ι	'He is someone who made me feel incredibly uncomfortable, because of the comments he made and I did not know how to address that with him'. (Staff 4)
2	Helpfulness of the SDR $(n = 40)$	12	7	7	7	7	'It's helped me to work with [Client 2] because I know what happening now when they get in a difficult situation'. (Staff 2)
3a	Noticing change in the client $(n = 28)$	6	I	8	6	7	'I feel like he is more open. He'll be more open to suggestions about not continuing his behavioural patterns'. (Staff 5)
3b	Feeling more positive and insightful (n = 24)	7	7	I	5	4	'I feel more confident in being able to say what I am really thinking without offending him, as it's all there in black and white on the map'. (Staff 5)
3c	CAC process difficult $(n = 10)$	2	4	2	2	0	'I think drawing out the maps and obviously you do the words, you know words that underpin everything because you've reached the bottom line'. (Staff I)
3d	Learning from the consultant $(n = 21)$	7	7	0	4	3	'It's been useful to look at someone else talking to [Client 2], the way they talked to them and watching the consultant was good for me'. (Staff 2)
4a	Not speaking during CAC difficult but helpful ( $n = 12$ )	3	4	3	Ι	Ι	'So you're not allowed to say anything and that's quite strange, but helpful because you are observing'. (Staff I)
4b	Consultant's approach $(n = 8)$	2	Ι	3	Ι	Ι	'It's about [consultant] teasing some of that information out erm and I think not, its getting them to take responsibility without coming across like blaming them'. (Staff 5)
5a	Worries about CAC finishing (n = 21)	16	0	4	Ι	0	'It still did feel quite quick and you still did get to the last session thinking "oh gosh I've got to do this on my own now", a bit scary'. (Staff I)
5b	Outstanding work remaining (n = 13)	I	4	6	Ι	Ι	'We're going to work on the voices, yeah. Yeah, because cos that's gonna be the big thing that I think's gonna help her do all the other things that were gonna do prior to discharge'. (Staff 3)

**Table 5.** Staff and client qualitative themes from study 2

Continued

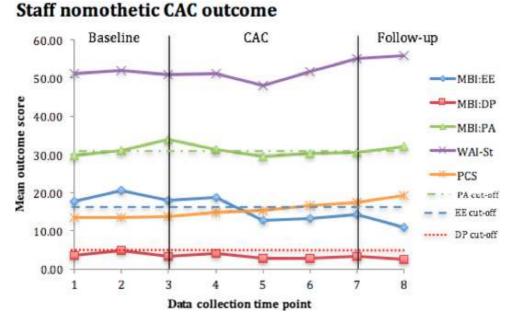
 Table 5. (Continued)

	Theme	Client I	Client 2	Client 3	Client 4	Client 5	Quotations
Ι	Doubts about CAC working $(n = 6)$	3	0	2	0	I	'l sort of got disillusioned half way through and not fully on board that this could possibly help me'. (Client 5)
2a	Optimism/ confidence (n = 8)	3	0	2	2	Ι	'I've got more confidence and I can go out and not feel like everyone is looking at me'. (Client 3)
2b	Insight $(n = 7)$	0	2	2	I	2	'Well it's making me think, you know, of why I was doing things'. (Client 2)
3	SDR helpful (n = 14)	3	0	0	7	4	'Well if I start to feel down then I look at the map and I think that's how I am feeling at them moments, so what made me feel like that'. (Client 4)
4	CAC process hard but helpful (n = 14)	0	4	Ι	3	6	'It was a bit hard at first, it was like taking a scab off and all the gunge coming out'. (Client 3)
5	Need for more sessions (n = 6)	0	0	2	Ι	3	'I think that they could increase the amount of time a bit more'

subthemes of 'worries about CAC finishing' and 'recognising that outstanding work remained'). The highest frequency staff statement concerned the helpfulness of the SDR. The client interviews also produced five superordinate themes (1) doubts about CAC working, (2) noticing improvement (comprising two subthemes of 'increased optimism/ confidence' and 'insight'), (3) SDR useful, (4) CAC process hard, but helpful, and (5) the need for more sessions. The joint highest frequency client statements were the helpfulness of the SDR and the processes of CAC being difficult, but helpful.

## QUAL-quant, QUANT-Qual, and triangulation

The results of the triangulation are reported in Table 6. In terms of qual-QUANT, there were three themes that differentiated the experience of CAC for recovered and nonrecovered clients: (1) postive consultant characteristics, (2) life being improved (comprising subthemes of 'behaviour change' and 'improved coping'), and (3) how CAC had helped (comprising subthemes of 'thinking' and 'behaving differently'). The most common theme for recovered clients was that of behaviour change (N = 5statements), and for non-recovered clients, it was the positive attributes of the consultant (N = 16 statements). In terms of QUANT-qual, clients reported a mean of 4.2 positive changes (SD = 1.92), comprising increased self-motivation and confidence (three clients), increased self-awareness (two clients), and improved relationships (two clients). Staff reported a mean of 4.0 positive changes about their work (SD = 1.92); specifically, an increase in confidence (four staff), increased insight (two staff) and increased optimism (two staff). Staff reported a mean of 3.6 positive changes (SD = 1.52) in their clients; specifically, that of improved relationships (two staff), improved control over symptoms (three staff) and clients' being open to trying out new ways of coping (three staff). Overall, this synthesis did not completely support that CAC was symptomatically effective for



#### Figure 3. Staff cognitive analytic consultancy sessional outcomes in study two.

Research question	Quantitative	Qualitative	QUAN-qual/and QUAL- quan	Merged findings code <sup>a</sup>
Was CAC effective in reducing client distress and fragmentation?	Individual level: 2 × clients showed reliable and clinical improvement on PSQ and CORE-10 between T1 and T7 Group level: Reduction in means for both PSQ and CORE-10 at follow-up Clients remained above the clinical cut-offs for both the PSQ and CORE-10 (PSQ almost reached clinical cut-off by follow-up) Significant change scores on PSQ between baseline and CAC ( $z = -2.02$ , $p = .042$ ), and baseline and follow-up ( $z = -2.02$ , $p = .043$ ) Medium CORE-10 effect sizes at follow-up ( $d = -0.65$ ) Large PSQ effect sizes at follow-up ( $d = -1.35$ )	Client theme: 'optimism and confidence' improved with CAC for 4/5 clients Client theme: 'insight' improved for 4/5 clients	QUAL-quant client theme: 'behaviour change' (positive) for non- recovered clients QUAL-quant client theme: 'To think differently' (positive) for non- recovered clients QUANT-qual: clients most frequently reported improvements in self-motivation and confidence, increased self-awareness QUANT-qual staff reported most frequently that clients had improved symptom control	Discrepant
Was CAC effective in improving staff competency and reducing burnout	Individual level: No reliable or clinically significant change on PCS or MBI for any staff One staff showed clinically significant change but not reliable change on MBI:EE (moved from above clinical cut-off to below) Group level: Significant change scores on the PCS between baseline and follow-up ( $z = -2.02$ , p = .043)	Staff theme: 'feeling stuck' before CAC for 4/5 staff Staff theme: 'feeling more confident, optimistic, insightful and less anxious' for 5/5 staff	QUANT-qual: staff most frequently reported improved confidence, optimism and insight into working with clients	Confirmatory: convergent and expansion

**Table 6.** Triangulation of mixed methods findings from study 2

CAT consultancy 17

Continued

Research question	Quantitative	Qualitative	QUAN-qual/and QUAL- quan	Merged findings code <sup>a</sup>
Could CAC improve the alliance in the care dyad?	Large PCS effect sizes at follow-up ( $d = 1.52$ ) After session 4, group staff outcome scores on MBI:EE dropped from above the clinical cut-off to below the cut-off and remained there Significant change scores in MBI:EE across all study phases ( $z = -2.02$ , $p = .043$ ) Large MBI:EE effect sizes at follow-up ( $d = -0.89$ ) Medium MBI:DP effect size at follow-up ( $d = 0.27$ ) Individual level: Care dyad 2 showed improvements in trend data on WAI-sc/t between baseline and end of CAC and made further gains at follow-up Client 5 trend data suggested improvements in alliance between baseline and end of CAC Group level: Both staff and clients had a slight improvement in alliance over the duration of the study, both with a drop-in alliance at T5 Significant change scores on WAI-Sc between CAC and follow-up ( $z = -2.02$ , $p = .043$ ) Small WAI-St effect size at T7 ( $d = 0.29$ ) BUT drop in staff alliance by follow-up ( $d = -0.32$ ) Large WAI-Sc effect size at follow-up ( $d = 1.33$ )	Staff theme: 'interpersonal difficulties with client' before CAC for 4/5 staff	QUANT-qual clients most frequently reported improvements in relationships with others (outside therapy) QUANT-qual staff most frequently reported that clients had improvements in their relationships with others	Confirmatory: convergent and expansion
Change mechanism: What CAT tools help?	None	Staff theme: 'using the SDR helped' for 5/5 staff Client theme: 'map helpful to gain	QUAL-quant client theme: 'Improved exit/coping	Not codeable

Continued

## Table 6. (Continued)

Research question	Quantitative	Qualitative	QUAN-qual/and QUAL- quan	Merged findings code <sup>a</sup>	
Change mechanism: Can difficult	Four out of five clients discharged from the service within 1 year of completing CAC	insight and control' for 3/5 clients Staff theme: 'CAC process difficult' for 4/5 staff	strategies' for non- recovered clients QUAL-quant client theme: 'talking about the past'	Confirmatory: convergent and	
processes help recovery?		Client theme: 'CAC process hard but helpful' for 4/5 clients	helpful for non- recovered clients	expansion	
Change mechanism: What consultant behaviours or model factors help?	100% completed CAC (with some attendance issues)	Staff theme: 'learning from the consultant' for 4/5 staff (e.g., applying what they've observed the therapist do, with the current client and possibly future clients too) Staff theme: 'Not speaking difficult but helpful' for 5/5/staff Staff theme: 'Therapist approach' mentioned by 5/5 staff (e.g., persistence and non-blaming) Client theme: 'Doubts about CAC working' for 3/5 clients Client theme: 'Model' more sessions would have been helpful for 3/5 clients Staff theme: 'Worried about CAC finishing' for 3/5 staff	QUAL-quant client theme: 'positive perceived therapist characteristics' for non-recovered clients	Confirmatory: Convergent and expansion	

Note. <sup>a</sup>Merged findings codes: 'Discrepant' = findings are contradictory; 'confirmatory: convergent and expansion' = findings broadly agree and add depth; 'confirmatory: convergent and complementary' = findings broadly agree and add breadth; 'Not codeable' = not enough data to reliably compare.

clients, but did confirm that CAC was beneficial for staff and improved the relationship in the care dyads. A discrepant finding that emerged from the synthesis was that nonrecovered clients reported changes to both behaviour and thinking as a result of CAC. In terms of mechanisms of change in CAC, then the often difficult processes and enactments that occurred in the care dyads during consultation sessions were helpful and that the process skills of the consultant in handling these (and eliciting the information to enable the formulation) were also important and helpful. Interestingly, the tools of CAT did not particularly emerge as an important mechanism of change.

# Discussion

This paper has used the hourglass model (Salkovskis, 1995) to strategically structure the advancement of an evidence base for CAC. The hourglass model proved useful in planning appropriate methodological progression of CAC outcome studies. The role of consultation to teams is increasingly been championed as a key role for senior psychological staff (BPS, 2012), but research on the effectiveness of consultancy has been largely limited to evaluations of cognitive-behavioural consultation models (see Berry et al., 2016, for an example). In the first study, three Trusts collaborated to provide simple pre-post clinical comparisons, acceptability outcomes, and qualitative interview feedback. Encouraging initial results then enabled recognized methodological weaknesses to be rectified in a mixed methods small N study. The second study increased the internal validity of the methods used by collecting sessional outcomes facilitating a comparison of the CAC intervention to baseline, generating follow-up data to assess durability and completing a detailed mixed methods synthesis to highlight possible mechanisms of change. The second study also widened the measures from clinical to also include organizational outcomes. In combination, the studies have increased the evidence base for direct CAC, as the previous evidence tended to be limited to evaluating indirect versions of the model, often using unvalidated measures and in very small samples.

Cognitive analytic consultancy is an intervention delivered for clients with typically complex mental health problems and CMHT staff requested the intervention because of issues with client engagement and ongoing poor alliances. In terms of study one, there were differences between the three sites in terms of the patients referred to CAC: in site one, the most common presenting problem was anxiety/depression; in site two, it was depression; and in site three, it was personality disorder. CAC therefore seems to be being requested where there is a problem with patient engagement and care dynamics, rather than in the context of a specific disorder. Group mean scores remained above the clinical cut-offs throughout study two on both the CORE-OM and PSQ, indexing the degree of ongoing client complexity. Both studies suggest decent acceptability evidence for CAC in terms attendance dropout rates, with there being no difference between the sites in terms of dropout rates. The dropout rate evidence for CAC mirrors the evidence for traditional CAT of consistently low dropout rates from one to one treatment (Calvert & Kellett, 2014). It is worth noting that the dropout rate at site 2 for CAC was higher (with only half completing), but reasons for this are unknown. In terms of the service outcomes, then the most common outcome was continued care consultation in the CMHT. However, across the two studies another common outcome was for the client to be deemed appropriate for discharge from the mental health service. All five clients in study two were discharged from the service (1 year following CAC). This evidence would suggest that CAC could possibly play a role in discharging clients from Secondary Care in a psychologically informed manner. It is acknowledged that the reasons for the discharge of clients from Secondary Care can be many and varied.

It is also worthy of note is that one of the common outcomes from CAC is a referral onto further therapy. Cognitive analytic consultancy is often used for clients initially deemed unsuitable for individual or group therapy by the CMHT (Carradice, 2013ab) and so the experience of CAC may possibly serve as a foundation stone in enabling service users in CMHTs make better use of therapy services. In terms of psychometric outcomes, across the two studies then CAC has emerged as a consultation approach that is a promising intervention for both staff and clients. Effect sizes were encouraging across staff and client outcomes, and there was little evidence of any marked post-CAC deterioration. This contradicts previous evidence suggesting that the effectiveness of CAC was solely limited to organizational realms (Kellett *et al.*, 2014). Qualitative themes from study one concerning increased awareness and insight in staff and clients were echoed in study two, but with more detailed qualitative analysis and the methodological advantage of the quality assurance of double ratings.

The inclusion criteria for both studies were care dyads that were struggling to work effectively and therapeutically together. The theory of CAT enables the relational difficulties between client and team to be captured in a non-blaming fashion via the production of the SDR and then exits defined for both client and care coordinator (Carradice, 2013ab). This would suggest that a brief, integrative, and relationally informed therapy (Ryle et al., 2014) can be translated into a sister-version form of consultation. The synthesis reported in study 2 suggested that CAC improved the alliance in the care dyad, with these findings being confirmatory and complementary. Improvements in the alliance would reduce the double negative impact identified by Howgego et al. (2003). Client fragmentation benefited more than client distress in the case series. CAC appeared to be influencing the reciprocal and relational nature of the organizational system of the care dyad over time (Vanneste, Puranam & Kretschmer, 2014), in that staff were feeling more competent and clients were feeling less fragmented, with the influence being bidirectional. The design made it impossible to ascertain the causal direction of such influences, but CAT theory would underline reciprocity and bi-directionality, not linear unidirectional causation (Ryle, 2004). Previous CAC research has indicated that staff being able to share and analyse the emotionally demanding nature of navigating often complex relationship care dynamics could reduce emotional exhaustion (Thompson, Kirk-Brown, & Brown, 2005). Statistically significant reductions in the emotional exhaustion of staff were observed during CAC, with emotional exhaustion regarded as the first stage of the burnout process (Lee & Ashforth, 1993). It appears strategically important to ensure staff are well supported in managing often complex relationships with service users, in order to reduce the associated risks of increased sickness and poor staff retention and the possible abandonment issues triggered in clients (Evans et al., 2006).

In terms of proposed mechanisms of change during CAC in study two, then some interesting results emerged. The synthesis suggested that the role of the tools of CAT was not particularly strong, as the merged finding was not codeable, but there was some support for developing and using SDRs. The consultant was able to 'map in the moment' (Potter, 2010) the relational dynamics of the care dyad. The SDR appears a containing feature from both client and staff perspectives, providing a visual aid to enable the care dyad to step back and disentangle itself from previously unhelpful, messy, or iatrogenic reciprocation. This was a key theme at site one in the first study. CAC usefully locates difficulties in the system rather than the team or the client (Ryle & Kerr, 2002). Being able to

complete the difficult work of CAC and the skills of the consultant did emerge as possible change mechanisms. The findings on these difficulties are similar to the early stages of the assimilation model (Stiles & Brinegar, 2007), with 'painful awareness' featuring in the model's early stages. During CAC, both clients and care coordinators stated that the process was difficult and brought up the difficult relational dynamics, but being able to work through these difficult thoughts/feelings enabled progression to take place.

In terms of the approach of the consultant, then the perceived consultation competency of the consultant proved important in terms of facilitating change. During individual psychotherapy, the more clients recognize positive therapist characteristics, the more sessions they attend (Olan, Deffenbacher, Guzman, Sharma, & Acuna, 2010). There is an extant measure of competency of traditional CAT (CCAT; Bennett & Parry, 2004), but there is no measure (as yet) to index CAC competency. This would have been useful in the current study, because at site 1 there was evidence of CAC being delivered beyond the 5-session protocol. Carradice (2013ab) acknowledged that CAC duration can be varied to meet the needs of the individual and this seems to have occurred in one site for a proportion of cases. The development of CAC competency and fidelity scales would be a key future research goal and would also enhance the clinical governance of CAC during routine service delivery. Freshwater, Guthrie, and Bridges (2017) recognized that the competencies to deliver CAC were somewhat different to CAT, particularly due to the strong 'here and now' focus of CAC.

In terms of limitations of this work, then the main criticism of study one would be the lack of follow-up and lack of detailed qualitative analysis. The thematic analysis conducted did however encourage the need to continue to employ qualitative methods in study two. The lack of standardization of outcome measures across the sites in study one is also a criticism. A CAC practice research network would be a useful solution to this standardization problem (Barkham, 2014). The current study has also indicated recruitment in future studies would not be limited by diagnosis, and it is worth noting that the CAT model is in itself transdiagnostic (Ryle & Kellett, 2018). The major methodological problem apparent in study two was the small sample size meaning conclusions about the effectiveness of CAC should be interpreted tentatively. The study also lacked any random allocation to consultation, and the follow-up period was short. A multiple baseline case series would have been a competing alternative small N design that would have increased the internal validity of the study (Barlow, Nock, & Hersen, 2008). Many of the changes in the dynamics of the care system would only be captured with the implementation of longer follow-ups. Traditional CAT when delivered in the 24 session format has four follow-ups spaced over 6 months (Ryle, 2004). Whilst this duration of structured follow-up is attractive in terms of research, CAC is a brief intervention and practically four follow-ups from a five-session consultation model risks being unbalanced. Future studies would benefit from audio-taping CAC sessions and then using qualitative content analysis (QCA; Schreier, 2012) in order to arrive at a model of how change is achieved during consultation sessions. Future research also needs to unearth the reasons why some clients disengage from CAC.

In conclusion, the two studies presented suggest that CAC appears promising in helping care dyads in CMHTs manage their therapeutic relationships in a more 'relationally-informed' manner and this helps clients to feel more integrated and staff more competent and less exhausted. CAC appears to present an opportunity for brief delivery of consultation to the clients and care coordinators in CMHTS struggling to form and maintain effective therapeutic alliances. Cognitive analytic consultancy is an organizational approach, and the care system appears to be positively influenced by the consultancy. Consultants need to be trained and well versed in the CAT model (ACAT, 2014) and supported via ongoing consultation supervision. The CAT model can be translated to intervening at differing levels of an organization, and examples are starting to emerge of this wider systemic work (Shannon & Parry, 2017). The current research would suggest that the PSQ be a suitable primary client outcome measure in future research, because it measures the state-shifting and fragmentation that CHMT staff appear to find so confusing. The PSQ is sensitive to change in complex clients (Kellett *et al.*, 2013) and has recently been cross-culturally validated (Berrios, Kellett, Fiorani, & Poggioli, 2016). The Perceived Competence Scale (PCS: Deci & Ryan, 1985) would be a suitable primary staff outcome measure in future research, as this measures how efficacious staff feel in their work with complex clients with consultancy aiming to support and improve staff in their client work. For services, attendance rates, need for further intervention rates, adverse events, and discharge rates are the most useful outcomes to monitor. Finally, this research has provided the useful groundwork for further methodological progression and precision in comparing CAC to treatment as usual with a clinical trial methodology.

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