

Discovery Awareness for staff supporting individuals with intellectual disabilities and challenging behaviour: Is it helpful and does it increase self-efficacy?

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Objectives: Discovery Awareness (DA) is an approach to using video within structured meetings to help staff become more mindful, aware and interested in a client they are supporting who has intellectual disabilities and challenging behaviour. The objective was to evaluate whether, and how, DA is helpful for staff in both inpatient and community settings, and whether it increases self-efficacy in working with people with challenging behaviour.

Methods: A two-phase mixed method design was employed. For phase one, forty staff who took part in one of seven single DA meetings completed the Challenging Behaviour Self-Efficacy Scale pre- and post- DA. In addition, post- DA, participants completed an Adapted Helpful Aspects of Therapy Scale (AHAT). For phase two, six participants completed a follow-up Change Interview; three to 12 weeks after DA.

Results: Descriptive statistics reveal participants found events in the DA ‘greatly helpful’. The changes identified varied in whether they were expected or not, but were unlikely to occur without DA and ‘very important’. Statistical analysis showed no significant changes in self-efficacy following the DA. A thematic analysis on the qualitative data generated by the change interviews and AHAT identified three main themes: Impact on interaction; DA is unique and valuable; and The power of the process. The latter had three subthemes: a structure to facilitate change, making use of the content and reflective space to promote learning.

Conclusion: Attendance at a single DA meeting does not increase staff perceptions of self-efficacy, however, staff find the process of DA helpful as it encourages reflection on their interactions with individuals with ID and challenging behaviour and attuning of their interactions, though further research is needed.

Keywords: Discovery Awareness, intellectual disability, challenging behaviour, self-efficacy

Introduction

An Intellectual Disability (ID) is defined as significant limitations in intellectual functioning and adaptive conceptual, social and practical skills, with early onset in childhood (AIDD, as cited in Emerson 2012). Individuals with ID can display behaviour that challenges, for example to communicate with others when needs are not met (National Institute for Health and Care Excellence [NICE] 2015) or when experiencing frustration or other forms of distress. Behaviour that challenges can include self-injury or physical aggression. Such behaviour is most appropriately viewed as the product of the interaction between the individual's personal characteristics and their service setting (Allen 2008).

Current Service Provision

Guidance from NICE and others, suggest using proactive strategies to reduce the risk of challenging behaviour, adequate support for carers and using behaviour support plans to develop effective strategies for behaviours (NICE 2016; NICE 2015). Positive Behaviour Support (PBS) is an established, complex intervention, focusing on identification of challenging behaviour reinforcement and the development of alternatives to reactive strategies to reduce challenging behaviour (Hassiotis *et al.* 2014). PBS programmes are cost-effective and applicable for all severities of challenging behaviour, across institutional and community settings (LaVigna and Willis 2012). However, despite positive evidence for effectiveness, behavioural interventions are notoriously difficult to implement and sustain due to a failure to attend to all elements of PBS (Allen 2009). A trial in which multidisciplinary professionals from community intellectual disability services were trained to use PBS demonstrated that PBS was not more effective than treatment as usual, at least partly attributable to its

partial implementation (Hassiotis *et al.* 2018).

PBS does not necessarily eliminate challenging behaviour and incidents may continue to both arise from and impact on interactions and relationships between staff and service users. It has been argued that the quality of care delivered, and professional judgements, is dependent on professional intentionality of being attached and attuned to the particularities of the client (Reinders 2010). National Institute for Health and Care Excellence (NICE) guidance for challenging behaviour infers the importance of attunement:

Understanding learning disabilities and behaviour that challenges: ...the effect of the social and physical environment on learning disabilities and behaviour that challenges (and vice versa), including how staff and carer responses to the behaviour may maintain it (NICE 2015, pp.20).

However, the guidelines do not explicitly require the use of methods to develop staff attunement, despite recognition that this may feel unnatural or even aversive (Schuengel, Kef, Damen and Worm 2010). Although PBS is utilised in practice, it could be argued to lack sufficient acknowledgement of how important the nuances of interactions and the relationship between service user and staff are. Particularly in response to challenging behaviour. Currently few PBS plans consider attachment perspectives in-depth, like attunement or the relationship between staff and the individual they are supporting. Instead they retain focus on symptom reduction (Skelly 2016).

Relationships and Attunement

Relationships are protective for psychological health. Arguably, for individuals with ID, the importance of relationships and their potential role in relation to challenging behaviour is often disregarded within institutional care settings (Skelly 2016), despite evidence of the importance of bidirectional dynamics between staff and

clients in relation to challenging behaviour (Willems, Embregts, Hendriks & Bosman, 2016). The introduction of guidelines (British Psychological Society [BPS] 2017) for incorporating attachment theory into practice indicates a shift towards a more relational focus within care for people with intellectual disabilities.

Some research on intellectual disabilities and challenging behaviour has focused on attachment behaviours, i.e. behaviours that signal need, and the importance of caregivers being able to interpret and sensitively respond to such behaviours (De Schipper and Schuengel 2010). As care-giving staff can become the focus of attachment needs for individuals with ID (Schuengel *et al.* 2013), they need to be attuned to service users to ensure they notice cues with correct interpretations (Schuengel *et al.* 2010).

Attuning is closely related to having empathy and is an active process within a communication dyad, in which carers continuously attempt to see the world from the perspective of the person for whom they are caring, to truly understand the communication (Griffiths and Smith 2016). It is influenced by the physical setting, for example being in close physical proximity, looking at one another or shared interest in an object (Griffiths and Smith 2016). Attunement includes understanding an individual's arousal cycle and their triggers of increasing arousal (Shackleton 2016). Arguably, increased attunement between care givers and individuals with ID would enable staff to respond earlier and more sensitively to indicators of distress, to avoid increased arousal leading to behaviour that is challenging to manage. However, it is acknowledged that there is limited empirical evidence to support this.

For staff supporting individuals with ID, challenging behaviour can increase stress and decrease confidence due to the high emotional demand (Zijlmans *et al.* 2015). Self-efficacy refers to perceptions of one's skills in a particular domain (Cudr-

Mauroux 2011). Contextually, self-efficacy is an individual's perception of their ability to manage challenging behaviour (Howard, Rose & Levenson, 2009). There are mixed findings about self-efficacy, for example it has been shown to positively impact friendly behaviour of staff to clients but also, unexpectedly, to have a moderate impact on assertive control and hostile behaviour (Willems *et al.* 2016). It is acknowledged that retrospective accounts of staff indicate that self-efficacy can fluctuate and that there might be different forms of self-efficacy in situations of challenging behaviour, thought to be attributable to competing goals within the situation (Cudré-Mauroux 2011). However, several studies (e.g. Hastings and Brown 2002; Howard *et al.* 2009; Willems *et al.* 2016) measure the self-efficacy of staff in managing challenging behaviour when not in a specific situation of challenging behaviour with pertinent findings.

Reportedly, low levels of self-efficacy increase staff's vulnerability to negative emotional responses (Hastings and Brown 2002), which staff may wish to hide so as not to induce insecurity in the person they are caring for (Cudré-Mauroux 2011). This is likely to impact the attunement with the client. Self-efficacy also moderates the relationship between the level of challenging behaviour and emotional exhaustion in support staff (Howard *et al.* 2009), which again is likely to impact on attunement. Lower self-efficacy may also predict depersonalisation and equipping staff with the skills to feel competent could help support staff wellbeing and subsequently increase quality of care (Shead *et al.* 2016).

Empirical evidence shows that PBS training significantly increased staff self-efficacy in understanding and managing challenging behaviour (Stocks and Slater 2016). However, given limitations of PBS in terms of both implementation and it not necessarily attending closely to attunement, it is appropriate to consider other interventions that may increase self-efficacy of staff in relating to individuals they care

for. This reflects research developments that attend to the self-efficacy of parent carers to improve their sensitivity and responsivity to their children with intellectual disabilities (van Windergeren *et al.* 2018).

What is Discovery Awareness?

Discovery Awareness (DA) is one of several methods used to focus on relationships between support staff and individuals with ID who behave in ways that challenge. Developed in the Netherlands and adopted in some parts of the UK, Discovery Awareness (Heijkoop and Clegg 2012) is ‘a unique way of using video with a clinical team to help them develop the way they view a client, encouraging them to take the client’s point of view’ and understand the service user from a relational perspective (Heijkoop and Baker 2018).

A DA meeting, facilitated by a DA coach, focuses on an individual service user and is attended by their ‘staff’ (Heijkoop and Baker 2018) and / or clinical team (Heijkoop and Clegg 2012). This can include support workers and multidisciplinary professionals. They tend to last one and half to two hours, depending on the number of attendees. Between one and three DA meetings might be held about an individual. Ideally the same attendees would meet repeatedly. However, particularly within acute settings reliant on shift work, and often running on limited staff per shift but from a large overall team, it can be the case that multiple meetings with the same attendees are not possible.

Meetings begin with a clear description of the intention of the process, i.e. to focus on the personhood of the individual, and not only the behaviours of concern, to support participants to develop their understanding of, and relationship with, the individual. The process of the meeting is then discussed. A collective summary of the

behaviours of concern and how these impact both the DA participants and the individual themselves is written on a flip chart. Then, two video clips are watched, each about two and a half minutes; one of the service user within everyday activities and another showing them under slight demand. Then, participants share their first impressions in turn. The footage is then viewed a second time and participants stop the footage at a personally significant point and question what it means to them. Then the coach moves to a 'round up' within the meeting, in which each participant in turn is encouraged to look back over the whole of the DA meeting and reflect on what has stuck in their mind most before identifying an area of interest to take from the DA meeting explore in their work with the service user (Heijkoop and Baker 2018). Opportunities to develop self-reflection may be important given findings that higher staff self-reflection predicts lower assertive control and much lower hostile behaviour of staff towards clients (Willems *et al.* , 2016).

DA can be utilised within a PBS framework, as one method to develop staff attunement to the individual with ID. Thus, enabling the implementation of proactive strategies to reduce challenging behaviour, and recognition and appropriate response to early warning signs or incidents of challenging behaviour. It forms part of the Heijkoop method, based on the belief that staff and service user relationships can become stuck due to the pressures of the working environment, which can cloud their view of the service user and knowledge remains static (Webb 2017; Heijkoop 2017). To aid this, DA focuses on the client's 'personhood', rather than their difficult behaviours (Heijkoop and Baker 2018).

Proposed impact of DA

Support staff are encouraged to take the point of view of the service user and others

participating in the meeting. This increases participants' awareness of their own view of the service user and as a result, motivates staff to get to know them better (Heijkoop and Clegg 2012). DA encourages supporting staff to become more sensitive to the service user through increased attunement and safe relational opportunities, eliciting an internally motivated shift in staff's behaviour (Baker and Heijkoop 2017). Benefits of DA include reflection on behaviour and the service user's personhood, (Webb *et al.* 2017b) and increased awareness of behaviours that previously appeared meaningless (De Groef 2017). Reportedly, it is a useful tool for staff to take a 'step back' and view the service user holistically (Webb 2017). Uncertainty of the service user is acknowledged through subjective questioning of personal interpretations (Webb *et al.* 2017a), potentially from an empathic stance (Webb *et al.* in press.)

With the relational understanding and exploration DA aims to provide support staff, it is plausible to suggest a focus on attuning to the service user would lead support staff to feel better able to provide safe relational opportunities for service users, thus leading to an increase in self-efficacy.

Whilst there have been qualitative studies of the experience of DA from the perspective of staff (Webb 2017; De Groef 2017), DA has yet to be formally evaluated regarding the impact on those supporting individuals with ID.

The purpose of the present study is to evaluate DA within both inpatient and community settings with three specific foci:

- 1) The effect of DA on staff self-efficacy
- 2) Whether staff perceive there to be helpful or hindering aspects of DA meetings and, if so, what these are.
- 3) Whether attending a DA meeting leads to any changes for staff.

Method

Design

A two phase, sequential explanatory mixed-method design was used. Phase one involved measures taken immediately pre- and post- attendance at a DA meeting, and phase two involved follow up interviews.

Participants and setting

Participant recruitment utilised opportunity sampling to recruit individuals attending DA meetings facilitated by one of three DA coaches trained by Jacques Heijkoop. During the period of the study, anybody invited to attend a DA meeting was given study details and could opt in via a consent form. Seventeen DA meetings were initially booked. Seven went ahead; three in the community and four within an inpatient setting. Others were cancelled due to limited availability of staff to attend. Forty members of Multidisciplinary Teams (MDT) in the East Midlands, UK, took part in phase one; 21 community staff and 19 inpatient staff. Participants varied in professional roles including: doctors, speech and language therapists, occupational therapists, nurses, managers, support workers, healthcare assistants and social workers. The number of participants in each DA meeting varied from 2 to 11. One participant attended two meetings, two participants attended three meetings each, and the remainder of participants attended just one meeting each.

Everybody who participated in phase one was invited at the end of the DA meeting to opt in to phase two and be interviewed. Twenty-three participants opted in and were approached for interview; eight responded and six completed an interview, as two did not respond to contact to arrange an interview. Data collection was completed by the

first author.

Phase 1

Measures

Challenging Behaviour Self-Efficacy Scale (CBSE) (Hastings and Brown 2002). This is a self-report 5-item measure of self-efficacy using rating scales from one to seven, regarding participants' views on responding to the challenging behaviour of those they care for. An example question includes *'To what extent do you feel that the way you deal with the challenging behaviours of the patients with intellectual disability you care for has a positive effect?'* (Cronbach's alpha pre- = .763, post- = .763).

Helpful Aspects of Therapy Scale (HAT) (Llewelyn *et al.* 1988). The HAT is a 7-item questionnaire specific to events in therapy that participants found helpful or hindering. Given one aim was to investigate the process of DA in terms of aspects of the meeting that participants found to be helpful or hindering, and the absence of a DA-specific tool to achieve this, and the HAT was adapted for DA (AHAT; appendix, A). It is acknowledged that no psychometric investigations were carried out to determine the appropriateness of the adaptation of this psychotherapy scale for the purposes of this study. The quantitative scores were used as an indication of participants' interpretation of the degree of helpful or hindering aspects of the meeting, rather than representing any 'truth'. Three items are quantitative measures involving rating scales ranging from one to nine to assess the extent events were helpful, for example *'please rate how helpful this event was'*. Four items are qualitative questions regarding descriptions and timings of events, for example *'please describe the event briefly'*.

Procedure

Ethical approval was obtained from Nottingham Trent University School Research Ethics Committee and the study was registered as a service evaluation project with Nottinghamshire Healthcare NHS Trust. At baseline, participants completed the CBSE. The DA meeting then took place and immediately after, participants completed the same CBSE measure and the AHAT.

Data Analysis

Quantitative statistical analysis was performed through IBM SPSS Statistics version 22. A Wilcoxon test determined whether there was a difference between pre- and post- self-efficacy scores; p-values <0.05 were considered statistically significant. Descriptive statistics were also calculated for AHAT quantitative data.

Phase 2

Measures

Change Interview (Elliott 2008). An adapted version of the Change Interview was used (appendix, B.); a 10 item semi-structured interview specific to changes participants identified following DA. Seven items are open-ended, for example '*what personal strengths do you think have helped you make use of DA?*'. Three items are closed-ended rating scales, ranging from one to five, for example '*for each change, please rate how much you expected it vs, were surprised by it*'.

Procedure

Participants opted in to phase two by providing contact details on the consent forms. Those who opted in were approached to take part via email. Audio recorded interviews

took place on Trust premises, and were up to 58:18 minutes long. Unfortunately, in one interview the digital recording device cut out at 13:42 minutes, limiting the data that could be transcribed from that interview. To protect confidentiality, the six participants in phase two were given pseudonyms. These reflect ethnicity, with one exception, to preserve anonymity.

Data Analysis

A critical realist position was held, which attends to how individuals make meaning in their experiences and the influence of the broader social context on those meanings (Braun and Clarke 2006). Interviews were anonymised and transcribed verbatim by the researcher. Interview data was analysed in accordance with thematic analysis (Braun and Clarke 2006): familiarisation with the data, generation of initial codes, search for themes, reviewing themes, defining of themes and reporting findings. The authors developed the themes in collaboration and resolved any discrepancies through discussion. Qualitative data from the AHAT was also incorporated into the thematic analysis of interview transcripts. Analysis was both inductive and deductive: analysis remained open to new findings but transcripts were read with consideration of the impact of DA on self-efficacy. Themes were created at a semantic level whereby they were identified through surface meaning of the data.

Findings

Quantitative findings

Phase 1

Incomplete data sets were discarded meaning 32 out of the 40 participants are included in quantitative data analysis. At baseline, self-efficacy ($M = 23.109$, $SD =$

5.038) was lower than post- DA meeting (M = 24.063, SD = 4.977) resulting in a mean increase of 0.953 per participant. A Wilcoxon test revealed this to be not statistically significant, $Z = - 1.15$, $p = 0.025$.

Descriptive statistics for the AHAT revealed participants found events during the DA ‘helpful’ (M = 8.218, SD = 0.750). Thirty-two participants, on average, rated helpful events as ‘greatly helpful’ (M = 8.109, SD = 0.644). Four participants identified a hindering event and ratings were between ‘slightly’ and ‘moderately hindering’ (M = 3.500, SD = 0.577).

Phase 2

Change Interviews revealed 16 changes across all six participants. Participants varied in whether the changes were expected or not (figure, 1). However, on average, changes were deemed unlikely to occur without DA (figure, 2) and very important (figure, 3). Table 1 lists the changes identified and descriptive statistics for the quantitative interview data, by participant.

[Table 1 near here]

[Figures 1, 2 and 3 here]

Qualitative Findings

Phase 1 and 2

Thematic analysis of the change interview data, with integration of the AHAT data, (evidenced via participant number), elicited three main themes: The power of the process, Impact on interaction and DA is unique and valuable. Table 2 presents a summary of the themes identified, which will be discussed as follows.

[Table 2 near here]

The power of the process

'Safe space': A structure to facilitate change

Participants consistently described DA as a structured process that is '*organised*' (Maria), '*guided*' (Maria) and '*eye-opening*' (Paul). The '*staged process*' (Ann) means the '*penny drops slowly*' (Ann) regarding participants' realisation of changes to make to improve interactions with the service user. This appears to be further facilitated by the dynamics of watching the videos twice as it '*really gives you the time to notice those things*' (Dan) and '*realise other things*' (Paul). One participant felt this aspect was '*quite illuminating*' (Ann), because the structure creates an opportunity to re-watch the service user which '*you don't normally get in an interaction*' (Ann). Half of the participants felt the structure prepared them well for further change exploration in their work with the service user: '*it's very personalised as well ... it's up to you to do whatever you want with the DA*' (Paul).

The DA meeting appeared to have '*a theory underpinning it*' (Ann) encouraging confidence in DA: '*you knew it had been planned and thought out and had a purpose, but that kind of helped me have confidence in it*' (Ann). This seemed to be helpful in creating equality between DA participants, '*having a family member's opinion is just as important as having like a consultant psychiatrist*' (Dan). Despite one participant who found '*you're not sure if you're saying right or wrong*' (Rachel) regarding sharing impressions, the majority felt their opinion was met with positivity from others, making participants feel their '*opinion is valued*' (Dan), and they are safe to comment:

it was equal in terms of the opportunity to comment and give your views as it went round the table, it just meant it was more erm organised I suppose and fair and I could listen to people ... you felt safe saying what you noticed (Ann)

However, it appears the structure did not incorporate everything necessary, which may impact the level of change seen from the DA. For example, Karen felt '*it can be a bit long-winded*' and '*we need to have a little bit of positive...actually structured in*'. Also reflected by Dan who felt the DA lacked '*a little bit more about ... who the service user is*'. Despite DA opening with a description of behaviour which concerns staff, inclusion of more positive content may increase participant engagement. However, seemingly DA meetings differ regardless of the structure: '*sometimes it can be a very clinical discussion, sometimes people bounce ideas off each other*' (Paul), impacting what may be included.

Making use of the content

Participants placed importance on the content of both the meetings and videos used. Half of participants found it helpful that the videos showed '*two videos over different points in time*' (Maria) as they could see changes within the service user. However, one participant felt two videos '*doesn't portray the whole picture*' (Paul). This was highlighted as potentially problematic in relation to one individual who cycled between three very distinct presentations within short periods of time and participants thought it would be useful to view examples of all three. Half of the participants effectively used the video content to illustrate their point: '*I could literally be like as them to stop and say this is what I've been talking about*' (Dan), enabling participants to share their understanding of the individual.

The content of others' impressions also appeared helpful as participants were made aware of aspects of the service user they had yet to notice:

pooling the resources of eight other people ... having like eight pairs of eyes over one just means that I've been able to see things that perhaps ... my eyes and my perceptions wouldn't have allowed me to pick up (Dan)

Thus, the content improved through involvement of all the staff team: *'everyone needs to be included, from HCA to the doctor, because everybody has a different relationship with that person'* (Karen). Seemingly, participants used different experiences of others to inform their own interactions with the service user. The AHAT data suggested this was helpful as participants felt it *'highlighted aspects about the patient I hadn't really thought of before'* (Participant 39). However, a mix of specialties also appeared unhelpful as *'experienced people might have ... their own agenda or things they want to talk about which is not helpful at all'* (Paul). Making use of the meeting may be easier if participants maintained focus on purely the content within the DA.

Participants also found it helpful if they had prior knowledge and experience of DA as they *'knew what to expect and what I was kind of wanting to get out of it and benefits I've had before'* (Maria). However, one participant still made use of DA despite having no prior experience: *'as the process goes forwards, you learn so much'* (Ann), suggesting making use of the content is personalised. One participant felt *'as long as you have previous interactions with the service user like you can definitely contribute something'* (Paul) however Dan suggested his *'deep understanding'* of the service user prior to the meeting may have meant his thinking was *'less flexible'*.

'Lightbulb moment': Reflective space to promote learning

All participants acknowledged that the DA encouraged reflection on the content of the

meeting, facilitated by the structure of DA. The meeting created a '*space to reflect*' (Ann) and participants were '*prompted to take a step back*' (Dan), which they felt would not ordinarily occur outside of DA. This meant participants saw the service user '*in a different light*' (Rachel), seemingly encouraging them to adopt an alternative perspective. However, Karen felt the DA meeting '*ended quite low*' and subsequently '*left with a bit of a heavy heart*'. Demonstrating how reflection within the meeting appeared to generate important but difficult realisations about the service user.

Two participants felt the DA facilitated their natural tendency to reflect:

I think being a reflective person allows you to take those things on board a little bit more and also to kind of question or analyse why you didn't notice them yourself
(Dan)

This appeared to encourage reflection beyond the end of the meeting, subsequently, leading to additional questioning of their actions resulting in learning about themselves. This seemed an unexpected yet powerful and helpful outcome of the meeting: '*it's clever isn't it because you think it's going to be discovery and awareness of the individual, but it isn't, it's about yourself*' (Ann). Reflection on the content of DA appeared to elicit personal realisations for participants regarding their approach to the service user, meaning participants felt as though they had '*gained something*' (Paul) and referred to DA as a '*lesson*' (Dan).

Participants also appeared to learn about others in the meeting through peer comparison. This was deemed useful when staff from new placements took part as participants could see '*quite a positive response from them and that kind of reassured my sort of views on how they were*' (Maria). Additionally, one participant was surprised to realise others may not have the same knowledge of the service user: '*people still hadn't got their head round this*' (Dan), but this may be helpful as it uncovers

inconsistencies within supporting staff's knowledge. Further, a difference of opinion also appeared to be acknowledged: *'you may not all be singing from the exact same hymn sheet but at least you're like in the same chapter'* (Dan). Importantly, learning and reflection on other perspectives within the meeting seems to create a collective understanding of the service user.

Impact on Interaction

Following a DA meeting, participants appeared to notice their interactions attuning to the service user. A third expressed that DA established their awareness of the service user's communicative needs: *'I already knew some of what wound her up...it just like crystallised it a bit more'* (Ann). Whilst this may not provide tangible goals to work towards, being able to confirm their actions through observations made in the DA and *'reaffirming what I'd noticed'* (Rachel) is likely to increase or maintain confidence in interacting with the service user, strengthening their relationship.

The DA meeting also appeared to encourage realisation of limitations in previous interactions with the service user: *'I felt like I'd noticed enough already ... I probably wouldn't have known to do it more'* (Dan), providing a direct focus for future interactions. Further, one participant felt the implementation of changes to interactions had positive outcomes: *'I sat next to her rather than in front of her ... I did actually notice that she spoke more through doing that'* (Maria). Small changes in communication with the service user generated change in the overall interaction. Despite DA being person-specific, four participants deemed these changes to be *'transferrable into other situations'* (Ann) of learning and their work with other service users.

By comparing previous interaction tendencies with their new understanding, a third of participants felt they had become stuck with a consistent way of interacting with the service user:

you go into automatic pilot mode a lot of the time, and you don't necessarily actually just take a moment to think about that person and how that person does things (Rachel)

These participants recognised they had become comfortable with a way of interacting, and due to the nature of the care environment, get little opportunity to question it: *'we're doing it every day, it's our bread and butter'* (Ann). DA appeared to create a situation in which individuals considered alternative methods of communication, thus increasing their attunement. The AHAT data showed that several participants felt the DA gave *'strategies to help tackle the challenging behaviours'* (Participant 14), however overall outcomes focused largely on developing interaction and attunement with the service user.

'It feels radically different': DA is unique and valuable

Participants consistently expressed positive feelings towards being in a DA meeting. It was portrayed as a *'mind-blowing strategy'* (Ann) that was *'something new'* (Paul) for half of the participants, making the experience unexpected. A salient aspect was the separation of DA from other meetings as something *'insightful'* (Rachel), with a lasting impact beyond the meeting, giving DA a unique quality which participants appear to value:

it just feels really rich I think ... there's so much more in there than there is in other meetings, so yeah, it's almost like the DA is what is missing from other meetings, like processing feelings (Dan)

The exclusivity of DA in comparison to other meetings is largely due to staff remaining '*person-centred*' (Karen) and having '*space to examine somebody ... differently than you would in day to day practice*' (Maria). This meant participants noticed things they '*wouldn't have necessarily pick up before the sessions*' (Rachel), suggesting unique outcomes also.

Seemingly, the value of DA increased with having a range of people in the meeting; '*the greater the variety of people attending, I think that's where you get a better kind of outcome*' (Maria). When questioned about helpful aspects of DA, the AHAT data consistently identified '*hearing other people's views*' (Participant 5) as this allowed participants to '*see the things others had pointed out, more clearly*' (Participant 10). One participant felt changes occurred '*when *staff nurse* said you know he's not as well as he was four months ago*' (Karen), highlighting the value of having a variety of experiences. This was also emphasised through frustration that '*people don't know what it is so then you potentially don't get people turn up*' (Dan). It appeared important to participants for others to know about DA: '*once you've been to one you're then kind of encouraging other people to go because you know what it's like*' (Ann). Potentially, this could be because they want others to get the same value out of the meeting, but also to enrich the meetings themselves. Frustration was also shown at the time available for DA as participants '*have to spare some time for it, to attend these sessions*' (Paul), suggesting DA is something staff prioritise.

Discussion

This study investigated how and whether DA was helpful and increased self-efficacy for staff supporting individuals with ID and challenging behaviour. The phase one quantitative analysis revealed no significant difference between pre- and post- DA

measures of self-efficacy. While it was expected that DA would increase self-efficacy of staff in relation to challenging behaviour, it is possible that this reflects limitations of the study in measuring self-efficacy immediately after a DA meeting, rather than DA not impacting on self-efficacy at all. Given the importance of the bidirectional relationships between staff and clients (Willems *et al.* , 2016) and the potential for self-efficacy to fluctuate in different situations (Cudré-Mauroux 2011), it is possible that staff may have difficulties perceiving any change before having opportunities to implement anything they took from DA and develop their skills in responding to challenging behaviour, which may in turn further develop self-efficacy (Howard *et al.*, 2009).

Quantitative analysis of the AHAT data suggests events during the DA were helpful for staff, further confirmed by aspects of the thematic analysis in phase two. Themes identified are in accordance with a former study investigating staff experiences of DA which include themes of reflection, perceived misinterpretation of the service user and DA as a useful tool for staff (Webb 2017).

Participants focused on improvements in interactions with the service user, in line with the expectations of DA which emphasises focus on personhood rather than challenging behaviour reduction (Heijkoop and Clegg 2012). DA also aims to motivate participants to consider alternative perspectives and re-establish their relationship with the service user (Baker and Heijkoop 2017). This was seen through the conceptualisation of DA as a structured process, which encouraged honesty and non-judgemental attitude; integral to the helpfulness of DA as this is difficult to conjure up by other means. In support of these findings, promotion of respect and a non-judgemental atmosphere within DA meetings disregard the hierarchical staffing structure (Webb 2017).

A largely helpful aspect of DA was reflection, both within and beyond meetings. Willems *et al.* (2016) demonstrated that staff self-reflection has a significant impact on staff interpersonal behaviour. DA appeared to enhance self-reflection. Interestingly, DA does not aim to teach staff how to interact with service users; rather it encourages staff to take an alternative perspective (Heijkoop and Baker 2018), which appeared to generate an indirect method of personalised realisation. Heijkoop (2017) argues that a shift in one's point of view takes place, which explains participants' consistent expression of DA as a 'lesson'. It is worthy of note that some participants in interview focused more on what they had learned about themselves than what they had learned about the personhood of the service user. This perhaps suggests that DA participants may experience learning about themselves to be the key mechanism of change within DA, despite its intended focus on learning about the service user's personhood. While the DA session uses a structured approach, the discussions are reliant on the people attending and the skill of the coach facilitating the meeting.

Helpfulness of DA, on an individual level, was both facilitated and limited by the discussion and application of service user knowledge prior to the meeting. Already having knowledge of the service user was useful, but too much focus on previous knowledge limited the process of DA moving forward and potentially how much participants gained from the meeting. However, collectively, the group may benefit as this appears to inform consideration of different perspectives. Previous knowledge of actions within the relationship dyad facilitates attuning (Griffiths and Smith 2016), suggesting reflection on previous experience helped staff from an attunement perspective.

The distinction between DA and other meetings and opportunities was congruent with previous findings which present DA as an opportunity to 'step back'

from everyday work duties to question their actions (Webb 2017). Considering the negative emotional impact of working within this context (Zijlmans *et al.* 2015), it is important for staff to have a safe space to explore their relationship with the service user. DA also provided staff with a tangible goal to work towards compared to previous uncertainty of how to develop their interaction with the service user. This uncertainty arises from a focus on difficulties displayed by the service user and the work pressures supporting staff experience (Heijkoop 2017). The ability of participants to become aware of being 'stuck' in interactions is in accordance with current professional guidance which includes an awareness of staff behavioural patterns that may maintain difficult behaviours (BPS 2017; NICE 2015). This presents DA as professionally helpful as well as personally helpful for staff, demonstrating its importance for staff supporting individuals with ID and challenging behaviour.

Study Limitations

This was an applied research study and had a number of limitations. While the use of the AHAT attempted to elicit information about helpful or hindering aspects of the DA meetings, some of the responses were very limited, e.g. one participant stated that the meeting gave them 'strategies to tackle challenging behaviour' but no further information about what these were. It would have been helpful to follow up AHAT data within interviews, but not all participants opted in for interviews. It is acknowledged that participants completing the AHAT and CBES immediately after the meeting could have influenced the result through a halo effect (Greenberg, Bremner, Carr, & Priebe, 2018) or socially desirable answers. Completing the measures after the meeting was an attempt to minimise attrition.

Attrition during interview recruitment limited qualitative data. It may be that the relatively few staff who participated in interviews were those who found the process most helpful and that the remaining 34 participants did not experience change in their understanding of or interactions with the service user. Equally, it could be that participating in research was not a priority for some staff, even if they found DA helpful. This is also true of the DA meetings; many were postponed or cancelled due to availability of attendees and service users.

Whilst this study offers insight into whether support staff find DA helpful, no direct observations of staff-service user interaction were obtained pre- and post- DA.

Therefore, direct conclusions regarding whether attunement increased or whether take away thoughts from the DA were implemented, cannot be determined. Additionally, the number of DA meetings participants previously participated in was not measured. This may have influenced participants' baseline self-efficacy level and how helpful they found DA. Although not an aim of the study, it may be interesting to investigate whether there are differences between different professionals in relation to their levels of self-efficacy and perceptions of DA. It was not possible to explore these differences due to the relatively small number of participants and uneven distribution between professions, but could be investigated in future research.

Recommendations

Future research should measure self-efficacy at follow-up points after the session, seek to consider the use of an attunement measure, and conduct observations of the interaction between staff and service user pre- and post- DA. The level of experience of staff, both working in the setting and with the service user could also be considered,

requiring a longitudinal study design. This design would also allow determination of whether multiple DA meetings for the same service user has a larger impact than one DA meeting. Potentially, there is more opportunity to see a significant difference to self-efficacy as multiple DA meetings would maintain motivation to explore interactions with the service user.

Conclusion

This study demonstrates DA meetings are helpful for staff in developing a relational perspective, through which they perceive improvements in their interactions with and attunement to service users. Although self-efficacy is not immediately influenced following DA, findings reinforce the importance of relational approaches in supporting staff working with adults with ID and challenging behaviour. The paper outlines implications which ought to be considered for future research on DA. The limited evidence base for DA warrants further exploration into this topic to aid understanding of the impact of DA for staff and whether any impact is sustained.

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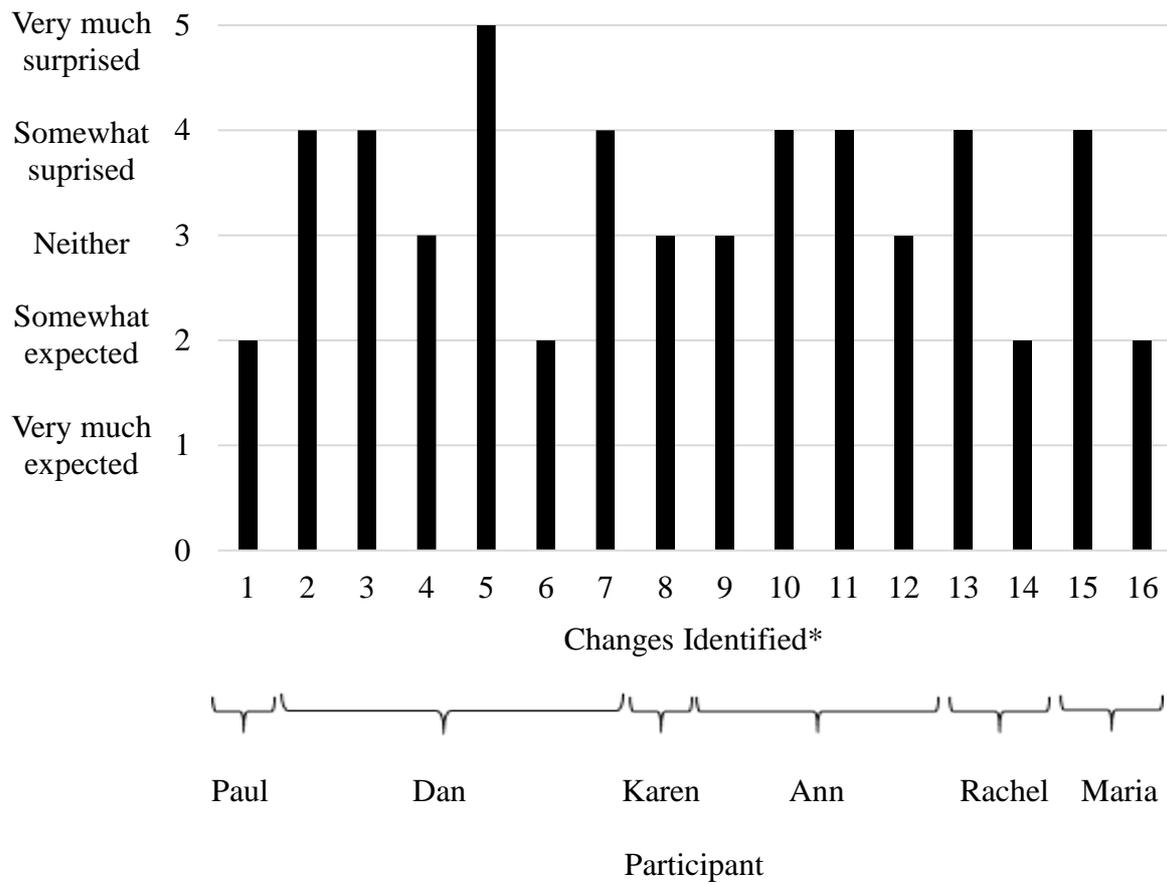
Table 1. Change Interview Quantitative Data (N = 6).

Participant Pseudonym	CHANGE*	How much change was expected	Likelihood of change without DA	Importance of change
Paul	1. <i>'Change in interaction with service user'</i>	2 (somewhat expected)	2 (somewhat unlikely)	4 (very)
Dan	2. <i>'Slowing down talking (with service user)'</i>	4 (somewhat surprised)	2 (somewhat unlikely)	5 (extremely)
	3. <i>'Allowing (service user) time for processing'</i>	4 (somewhat surprised)	2 (somewhat unlikely)	4 (very)
	4. <i>'Checking the service user's understanding'</i>	3 (neither expected or surprised)	4 (somewhat likely)	4 (very)
	5. <i>'Being conscious of physical movements'</i>	5 (very much surprised)	1 (very unlikely)	5 (extremely)
	6. <i>'Being mindful of the way the service user answers questions'</i>	2 (somewhat expected)	4 (somewhat likely)	3 (moderately)
	7. <i>'Letting others know of service user's facial expressions'</i>	4 (somewhat surprised)	1 (very unlikely)	4 (very)
	Karen	8. <i>'Being mindful that service user isn't as well as first thought'</i>	4 (somewhat surprised)	2 (somewhat unlikely)
Ann	9. <i>'More mindful of what winds service user up'</i>	3 (neither expected or surprised)	4 (somewhat likely)	4 (very)
	10. <i>'More confident in my approach'</i>	4 (somewhat surprised)	1 (very unlikely)	5 (extremely)
	11. <i>'More grounded in why I'm doing what I'm doing'</i>	4 (somewhat surprised)	1 (very unlikely)	5 (extremely)

	12. <i>'Interaction is now less forced'</i>	3 (neither expected or surprised)	4 (somewhat likely)	4 (very)
Rachel	13. <i>'Understand the way service user talks/expresses herself'</i>	4 (somewhat surprised)	3 (neither likely nor unlikely)	4 (very)
	14. <i>'Breaking down what I'm saying to service user'</i>	2(somewhat expected)	3 (neither likely nor unlikely)	4 (very)
Maria	15. <i>'Sitting side-by-side with service user rather than opposite'</i>	4 (somewhat surprised)	1 (very unlikely)	4 (very)
	16. <i>'Less clinical focused discussions'</i>	2 (somewhat expected)	3 (neither likely nor unlikely)	4 (very)

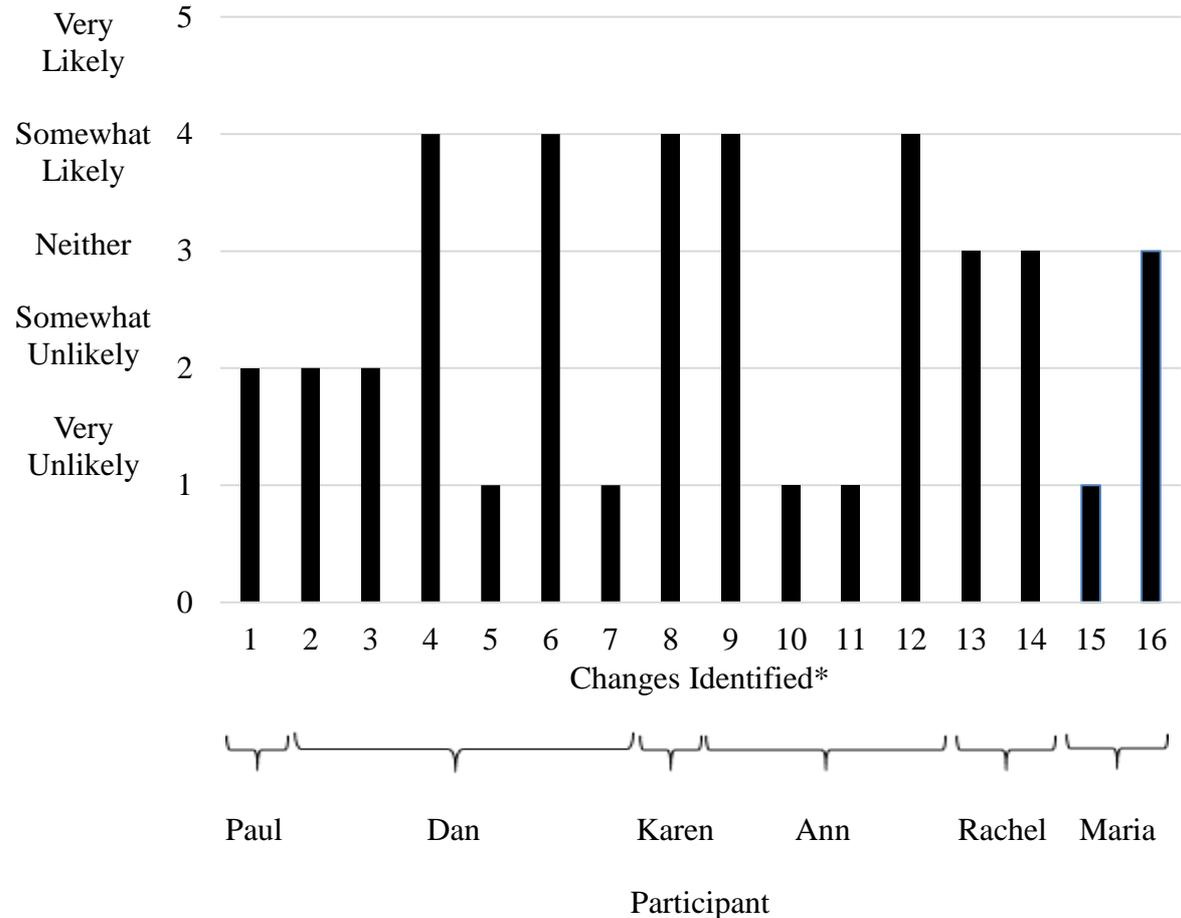
* Numbers 1 – 16 indicates change represented in Figures 1 – 3.

Figure, 1. How much change was expected



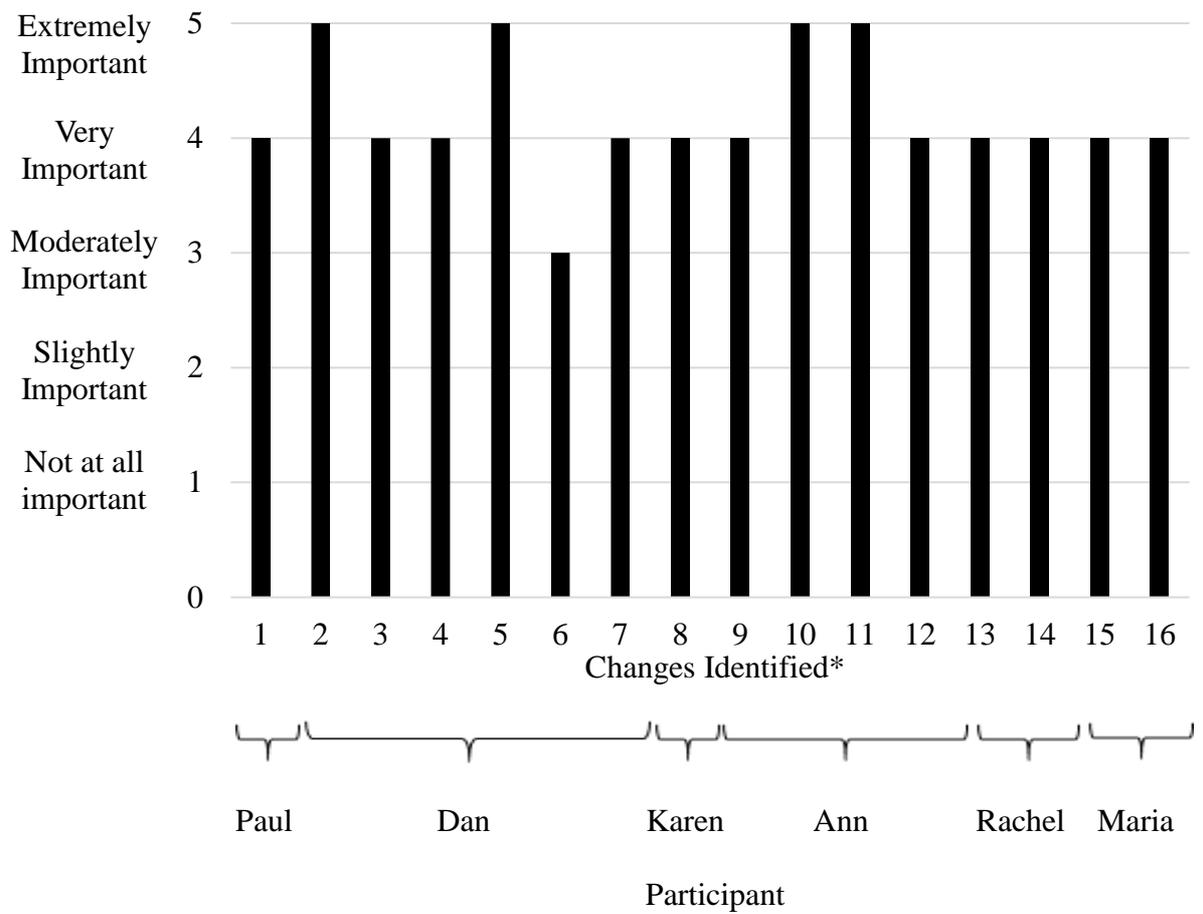
* 1-16 corresponds to changes listed in Table 1.

Figure, 2. Likelihood of change without DA



* 1-16 corresponds to changes listed in Table 1.

Figure, 3. Importance of Change



* 1-16 corresponds to changes listed in Table 1.

Table 2. Themes and sub-themes of helpful aspects of Discovery Awareness.

Themes	Sub-themes	Example Quotations
The power of the process	'Safe space': A structure to facilitate change	<i>'it had been planned and thought out and had a purpose'</i> – Ann
	Making use of the content	<i>'As the process goes forward you learn so much'</i> – Ann <i>'I'll often think back to that lesson'</i> – Dan
	'Lightbulb moment': Reflective space to promote learning	
Impact on interaction		<i>'I actually understand her a bit more now'</i> – Rachel
'It feels radically different': DA is unique and valuable		<i>'there's so much more in there than there is in other meetings'</i> – Dan <i>'I really value DAs'</i> – Karen

5. About how long did the event last?

6. Did anything else particularly **helpful** happen during this session?

YES NO

(a. If yes, please rate how **helpful** this event was:

Slightly 6 Moderately 7 Greatly 8 Extremely 9

(b. Please describe the event briefly:

7. Did anything happen during the session which might have been **hindering**?

YES NO

(a. If yes, please rate how **hindering** the event was:

Slightly 4 Moderate 3 Greatly 2 Extremely 1

(b. Please describe this event briefly:

Appendix, B. *Adapted Change Interview Schedule*

Change Interview Schedule
(Version 5; 02/2008)

Participant ID _____ Date _____ Session _____

1. General Questions [5 min].

**What was Discovery Awareness like for you?
How did it feel to be in a DA session?**

2. Changes [10 min].

2a. What changes, if any, have you noticed in your relationship and work with the client since taking part in Discovery Awareness? (*Interviewer: Reflect back change to client and write down brief versions of changes for later. Can use these follow-ups if needed: Are you doing/feeling/thinking differently from the way you did before? What specific ideas, if any, have you gotten from DA so far, including ideas about yourself or other people? Have any changes been brought to your attention by other people?)*

2b. Has anything changed for the worse for you since you took part in DA?

2c. Is there anything that you wanted to change that hasn't since taking part in DA?

3. Change Ratings [10 min].

5 point rating scales (Go through each change and rate it on the following three scales:)

3a. For each change, please rate how much you expected it vs. were surprised by it? (Use this rating scale:)

- (1) Very much expected it
- (2) Somewhat expected it
- (3) Neither expected nor surprised by the change
- (4) Somewhat surprised by it
- (5) Very much surprised by it

3b. For each change, please rate how likely you think it would have been if you hadn't been part of a DA session? (Use this rating scale:)

- (1) Very unlikely without therapy (clearly would not have happened)
- (2) Somewhat unlikely without therapy (probably would not have happened)
- (3) Neither likely nor unlikely (no way of telling)
- (4) Somewhat likely without therapy (probably would have happened)
- (5) Very likely without therapy (clearly would have happened anyway)

3c. How important or significant to you personally or professionally do you consider this change to be? (Use this rating scale:)

- (1) Not at all important
- (2) Slightly important

- (3) Moderately important
- (4) Very important
- (5) Extremely important

4. *Attributions [5 min].*

In general, what do you attribute any changes to, i.e. why do you think they have happened? (Including things both outside of DA and in DA)

5. *Resources [5 min].*

5a. What personal strengths do you think have helped you make use of DA? (what you're good at, personal qualities)

5b. What things in your current life or work situation have helped you make use of DA in your relationship with the client?

6. *Limitations [5 min].*

6a. What things about you do you think have made it harder for you to make use of DA in your relationship with the client?

6b. What things in your life or work situation have made it harder for you to use DA to deal with your problems at work?

7. *Helpful aspects [10 min].*

Can you sum up what have been helpful things about DA? Please give examples. (For example, general aspects, specific events)

8. *Problematic aspects [5 min].*

8a. What kinds of things about DA have been hindering, unhelpful, negative or disappointing for you? (For example, general aspects, specific events)

8b. Were there things in DA which were difficult or painful but still OK or perhaps helpful? What were they?

8c. Was anything missing from DA? (What would make/have made DA more effective or helpful?)

9. *The Evaluation [10 min].*

9a. What has it been like to be involved in this evaluation? (Initial screening, research interviews, completing questionnaires etc.)

9b. Has anything been helpful about the evaluation? Please give examples.

9c. Has anything about the evaluation have been hindering, unhelpful, negative or have got in the way of DA? Please give examples.

10. *Suggestions [5 min].* Do you have any suggestions for us, regarding the evaluation or DA? Do you have anything else that you want to tell me?

