

‘Understanding’ as a practical issue in sexual health education for people with intellectual disabilities: a study using two qualitative methods

Finlay, W. M. L.; Rohleder, Poul; Taylor, Natalie; Culfear, Hollie
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Abstract

Objective

Sexual health education is important in addressing the health and social inequalities faced by people with intellectual disabilities. However, provision of health-related advice and education to people with various types and degrees of linguistic and learning difficulties involves addressing complex issues of language and comprehension. This paper reports an exploratory study using two qualitative methods to examine the delivery of sexual health education to people with intellectual disabilities.

Methods

Four video-recordings of sexual health education sessions were collected. Conversation analysis was used to examine in detail how such education occurs as a series of interactions between educators and learners. Interviews with four educators were carried out and analyzed using thematic analysis.

Results

The analysis shows how educators anticipate problems of comprehension and how they respond when there is evidence that a person does not understand the activity or the educational message. This occurs particularly when verbal prompts involve long sentences and abstract concepts. We show a characteristic pattern which arises in these situations, in which both educator and learner jointly produce a superficially correct response.

Conclusions

While interviews allows us some insight into contextual issues, strategy, and aspects of sexual health education which occur outside of the actual teaching sessions, analysis of actual interactions can show us patterns which occur in interactions between educators and learners when comprehension is in question. Addressing how sexual health education is delivered in practice and in detail provides valuable lessons about how such education can be improved.

Introduction

The World Health Organisation (WHO, 2006) has developed a broad definition of sexual health which emphasises the importance of human rights and wellbeing. It defines sexual health as requiring a “positive and respectful approach to sexuality and sexual relationships” (pg 5). They go on to state that in order for “sexual health to be attained and maintained, the sexual rights of *all* persons must be respected, protected and fulfilled.” (pg. 5 emphasis in italics added). Sexual rights are particularly important for people with intellectual disabilities who face various attitudinal and structural barriers to realizing sexual health, including access to sexual health education (SHE). The provision of effective and accessible SHE is therefore an issue with which health psychologists should be concerned. This paper illustrates how conversation analysis (CA) of recordings of SHE group sessions can be combined with interviews to illuminate practical issues in the delivery of SHE to young people with intellectual disabilities.

People with intellectual disabilities face a range of obstacles in leading satisfying sexual lives. Shakespeare (2000) notes that sexuality is a site of oppression for people with disabilities in general, and historically the sexuality of people with intellectual disabilities has been constructed as potentially dangerous (Craft, 1987) or as absent (Milligan & Neufeldt, 2001). People in this group may be left with the sense that relationships and sex are not meant for them (e.g. Kelly, Crowley, & Hamilton, 2009) and may hold negative views about sex (Bernert & Ogletree, 2012). People with intellectual disabilities are at risk of maltreatment, including sexual abuse (Horner-Johnson & Drum, 2006; see also Murphy, 2007), further highlighting the need to attend to matters of sexual health and protection. However, research shows that family members, teachers and paid supporters often lack confidence or feel uncomfortable in addressing sexual issues (Evans et al, 2009; Pownall et al, 2012). As a result many young people with intellectual disabilities are excluded from sex education (Rohleder & Swartz, 2012). Furthermore, young people with varying linguistic and cognitive abilities often experience a range of difficulties in fully understanding issues of sexual health and sexuality. Studies have shown, for example, that

adults often lack knowledge of areas such as sexually transmitted infections, pregnancy, contraception and the law (e.g. Grieve, McLaren & Lyndsay, 2007; Jahoda & Pownall, 2013).

Sexual health education in the UK is provided in a variety of ways. Schools are supposed to include it in the curriculum (e.g. Department for Education and Employment, 2000). When young people leave school, it might be provided by colleges, voluntary organisations, youth services, sexual health/family planning services or community intellectual disability teams. However, the quantity and quality of provision is inconsistent. For example, a study by Lafferty et al (2012) into the difficulties in providing SHE to this group in Northern Ireland found that families, professionals and supporters all reported a need for SHE, but reported a lack of consistent provision. They identified four main barriers: cultural prohibitions; concerns about vulnerability; a lack of appropriate educational resources; and a lack of training.

The standard approach to evaluating the effectiveness of SHE is to administer measures of understanding before and after the course (e.g. Dukes & McGuire, 2009; McDermott et al, 1999). A more innovative approach was adopted by Lawrence and Swain (1993) in which audio-recordings of educational sessions were taken during the course. Evidence was collected of students using relevant vocabulary when answering questions, and of being able to clarify and explain their answers when requested. Although these studies show SHE can be effective, a recent review indicated that more detailed research into sex education for people with intellectual disabilities is needed (Grieve, McLaren & Lindsay, 2007). These authors noted certain problems, particularly for those with moderate or severe intellectual disabilities. These include the use of role plays that were too complex, activities which required abstract thinking, pictures which were unclear and/or contained too many distracting details, and high levels of reliance on complex verbal content.

Many people with intellectual disabilities experience difficulties in understanding language and acquiring knowledge (Sigafos, O'Reilly & Green, 2007). This may include memory issues, difficulties understanding abstract concepts, and problems in understanding long or complex

sentences. This presents a challenge for effective SHE, since topics often require background knowledge (e.g. names of body parts) which may be uncertain in some learners with intellectual disabilities. Learners also need to grasp a range of abstract concepts such as trust, consent, and privacy. Issues such as conception, contraception and sexually-transmitted diseases involve a range of technical terms and a series of complex and linked facts. Choice and consent requires understanding that other people have different perceptions and preferences than oneself. Finally, learning often takes place out of context, and relies on people applying the lessons learned in one place (e.g. in a group session) to specific situations in their lives in future.

Health professionals report that communication is a major issue in the delivery of health-care services to this group (Ziviani et al, 2004), and studies have shown that supporters and professionals often communicate in ways that are too complex for people with intellectual disabilities, particularly those with language difficulties (e.g. Antaki & Finlay, 2012; Bradshaw, 2001). Issues of language and comprehension are therefore likely to be of enormous practical importance in the provision of SHE for people in this category.

In cognitive psychology, comprehension is conceived as the operation of a number of internal processes (e.g. working memory; syntactic, semantic and lexical processing - Carpenter, Miyake & Just, 1995). Those interested in problems of comprehension try to examine which internal processes and systems are faulty in the individual (e.g. Bishop & Adams, 1992). This broadly aligns with medical models of disability (Oliver, 1990). We take a more social approach here: we are interested in which elements of SHE create a context for lack of comprehension, how that lack of comprehension is expressed, and how it is (or is not) resolved between the teacher and the learner. Rather than adopt a cognitive perspective, then, we draw on the approaches of researchers interested in knowledge as jointly constructed in educational exchanges (e.g. Edwards & Mercer, 1987). This approach is more aligned with social models of disability (Oliver, 1990). Qualitative research methods are useful here, as they provide a method for analysing such processes in detail. We use two qualitative methods, both as a means of

deepening our level of investigation, and as a means of triangulation (see Farmer, Robinson, Elliot, & Eyles, 2006).

Conversation analysis (CA) is a qualitative method which allows us to see how people manage interactions with each other on a turn-by-turn basis (for summaries see Hutchby & Woofitt, 1998; ten Have 2007). CA has built up a substantial base of knowledge about the hidden rules of interactional practice, showing how people orient to a shared sense of social order. The method allows us to analyse how interactions progress – how people communicate with each other, how social and institutional activities get accomplished, and how people solve problems which arise in their interactions. It has been used to help us understand interactions in a range of health settings (e.g. for examples see Walton & Finlay, in press), and has increasingly been used to analyse dialogue involving people with intellectual disabilities and others (e.g. Antaki & Finlay, 2012; Finlay & Antaki, 2012; Rapley, 2004; Williams, 2011). To our knowledge, no previous published studies have used CA to look at the delivery of sex education for people with intellectual disabilities. When examining the delivery of SHE to young people with intellectual disabilities, CA can show us how SHE works in real-life settings, and can allow educators to critically examine their practice.

Traditionally, CA studies have stood alone, not relying on interviews with participants. The reason for this is that much of what goes on in interactions happens quickly and may not be remembered by interlocutors. CA also aims to discover rules and regularities in interaction of which participants might not be aware. However, some studies using CA have begun to supplement the detailed study of interaction with ethnographic notes, interviews or documents (Peräkylä & Vehviläinen, 2003; see also Gillespie and Cornish, 2009, for this point in reference to dialogical analysis). This seems particularly important when the goal of research is to influence practice, and when research is carried out in specialized areas where the analyst does not have detailed knowledge of the context. For example, professionals might be orienting to particular guidelines, agendas or policies when they interact with others.

The aim of this study was to carry out a preliminary investigation of how SHE is delivered in practice to young people with intellectual disabilities. We were particularly interested in the barriers that make delivery difficult, the perceived need for such provision, the institutional and social context, and the challenges faced by teachers and community workers. The issue we focus on in this paper is how difficulties in understanding/comprehension arise and how they are dealt with in practice. Furthermore, this paper aims to show how using two very different types of data (interviews and video-recordings of SHE sessions) can provide a more rounded picture of the issue.

Method

As part of an exploratory study, recordings of SHE group sessions were made and interviews were conducted¹. Four SHE sessions (one hour each) involving young people aged 16-19 were video-recorded (one in a youth club and three in a school for children with special educational needs). These sessions were part of an ongoing weekly SHE programme delivered by local youth services in the South-East of England. The sessions recorded focused primarily on sexual behaviour, contraception, norms and relationships. There were four different session leaders: two women worked for the youth service, one man was a volunteer, and one man was the leader of a drama organisation for people with intellectual disabilities. Between four and eight young people attended each session. In three of the sessions, only males participated. There was a female participant in the fourth session. All participants had either mild or moderate intellectual disabilities. In sessions in the school, between one and three teaching assistants were also present. The sessions were planned and directed by the leader. One of the principal researchers and a research assistant were present only to operate the video recorder. They did not participate in the sessions. Video was chosen as the method of data collection because the level of detail required to carry out CA transcription precludes observations or note-taking.

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Full ethical permission was granted from the authors' university ethics committee. The young people's capacity to consent was assessed by the trainer responsible for delivering the sessions; only those judged able to consent were included in the research. Students were provided with details about the aims of the study and what their participation would entail. Students initially gave their consent to the trainers. On the day the session was to be recorded, the researcher once again explained the purpose of the study and what their participation would entail, and consent was confirmed prior to the start of each session. Two students declined to participate. Careful positioning of the camera and switching off the recording at appropriate times ensured they were not recorded. This was clearly explained and discussed with all participants. Parents were also informed of the research and given an opportunity to contact the researchers or trainer.

Four interviews with facilitators/teachers of SHE for people with intellectual disabilities were also conducted. These included a youth worker who led three of the video-taped sessions (P1), the deputy head of a school for children with special needs who had developed a SHE strategy (P2), an outreach worker for a sexual health charity who provided SHE support for young people with intellectual disabilities in the community (P3), and a youth worker who led a drama organisation for people with intellectual disabilities and who co-facilitated one of the recorded sessions (P4). Semi-structured interviews lasted approximately one hour and covered a range of issues such as the purpose and need for SHE with this group, obstacles and facilitating factors, and participants' experiences of delivering SHE. The interviews included questions on: participants' experience of providing sexual health education; their prior training; which topics they typically covered; which topics participants found difficult to talk about and why; whether they avoided any topics and why; and how they assessed understanding. Prompts were used to encourage further exploration of issues raised. As well as the standard questions, P4 also viewed and commented on the recording of the session he led. The other youth worker (P1) was invited to view recordings of her sessions but declined.

Analysis

Video recordings of SHE sessions were transcribed (for transcription conventions see appendix) and analysed using the principles of conversation analysis. Although a range of interesting phenomena were observed in this data (e.g. difficulties which arose when using visual stimuli to discuss relationships; focus on the rules of games/activities at the expense of the educational message; techniques to promote inclusion), for reasons of space this paper focuses on one type of interactional trouble: how people respond when a learner gives an incorrect response. All instances in which students did not provide the correct response when asked were collected together, and data sessions were held in which the authors viewed these instances and discussed their interactional features. These were separated into instances in which such answers were ignored and those in which answers were challenged. We chose to focus on the latter for this paper, and these extracts were examined in detail for the interactional patterns which followed from an incorrect response. We paid particular attention to turn-taking, repair, and resolution of the interaction (see ten Have, 2007, for more detail on how CA is carried out).

Interviews were transcribed and analysed using thematic analysis (Braun & Clarke, 2006). Thematic analysis aims to identify and report on thematic patterns across the sample, which allows researchers to make interpretations of the data that reflect the reported 'reality' of participants. The interview schedule and resulting thematic analysis were partly informed by our analysis of the video data. In particular, we identified interactional trouble as an important issue in the sessions, and as a result the topic of comprehension formed one of the foci of the interviews and resulting analysis. This process was therefore neither entirely theory-driven nor entirely data-driven. For reasons of space, this is the only theme reported in this paper.

Pseudonyms are used in all extracts.

The validity of the analysis was enhanced by a form of inter-rater reliability. The research team met regularly to view the videos and examine the transcripts. Impressions of the data were

discussed as a team, and emerging themes and phenomena were identified. These were used as a basis to code the interview data and analyse the patterns of interactions in the videos. The thematic analysis was carried out by two research assistants independently of each other. Once coding was complete, they met and arrived at a combined analysis, which was then examined and agreed in a team discussion.

Results

This paper focuses on one particular issue (comprehension difficulties) which arises in both sets of data, and illustrates how the two types of analyses complement each other. First we will examine how educators describe comprehension problems and their attempts to overcome them. Then the paper will examine actual instances from the video data, looking in detail at the context of comprehension problems and how the interlocutors attempt to deal with them. Finally, we will examine how this fits with the teachers' models of comprehension in the learners they work with.

Interviews

Comprehension difficulties.

The educators discussed a range of problems concerning comprehension. This was particularly the case if the learner had a greater degree of difficulty in communication or cognition: "How do you explain to somebody with even sort of, you know, moderate to high learning disabilities, you know, what actually an STI [*sexually transmitted infection*] is? That's something that you know is going to raise problems." (P3). In some cases, educators accepted that people would not understand, and that people might say they have understood when they have not: "It's like 'do you understand that?' 'Yeah yeah,' you know and they won't, you know. They won't have retained that knowledge at all" (P4)

Although it was not always certain that all the learners understood fully, they were often thought to have gained something. For example, discussing an activity involving sorting pictures into public and private places, P2 said: “some get private, if they don’t get private it’s, that this behaviour is ok, it’s not bad (...) but you just do it in your bedroom, coz nobody else wants you to do it anywhere else.”

Tackling comprehension difficulties.

Participants reported tackling these issues in a range of ways. For example, P4 said: “It’s about kind of knowing the individual. People are always going to have a different level of understanding.” Because of the difficulties in teaching mixed groups, P3 went further, suggesting that groups should be divided “based on ability.”

One strategy was to monitor people’s understanding during and after the course. P1 commented that “it’s really difficult to assess what people have taken in.” Although the programme had not yet finished, “we try and have a baseline on it, you know, sort of fill out a form at the beginning - what do we think about this, what do you think about that, what do we think you understand.” In terms of ongoing monitoring during sex education sessions, P3 said that she would ask if they understood: “I usually sort of say to them, you know, did you understand what I was saying (..) tell me what I’ve just said, you know, what you think I’ve said, you know, your understanding of this (..) and then at the end of the sort of session, is just sort of going back over things.” P4 talked about getting people to “feed back (..) in their own words (..) what happened, maybe if they can relate it to a story or something that’s happened themselves.”

P4, who used a lot of drama in his work, also monitored group members’ non-verbal reactions to role plays: “there was a few gasps at the start and I think Josh was like looking and engaging, you know. He doesn’t engage a lot with certain things so (..) you have a real sense of whether it’s working or not (..) it’s the breathing (..) it’s the gasps, it’s the looks.”

All educators discussed the importance of careful selection of topics – focussing on issues that were immediately relevant and avoiding topics that required pre-existing knowledge.

For example, P3 said: “it’s really difficult to talk to a young guy about using a condom when he actually has no idea of quite actually what a relationship is.” P2 stressed the importance of teaching which takes place over time, which can respond to a child’s development and can ensure there is a foundation on which to build. For example, she reported that at her school there was a lot of work on choice and risk before sex came up: “We’re a long way from the actual, you know, the sex education. We’re much more on keeping safe, keep safe work, having a voice, understanding that your body has private parts and they’re private to you, understanding appropriate behaviour so you don’t put yourself at risk or that you are seen as inappropriate in public.”

This is related to the idea that education should not aim to teach everything in one course, but to teach small bits at a time. Services sometimes expect educators will cover too much. P3 said: “they wanted us to cover far too much in a short time (..) you need one subject broken down, really into small little chunks rather than a mass of information because (..) they won’t comprehend it.”

All educators reported that repetition was important. Topics need to be constantly revisited and built upon. For example P2 said: “you’ve just got to constantly do it (..) you can’t just say, oh we’ve done that, you know. You have to keep going back to it” However, there was a dilemma between repeating points too much and not enough. On viewing a video of his own session, P4 commented that he sometimes got too involved in the activity and forgot to explain adequately. He commented “you don't want to kind of, over-egg the pudding, you don't want to go on and on and on about it and stuff, about every single point (..) If I was reflecting on that, I'd certainly talk about what boundaries were because you know that wasn't really, you know it's like we both got very excited and neither of us explained what it was about.”

Tasks had to be carefully selected to allow learners to participate. P2 mentioned two activities in particular: pictorial social stories and sorting pictures into public and private. Social stories were useful for teaching about issues relevant to particular pupils (Tarnai & Wolfe, 2008).

“Social stories is great because if you, if you’re doing quite a specific piece of work with one child on appropriate behaviour then you would use your social story because they are in the story (...) they can’t get abstract (..) it’s got to be concrete to them” (P2).

Finally, P4 noted that acting out situations can help provide a visual channel for information, one more based on situations: “people see or hear or experience what happens to them every day (..) by seeing something (..) I think it sticks in their mind more, they remember it more, and they can relate to it more.” Elements of drama that helped were strong, stereotyped characters, comedy, youth references, and making sure the sessions were fun. P4 felt that drama was useful for a mixed ability group because: “we’ve got the visual thing, the scene (..) so people with low understanding would have seen that what I was doing, certainly with the physical stuff was inappropriate (..) whereas maybe some of the language, that that might have not got across.”

Video data

We have seen that comprehension is an important issue faced by educators, and that they attempt to deal with it in a variety of ways. Examining data of actual SHE work allows us a different opportunity to study the same issue. Here we see at a more fine grain level how both teachers and learners deal with comprehension problems over a series of interactional turns. Rather than seeing the problem as located in the individual with disabilities, it becomes clearer that comprehension problems and their resolution are *joint productions*, involving the educator, the materials and the person with intellectual disabilities.

There were many different ways in which young people displayed comprehension and knowledge to others in the group (for an earlier discussion of this issue see Lawrence & Swain, 1993). These included: performing an action requested of them (e.g. selecting a card from a pack); pointing to a correct option when asked an open question (e.g. on a whiteboard); correctly answering a question verbally; or contributing a relevant comment or elaboration to an activity or a verbal exchange. Less convincing indications of understanding were found in two common

patterns. These were often accepted by others in the group unproblematically, and the speaker was not called on to provide further evidence that they had understood. In some cases leaders asked a simple yes/no question to check understanding or agreement (e.g. ‘Do you understand?’). More commonly, learners repeated the words or choices of other learners or the teacher (see Mehan, 1979 for this point in standard classrooms). In the following extract we see Riaz change his answer from negative to affirmative after Helen, Mohammed and the leader have responded in the affirmative. This is accepted without further interrogation.

Extract 1. V1(2) 6.58

- | | | |
|---|----------|---|
| 1 | Leader | At sixteen can you go (.) to a clinic and get free condoms↑ |
| 2 | Riaz | [(<i>shakes head</i>)]. |
| 3 | Helen | [(<i>nods</i>)] Yep |
| 4 | Mohammed | [Yeah |
| 5 | Leader | [((<i>nods</i>))]Yes. |
| 6 | Riaz | [Yeah ((<i>puts hand over face</i>)). |
| 7 | Leader | Well done |

At other points, the leader or other group members treated a person’s behaviour or utterance as problematic in some way (for discussions of ‘trouble’ and ‘repair’ in conversation see Schegloff, 1987; Schegloff et al, 1977). The person might have: failed to respond; responded incorrectly or in an incorrect format; repeated a word provided by someone else with no other evidence of understanding; or responded in a way which seemed generally relevant but which the teacher corrected.

Many of the problems arose after the educator used verbal questions which were complex, and the learners responded in ways which suggested they might not have understood, or that they did not know the correct answer. The educators and other learners then tried to resolve the problem in various ways. The next two extracts involve two less experienced facilitators (a youth worker and a volunteer). The activity here involves the facilitator reading out a statement about relationships. The learners then decide whether this statement represents ‘no love’, ‘much love’ or ‘not sure’. They do this by placing a card on one of three piles, each pile representing one of the answers.

Extract 2. V2 7.21

1	Leader 1	Respecting the decisions if either of you wants to end the relationship
2	Mohammed	Oohhoo[hoo
3	?:	[Ooo.
4	Marcus	[[<i>(Moves card towards 'no love' but stops short)</i>].
5	Mohammed	[[<i>(puts card on 'much love')</i>].
6	Riaz	[Not funny
7	Marcus	[[<i>(holds card above from 'no love')</i>] What
8	Leader 3	Do you understand the question=
9	Leader 1	=Do you understand that yeah↑
10	Mohammed	mmhm (<i>(nods)</i>)
11	Anton	No [I didn't catch that.
12	Marcus	[[<i>(puts card on 'much love' then picks up again)</i>]
13	Leader 1	[Ok
14	Riaz	[I did
15	Leader 1	Respecting the decision if either of you want to end the relationship
16	Marcus	[[<i>(drops card onto 'no love')</i>].
17	Mohammed	[Ohhh (<i>(points at Marcus's hands)</i>) Eh eh eh
18	Anton	[[<i>(Places card onto 'much love')</i>]
19	Mohammed	[[<i>(points at 'much love')</i>] <u>eh</u>
20	Riaz	()
21	Mohammed	Marcus
22	Marcus	[[<i>(Takes card off 'no love' and places on 'much love')</i>]
23	Leader 1	Riaz↑ (.) do you understand that one

The prompt in line 1 is 'Respecting the decision if either of you wants to end the relationship'.

Marcus initially hovers over 'no love' (line 4 &7), while Mohammed and Anton choose 'much love'. Marcus then changes his answer to agree with them (line 12). There are a number of indications of comprehension problems here. Only one of the four young people (Mohammed – line 5) makes a firm choice after the first attempt at the question. Non-response to questions is an indication of conversational 'trouble', usually prompting one of the actors to attempt to 'repair' or account for the lack of response (Schegloff et al, 1997). Indeed, Marcus attempts a 'repair' with the word 'What' in line 7. The leaders recognize that there might be a comprehension problem by asking 'Do you understand?' (lines 8 and 9). In response, Anton states 'I didn't catch that', prompting the leader to repeat the original statement. Due to Anton's utterance, the lack of initial response by the learners is treated as a problem of hearing rather than one of comprehension. However, while repeating the original question unchanged might help Anton, we cannot be sure it has helped the other two learners.

Now Marcus chooses 'no love' (line 16). He might be guessing, or he might be responding to only the second clause of the question – suggesting quite reasonably that ending

the relationship is a sign of ‘no love’. Anton, one of the more fluent communicators in the group, then chooses ‘much love’, prompting Marcus to change his response (line 22). Riaz does not make a choice.

Here we see several issues. The activity seems straightforward. A sentence is read out and learners have to choose which category it fits into. Some features are well-designed for this group. The response format can be done non-verbally, since it simply requires placing a card on the table. The prompt consists of only a single sentence, reducing the memory requirement of the task. The facilitators notice signs of trouble and attempt to remedy them. However, other features may obstruct comprehension. The prompt consists of a main clause and a conditional clause, both of which need to be understood to grasp the sense of the question, as well as generalisation and contextual displacement (Edwards & Mercer, 1987). Both of these may create problems for people with language or cognitive difficulties. The attempt to repair the trouble works for Anton but does not seem as successful for Marcus. Finally, Marcus changes his answer after seeing what Anton chooses, so we do not know if he is simply copying him. However, the leaders take this as his (now correct) answer and turn their attention to Riaz.

The next extract illustrates another trajectory after an incorrect answer. The prompt is ‘Time and space to see your own friends’. While Marcus and Anton have chosen ‘much love’, Mohammed has chosen ‘no love’:

Extract 3. V2 11.13

- 1 Leader 1 ((to Mohammed)) Why have you [said no love?
- 2 [((Places finger on ‘no love’ option)).
- 3 Anton Why↑ why mate [why↑
- 4 Marcus [((Picks up Mohammed’s card [and puts on ‘much love’))
- 5 Leader 1 [Time and space (.) to see
- 6 your own friends (.) so if you had a girlfriend would you want to be with your
- 7 girlfriend all the time or would you like to say to her I’m just going down to
- 8 meet my friends and I will see you later (.)
- 9 Marcus ((Nods)) (.) ((looks at Mohammad, [nods])).
- 10 [Yeah.
- 11 Mohammed Yeah I do
- 12 Leader 1 You do↑
- 13 Mohammed Yeah I do
- 14 Leader 1 Right [so then that would be much[love.
- 15 Anton [((thumbs up)) ding
- 16 Mohammed [much love

- 17 Helper 1 because she'd be able to say to you oh Mohammad I'm not coming
 18 round today I'm going to see my friend and you would be like ok
 19 Mohammed dank you
 20 Leader 1 ((*laughs*)) right (.) next game

Both Anton and the facilitator attempt to clarify why Mohammed has chosen the wrong option by asking him to explain his answer (lines 1 & 3). Mohammed does not reply, and the facilitator goes back to the prompt, first repeating it and then rephrasing it from an abstract statement to a more specific and personalised example ('so if you had a girlfriend..'). This is followed with an either/or question (for an example of this in standard classroom interaction see Mehan, 1979). This rephrasing indicates the facilitator is treating Mohammed's initial response as based on a misunderstanding of the prompt. Before Mohammed has a chance to respond, Marcus nods and says 'yeah'. In line 11, Mohammed says 'yeah I do', a response which is not formatted correctly for the either/or question. However, the leader treats it as endorsing the last option offered ('much love'). Mohammed appears to confirm by repeating 'much love'.

We can see two things here. The first is that comprehension is a live issue for the participants. Mohammed is called on to explain his choice, and then treated as if he has misunderstood the prompt. The facilitator tries to clarify it by making it more specific and personal to Mohammed, but in the process makes the question much more elaborate. Mohammed offers a less than clear response and we do not know if he is just copying Marcus, really endorsing the latter part of the either/or question, or just responding to the social pressure in the situation. However, the facilitator takes it as evidence of the 'correct' response and moves on.

In the following sequence, the activity is about understanding the notion of 'trust'. The leader is reading out short scenarios and asking the students if they trust or do not trust the person in the story. To respond, they must go and stand on the appropriate card on the floor.

The extract opens with the leader addressing Mohammed:

Extract 4. V1(1) 18.36

- 1 Leader another student in the class keeps hassling you to lend them money ((*gasps*
 2 *from others in background*)) (3.5) what do you think about that

- 3 Mohammed [(*head down, moves his body from side to side*)).
 4 [(2.5)
 5 Leader Are you going to trust them or not trust them
 6 Mohammed Trust
 7 Riaz: [Aww man
 8 (?) [Aw
 9 Mohammed Aw man
 10 Leader: why do you think that's a good idea to trust someone who's trying to get
 11 your money off you=
 12 Mohammed =naw trust.
 13 Leader ((*nods*)) [but why th- why
 14 Mohammed: [(*walks away from leader*))
 15 Riaz: Why
 16 Leader: [tell me why
 17 [(*places hand on Mohammad's shoulder*)) [come back. (.)
 18 Mohammed [(*steps back to leader*))
 19 Leader Why is it not a good idea
 20 Mohammed ((*places hand over mouth, looks downwards*))
 21 Riaz (The police)
 22 Leader the police it's your money isn't it
 23 Mohammed Yeah
 24 Leader ((*points to cards on floor*)) where you gonna stand (.) there's trust over there
 25 ((*points*)) and not trust over there ((*points*))
 26 Mohammed ((*goes to stand on 'not trust'*))

We do not know why Mohammed answers 'trust' in line 6. It is possible he does not understand the meaning of 'trust', the verbal question might be too complicated for him to follow, or he might not be attending. He may also be answering from his more general social experience (that students should trust one another) rather than understanding the 'ground rules' of this particular educational activity (for discussion of this issue see Edwards and Mercer, 1987). The leader requests an explanation (line 10). However, she rephrases the question in a way which more strongly suggests the correct answer should be 'not trust'. The classmate (who Mohammed would know personally) becomes a more anonymous 'someone', and the loan (which might be paid back) becomes 'trying to get your money off you'. By rephrasing it in this way, the question suggests there was a problem with Mohammed's original answer, and prompts more strongly a 'not trust' answer. In response, Mohammed changes his answer 'not trust' (line 12).

Mohammed has now chosen both 'trust' and 'not trust', and therefore we cannot be sure he understands the question. Perhaps he has just changed his answer because he has been prompted to. Jessica orients to this possibility by asking him for an explanation twice (10 & 13).

When he does not reply to either question, she offers the correct response herself with a negative interrogative: ‘Because it’s your money isn’t it?’ Negative interrogatives tend to project agreement (Heritage, 2002) and we can see here that Mohammed does indeed respond with a ‘Yeah.’ After a further prompt he goes to stand on the correct spot.

If the problematic response is not overtly wrong, but not correctly formatted for the question, another strategy is simply to reformulate the utterance as a correct or relevant contribution and ask for a confirmation. Here the group leader is again using some pre-prepared materials in which she asks whether a range of behaviours or beliefs are ‘normal, unacceptable or risky’. Here she is asking about sexual anxiety:

Extract 5. V1(2) 7.09:

- | | | |
|----|----------|---|
| 1 | Leader 1 | Is it normal or ok (.) or unacceptable to worry about sex (.) |
| 2 | | [how [to do it |
| 3 | Riaz | [Urgh [(<i>Puts hand over face and turns face away</i>)]] |
| 4 | Mohammed | [Ahh yeah (<i>puts hand over face and smiles</i>). |
| 5 | | (<i>Laughter from leaders and group</i>) |
| 6 | Riaz | (<i>leans forward, clicks fingers</i>) (2.0) |
| 7 | Leader 1 | and what to do |
| 8 | Mohammed | It’s nice. |
| 9 | Leader 1 | Is it nice? |
| 10 | Mohammed | [Yeah. |
| 11 | | (<i>Laughter from leaders and group</i>) |
| 12 | Leader 1 | So it’s its no-it’s ok isn’t it |
| 13 | Mohammed | Yeah= |
| 14 | Leader 2 | =Yes |
| 15 | Leader 1 | Is it normal or ok to say no to having sex |

The question contains three response options: ‘is it normal, ok, or unacceptable to worry about sex, how to do it?’ Previous studies have shown that questions with multiple response formats can be difficult for people with intellectual disabilities (Finlay & Lyons, 2001). This is because they involve long sentences, which pose a problem for people with difficulties in receptive language, and because the person has to hold three options in their memory as they formulate a reply. Mohammed’s reply ‘Yeah’ does not involve one of the options, and indeed it is hard to work out what he is agreeing with.

The question becomes more complex in line 7 when the leader adds ‘and what to do’. If we put the question together, it contains three response options, and three subjects (sex, how to

do it, and what to do). Mohammed’s answer in line 8 (‘It’s nice’) does not seem to address any of these options, but rather the general subject matter (sex). There is more laughter, before the leader makes his answer relevant to the question by reformulating it as a negative interrogative (a question form that projects agreement): “it’s ok, then, isn’t it?” As in extract 4 above, Mohammed replies ‘Yeah’.

We see common patterns in all of these extracts, each of which is a variant of the extended *initiation, reply, evaluation* sequences identified in many studies of standard classroom interaction (e.g. Mehan, 1979; Nassaji & Wells, 2000). After a rather complicated verbal question or prompt, a learner makes an incorrect response, a questionable response, or does not respond at all. The teacher then attempts to prompt the correct response in various ways. In all cases the result is some sort of correct verbal utterance by the learner, but it is unclear whether they have really understood and changed their mind, or whether they have been led to the correct response by challenges, suggestive rephrasings, or by the teacher providing the correct response and asking for agreement. It helps to remind ourselves of the context here. The dilemma for the leader is to decide when to continue pursuing a topic in the face of interactional difficulties versus moving on to something easier. Given that the learners in the group have differing abilities and some understand more readily than others, that leaders want to encourage participation, inclusion and enjoyment, and that there is an agenda of activities planned for the session, the decision is often to move on.

There is one final example which illustrates a rather different pattern:

Extract 6. V1(2) 3.58

- | | | |
|----|----------|---|
| 1 | Leader 1 | Do you remember what masturbate means [(.) yep↑ |
| 2 | Riaz | [(<i>shakes head</i>) |
| 3 | Mohammed | [Yeah. |
| 4 | Helen | [(<i>nod</i>)]. |
| 5 | Riaz | (<i>leans forward looks at leader</i>) |
| 6 | Leader 1 | Do you want to jus [(.) anyone want to [(.) |
| 7 | Riaz | [(<i>shakes head</i>) [(<i>shakes head</i>) |
| 8 | Leader 1 | [no ok. |
| 9 | Leader 2 | [Do you remember [it |
| 10 | Mohammed | [(No) |
| 11 | Riaz | (I can’t remember). |

P2 also commented that people might not understand straight away, and they might understand at one time but then forget. She rejects a linear model of steady progress in understanding, suggesting the children go ‘side to side, up and down and all over’.

“the biggest thing about our children is they’re not going to get it straight away, and if they do get it, they’re going to forget it, so it’s constant over-learning. Revisiting is vital, so this is a spiral curriculum, where every year, you, you build on the threads (..) Sadly the education system likes people to go up, don’t they, in a line, whereas our kids go, side to side up and down and all over, and just because they’ve got it one day doesn’t mean they’re going to have it the next day necessarily (..) You can’t say, ‘I did it last year.’ You’ve got to revisit it, build on it, check understanding, so it’s got to go round and round and round rather than straight up”

This model of understanding and development helps us to contextualize some of the practices we see in SHE sessions. The educators describe themselves as engaged in a long game, which means that pursuing a clear expression of understanding on each separate occasion is not the aim. The aim is rather to ‘keep going’, to go ‘round and round’ gradually building on the threads, but recognizing that at any one time people are only getting ‘bits’.

Discussion

This exploratory study shows that issues of understanding are important in SHE with people with intellectual disabilities. Difficulties in comprehension and understanding are, of course, not unique to sexual health education. However, sexuality and sexual relationships are a core component of a person’s sense of identity and wellbeing, and sexual health education is an important aspect of individual human rights. The exclusion of people with disabilities from sexual health programmes has been increasingly highlighted (Groce et al., 2013). It is often the case that parents and professionals may shy away from delivering comprehensive SHE for people with intellectual disabilities as they struggle with trying to put complex, abstract and

sometimes explicit information across in a way that is accessible and understood. Educators recognize this and make a range of adjustments at a strategic and planning level to cater for differing levels of understanding. They also mention some general ways they monitor comprehension in practice. The video data show us that questions of comprehension occur particularly when abstract concepts are used and leaders use complex sentences. When a learner does not answer, or provides a wrong or questionable answer, the group leader can pursue this in various ways, most of which are verbal. These include rephrasing the question to make it more strongly suggestive, asking for an explanation, reformulating the answer, or offering the correct answer and asking for confirmation. As Mehan (1979) illustrated in standard classroom interaction, incorrect responses are often responded to in ways that continue the interaction rather than close it down: teachers often ‘search’ for correct answers while the learners respond to cues from the teacher and the other learners as to what is the right answer (see also Edwards & Mercer, 1987).

It seemed to be the case that the best evidence of comprehension was produced at first attempts, and rarely seemed convincing if it was the product of challenge and correction. In the examples here, the learner eventually offers the ‘correct’ response, and the leader then moves on to the next activity. A superficial resolution is achieved. We can understand this pragmatic approach in terms of both the models of understanding offered by the educators, whereby development of comprehension is non-linear, and learners are only expected to pick up ‘bits’, and by the immediate demands of the situation, in that there are other group members to consider and an agenda of activities to get through in the allotted time. It is also important to note that educational interactions are not just about building knowledge – participants are also orienting to agendas such as participation, inclusion, sociability and face-saving.

Examining how these issues are resolved allows us to see where SHE, and health education more generally, might be improved for people with intellectual disabilities.

Importantly, from a social model of disability perspective, it enables us to examine where social

barriers exist in interactions that may make it difficult for some people with intellectual disabilities, and thus exclude them from full participation. In the interactions we have analysed, leaders pursued verbal solutions to verbal problems, and the effectiveness of these solutions is less than clear. Group sessions, and agendas of session activities, create a sense of urgency, whereby the needs of other members mitigate against lengthy interactions with a single member to ensure a point is understood. We need to develop ways of explaining concepts in SHE that do not rely so heavily on verbal explanations. Even activities based on pictures and activities often rely on verbal explanations to correct learners and to explain their relevance to real life.

CA researchers have tended to examine behaviour directly rather than ask participants to report on it retrospectively. This is partly because much of our behaviour (particularly the small details) goes unnoticed, and we are often unaware of the patterns and rules we follow in talk and interaction. However, while researchers might be able to assume they understand ordinary conversational contexts well enough not to need additional sources of information, this assumption is problematic when researching specialized institutional contexts. As a result, some CA researchers carrying out work in health and social care institutions do make use of various forms of ethnographic data to make sense of the context in which interactions take place (e.g. Peräkylä & Vehviläinen, 2003). There are problems in aligning the two methods, particularly as interview reports about behavior are inevitably partial and imperfect reconstructions compared to the detailed analysis of recordings of real behavior. Indeed, the accounts of behavior gathered in interviews might even contradict evidence from the video recordings. The choice here was a pragmatic one and in some ways similar to discursive research which frames itself using contextual findings from non-discursive work. Here we have used interviews to provide contextual information, and help provide some insight into broader strategic aspects of these interactions. The participants did not comment as much on the mechanics of the interactions, but more on broader concerns and issues. However, one of the trainers (P4) did discuss his practice in more detail when observing the recording of his session, and this is a technique we

would recommend in the future as it allows some rebalancing of the power relations between analyst and participant.

The two methods used here complement each other in several ways. Early analyses of the video data identified comprehension as an issue, and as a result part of the interviews focused on this topic. The process was not one-way, however. The patterns identified from the CA were usefully contextualised at the end of the results section by understanding the models of comprehension that educators expounded. Using different types of data has also allowed us to see the problem of comprehension with two different lenses. The interviews primarily locate the source of the problem in the person with disability, and their difficulties in understanding. The job of the educator is to deliver materials in such a way as to minimize this problem. While these accounts do see understanding as a joint problem, involving both the educator and the learner, this model was not elaborated in great detail. Social models of disability see disability as the product of the affordances of the social and physical environment. We can see this in more detail in the recordings of the sessions which illustrate how comprehension problems are produced and resolved jointly as a result of the interaction between the educator, the materials/activity, and the person with disabilities. Studying the small details that make up this joint production allows us to look at the mechanics of the encounter and provides more potential for intervention. This allows us to recognize problems created by the use of language, the type of activities and materials used, and the methods used to check and correct comprehension.

The study has a number of limitations. As an exploratory, pilot study, it represents a small sample of participants and SHE sessions, and does not include the perspectives of the learners themselves, which would have further enriched the analysis. The trainers were youth workers and therefore the sessions are likely to differ from those provided by qualified teachers or public health workers. In addition, the learners were young and still living at home, and their contributions might differ from more mature adults. We are therefore not claiming that our findings apply to all provision. However, some evidence of the validity of the study is provided

in the observation that similar linguistic/interactional issues arise here as in other CA-based research into community support services (e.g Antaki & Finlay, 2012; Finlay & Antaki, 2012) as well as studies of classroom interaction (e.g. Edwards & Mercer, 1987; Mehan, 1979). Rather than provide generalizable findings, then, the aim of the paper was to illustrate the possibilities of combining two qualitative methods in order to address an important issue in health psychology, and to provide initial data and discussion on the practical delivery of SHE to young people with varying cognitive and communicative abilities.

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References

- Antaki, C. & Finlay, W.M.L. (2012) Trust in what others mean: breakdowns in interaction between adults with intellectual disabilities and support staff. In Candlin, C.N. & Crichton, J. (Eds) *Discourses of Trust*. Basingstoke: Palgrave MacMillan
- Bernert, D. J., & Ogletree, R. J. (2012) Women with intellectual disabilities talk about their perceptions of sex. *Journal of Intellectual Disability Research*, 57, 240-249. Doi: 10.1111/j.1365-2788.2011.01529.x
- Bishop, D. V. M., & Adams, C. (1992). Comprehension problems in children with specific language impairment literal and inferential meaning. *Journal of Speech, Language, and Hearing Research*, 35(1), 119-129. doi: 10.1044/jshr.3501.119
- Bradshaw, J. (2001). Complexity of staff communication and reported level of understanding skills in adults with intellectual disability. *Journal of Intellectual Disability Research*, 45(3), 233-243. doi: 10.1046/j.1365-2788.2001.00318.x
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. doi: 10.1191/1478088706qp063oa
- Carpenter, P. A., Miyake, A., & Just, M. A. (1995). Language comprehension: Sentence and

discourse processing. *Annual Review of Psychology*, 46(1), 91-120.

doi:10.1146/annurev.ps.46.020195.000515

Cornish, F., & Gillespie, A. (2009). A pragmatist approach to the problem of knowledge in health psychology. *Journal of Health Psychology*, 14(6), 800-809. doi: 10.1177/1359105309338974

Craft, A. (1987). *Mental handicap and sexuality: issues and perspectives*. Kent: Costello. Edwards, D., & Mercer, N. (1987). *Common knowledge: The development of understanding in the classroom*. London: Methuen.

Department for Education and Employment (2000). *Sex and Relationship Education Guidance*. Nottingham: DfEE Publications.

Dukes, E., & McGuire, B. E. (2006). Enhancing capacity to make sexuality-related decisions in people with an intellectual disability. *Journal of Intellectual Disability Research*, 53, 727-734.

Evans, D. S., McGuire, B. E., Healy, E., & Carley, S. N. (2009). Sexuality and personal relationships for people with an intellectual disability. Part II: staff and family carer perspectives. *Journal of Intellectual Disability Research*, 53(11), 913-921. doi: 10.1111/j.1365-2788.2009.01202.x

Farmer, T., Robinson, K., Elliot, S. J., & Eyles, J. (2006). Developing and implementing a triangulation protocol for qualitative health research. *Qualitative Health Research*, 16, 277-294.

Finlay, W. M. L., & Antaki, C. (2012). How staff pursue questions to adults with intellectual disabilities. *Journal of Intellectual Disability Research*, 56(4), 361-370. doi: 10.1111/j.1365-2788.2011.01478.x

Finlay, W. M. L., & Lyons, E. (2001). Methodological issues in interviewing and using self-report questionnaires with people with mental retardation. *Psychological assessment*, 13(3), 319-335. doi: 10.1037/1040-3590.13.3.319

Grieve, A., McLaren, S., & Lindsay, W. R. (2007). An evaluation of research and training resources for the sex education of people with moderate to severe learning disabilities. *British Journal of Learning Disabilities*, 35(1), 30-37. doi: 10.1111/j.1468-3156.2006.00401.x

Groce, N., Rohleder, P., Eide, A.H., MacLachlan, M., Mall, S., & Swartz, L. (2013). HIV issues

and people with disabilities: A review and agenda for research. *Social Science & Medicine*, 77, 31-40.

Doi: <http://dx.doi.org/10.1016/j.socscimed.2012.10.024>

Heritage, J. (2002). The limits of questioning: negative interrogatives and hostile question content. *Journal of Pragmatics*, 34(10-11), 1427-1446. doi:10.1016/S0378-2166(02)00072-3

Horner-Johnson, W., & Drum, C. (2006). Prevalence of maltreatment of people with intellectual disabilities: A review of recently published research. *Mental Retardation and Developmental Disabilities Research Reviews*, 12(1), 57-69. Doi: 10.1002/mrdd.20097

Hutchby, I., & Wooffitt, R. (1998). *Conversation Analysis: An Introduction*. Cambridge: Polity.

Jahoda, A., & Pownall, J. (2013). Sexual understanding, sources of information and social networks: the reports of young people with intellectual disabilities and their non-disabled peers. *Journal of Intellectual Disability Research* (Online version of record published before inclusion in an issues only available at the time of writing). doi:10.1111/jir.12040

Kelly, G., Crowley, H., & Hamilton, C. (2009). Rights, sexuality and relationships in Ireland: 'it'd be nice to be kind of trusted'. *British Journal of Learning Disabilities*, 37(4), 308-315.

doi:10.1111/j.1468-3156.2009.00587.x

Lafferty, A., McConkey, R., & Simpson, A. (2012). Reducing the barriers to relationships and sexuality education for persons with intellectual disabilities. *Journal of Intellectual Disabilities*, 16(1), 29-43. doi: 10.1177/1744629512438034

Lawrence, P., & Swain, J. (1993). Sex education programmes for students with severe learning difficulties in further education and the problem of evaluation. *Disability, Handicap & Society*, 8(4), 405-421. doi: 10.1080/02674649366780381

McDermott, S., Martin, M., Weinrich, M., & Kelly, M. (1999). Program evaluation of a sex education curriculum for women with mental retardation. *Research in Developmental Disabilities*, 20(2), 93-106. doi: [http://dx.doi.org/10.1016/S0891-4222\(98\)00035-3](http://dx.doi.org/10.1016/S0891-4222(98)00035-3)

Mehan, H. (1979). 'What time is it, Denise?': Asking known information questions in classroom discourse. *Theory into Practice*, 18(4), 285-294. doi: 10.1080/00405847909542846

- Milligan, M., & Neufeldt, A. (2001). The myth of asexuality: A survey of social and empirical evidence. *Sexuality and Disability*, 19(2), 91-109. doi: 10.1023/A:1010621705591
- Murphy G. (2007) Intellectual disabilities, sexual abuse and sexual offending. In A.Carr, G.O'Reilly, P.Noonan Walsh & J.McEvoy (Eds.), *The handbook of intellectual disability and clinical psychology practice* (pp. 831–866). London: Routledge.
- Nassaji, H., & Wells, G. (2000). What's the use of 'triadic dialogue'? an investigation of teacher-student interaction. *Applied Linguistics*, 21(3), 376-406. doi: 10.1093/applin/21.3.376
- Oliver, M. (1990). *The politics of disablement*. Basingstoke: MacMillan
- Peräkylä, A., & Vehviläinen, S. (2003). Conversation analysis and the professional stocks of interactional knowledge. *Discourse and Society*, 14(6), 727-750. doi:10.1177/09579265030146003
- Pownall, J. D., Jahoda, A., Hastings, R., & Kerr, L. (2011). Sexual understanding and development of young people with intellectual disabilities: Mothers' perspectives of within-family context. *American Journal on Intellectual and Developmental Disabilities*, 116(3), 205-219. doi: 10.1352/1944-7558-116.3.205
- Rapley, M. (2004). *The social construction of intellectual disability*. Cambridge: Cambridge University Press.
- Rohleder, P., & Swartz, L. (2012). Disability, sexuality and sexual health. In P. Aggleton, P. Boyce, H.L. Moore, & R. Parker (Eds.), *Understanding global sexualities: New frontiers* (pp. 138-152). London: Routledge.
- Schegloff, E. A., Jefferson, G., & Sacks, H. (1977). The preference for self-correction in the organization of repair in conversation. *Language*, 361-382. www.jstor.org/stable/413107
- Schegloff, E., A. (1987). Some sources of misunderstanding in talk-in-interaction *Linguistics* (Vol. 25, pp. 201). doi:10.1515/ling.1987.25.1.201
- Shakespeare, T. (2000). Disabled sexuality: Toward rights and recognition. *Sexuality and Disability*, 18(3), 159-166. doi: 10.1023/A:1026409613684
- Sigafoos, J., O'Reilly, M., & Green, V.A. (2007) Communication difficulties and the promotion

of communication skills. In A.Carr, G.O'Reilly, P.Noonan Walsh & J.McEvoy (Eds.), *The handbook of intellectual disability and clinical psychology practice* (pp. 606-642). London: Routledge.

Ten Have, P. (2007). *Doing conversation analysis*. London: Sage.

Walton, C. & Finlay, W.M.L. (in press) Conversation analysis. In P. Rohleder & A Lyons (Eds) *Qualitative Research in Clinical and Health Psychology*. Basingstoke: Palgrave MacMillan

WHO (2006). *Defining sexual health: Report of a technical consultation on sexual health*. Geneva: World Health Organization.

Williams, V. (2011) *Disability and discourse: analysing inclusive conversations with people with intellectual disabilities*. Chichester: Wiley-Blackwell

Ziviani, J., Lennox, N., Allison, H., Lyons, M., & Mar, C. D. (2004). Meeting in the middle: improving communication in primary health care consultations with people with an intellectual disability. *Journal of Intellectual and Developmental Disability*, 29(3), 211-225.

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Appendix: Transcription conventions

(.)	Just noticeable pause
word [word] [word]	Square brackets aligned across adjacent lines denote the start and end of overlapping talk.
wor-	A dash shows a sharp cut-off
(words)	A guess at what might have been said
()	Talk too unclear to merit even a guess.
Word= =word	No discernible pause between words
°word°	Material between "degree signs" is quiet
↑Word	Upward arrow shows upward intonation
(<i>smile voice</i>)	Non-verbal behaviors