Assessing the Communication Skills of Adults with Profound Intellectual Disability: Is the Model of Intentionality a Useful Construct?

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Introduction

For many adults who have profound intellectual disability (PID), the journey for exploring ways to enhance their communication skills begins with an assessment by a speech pathologist. The ultimate goal of the communication assessment of adults with PID is often to enhance communication for the purpose of relationships with others, be it family, support workers, peers, or the general community.

Speech pathologists may use many tools in their assessment. They might explore formal assessments which may be done in a standard way or be modified for the participants' access needs. They may use informal assessments, interviews, or observation tools. Some speech pathologist may engage with the person and undertake a process of dynamic assessment in order to examine what the person can do with different degrees of learning opportunities or support. Many of the current tools used for assessing communication of this population are based on theories of communication intentionality.

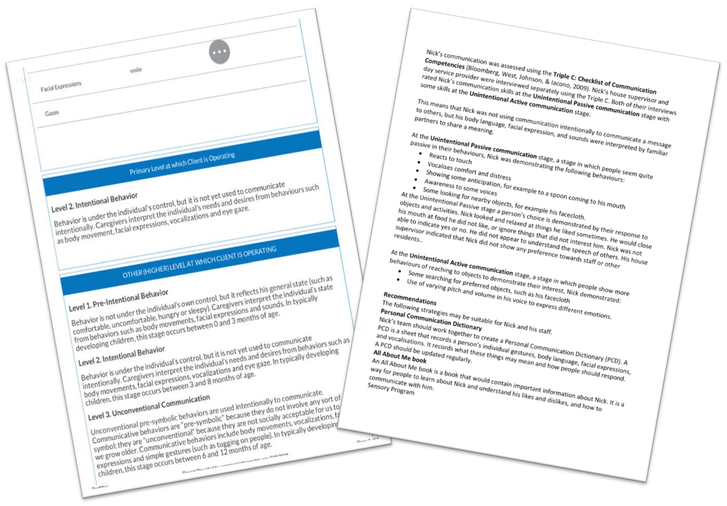
Communication Intentionality

The theory of communication intentionality grew from a context of Piaget's model of sensorimotor stages of development. Bates, Camaioni, and Volterra [1] focused on the communication of children who had not yet developed speech, and identified how infants could have a systematic effect on their listener without having an intention or awareness of control over the effect. They also called this a perlocutionary stage in communication. Later, indicators of intentionality were listed by Wetherby and Prizant [2] to demonstrate the movement from being a preintintional to an intentional communicator. These behaviours included alternating eye gaze between a goal and a listener, persistence in signalling and escalating the signal if the goal is not achieved, awaiting a response and changing behaviour on achievement of the goal.

A number of tools have been developed that are based on the theory of communicative intentionality. First, came the Early Communication Assessment [3], with three levels of pre-intentional communication (reflexive, reactive, and proactive) and two intentional communication levels. Using a similar model, the Triple C Checklist of Communication Competencies [4, 5] had a focus on questions that could be answered by support workers. The Triple C is a two-page checklist where the majority of ticks indicates one of five levels of communication competencies (or one of six in the first edition). Two levels of unintentional communication are labelled (passive and active) and three levels of intentional communication. The Communication Matrix [6] is a series of questions, now administered online, that build a profile of levels of communication across communication function, with levels of achievement (not used, emerging, mastered). At its lowest level is pre-intentional behaviour and intentional behaviour, followed by five levels of intentional communicative behaviours.

These tools have all been pivotal in helping speech pathologists and others to include people with PID within the context of a persons whose communication skills can be assessed and meaningful recommendations can be made. Previously, many people with PID were not assessed and were told to work on pre-communication skills (e.g., cause and effect).

Example of Reports Focusing on Intentionality



Facial Expressions: smile

Gazes

Primary Level at which Client is Operating

Level 2. Intentional Behavior

Behavior is under the individual's control, but it is not yet used to communicate intentionally. Caregivers interpret the individual's needs and desires from behaviours such as body movement, facial expressions, vocalizations and eye gaze.

OTHER (HIGHER) LEVEL AT WHICH CLIENT IS OPERATING

Level 1. Pre-Intentional Behavior

Behavior is not under the individual's own control, but it reflects his general state (such as comfortable, uncomfortable, hungry or sleepy). Caregivers interpret the individual's state from behaviors such as body movements, facial expressions and sounds. In typically developing children, this stage occurs between 0 and 3 months of age.

Level 2. Intentional Behavior

Behavior is under the individual's control, but it is not yet used to communicate intentionally. Caregivers interpret the individual's needs and desires from behaviors such as body movements, facial expressions, vocalizations and eye gaze. In typically developing children, this stage occurs between 3 and 8 months of age.

Level 3. Unconventional Communication

Unconventional pre-symbolic behaviors are used intentionally to communicate. Communicative behaviors are "pre-symbolic" because they do not involve any sort of symbol, they are "unconventional" because they are not socially acceptable for us to use as we grow older. Communicative behaviors include body movements, vocalizations, facial expressions and simple gestures such as tugging on people. In typically developing children, this stage occurs between 6 and 12 months of age.

Nick's communication was assessed using the **Triple C: Checklist of Communication Competencies** (Bloomberg, West, Johnson, & Iacono, 2009). Nick's house supervisor and day service provider were interviewed separately using the Triple C. Both of their interviews rated Nick's communication skills at the **Unintentional Passive communication** stage with some skills at the **Unintentional Active communication** stage.

This means that Nick was not using communication intentionally to communicate a message to others, but his body language, facial expression, and sounds were interpreted by familiar partners to share a meaning.

At the **Unintentional Passive communication** stage, a stage in which people seem quite passive in their behaviours, Nick was demonstrating the following behaviours:

- Reacts to touch
- Vocalises comfort and distress
- Showing some anticipation, for example to a spoon coming to his mouth
- Awareness to some voices
- Some looking for nearby objects, for example his facecloth.

At the Unintentional Passive stage a person's choice is demonstrated by their response to objects and activities. Nick looked and relaxed at things he liked sometimes. He would close his mouth at food he did not like, or ignore things that did not interest him. Nick was not able to indicate yes or no. He did not appear to understand the speech of others. His house supervisor indicated that Nick did not show any preference towards staff or other residents.

At the **Unintentional Active communication** stage, a stage in which people show more behaviours of reaching to objects to demonstrate their interest. Nick demonstrated:

- Some searching for preferred objects, such as his facecloth
- Use of varying pitch and volume in his voice to express different emotions.

Recommendations

The following strategies may be suitable for Nick and his staff.

Personal Communication Dictionary

Nick's team should work together to create a Personal Communication Dictionary (PCD). A PCD is a sheet that records a person's individual gestures, body language, facial expressions, and vocalisations. It records what these things may mean and how people should respond. A PCD should be updated regularly.

All About Me book

An All About Me book is a book that would contain important information about Nick. It is a way for people to learn about Nick and understand his likes and dislikes, and how to communicate with him.

Sensory Program

Intentionality in Assessment and Recommendations… Problem Arises

Using the theory of pre-intentional communication, people with PID were moved from being a person who could not communicate, to being viewed as a person who could communicate albeit pre-intentionally. Staff training focused on teaching staff about the terms of intentionality. Staff were taught to understand that the pre-intentional communicator was not able to do an expression to deliberately communicate something, the meaning of the message was only based on the ability of staff to interpret what the person was doing. It was stressed that a person would do a behaviour whether staff were present or not.

Using the theory of pre-intentional communication, report recommendations have frequently targeted partners – the partners needed to have a consistent understanding of the behaviours observed (a Personal Communication Dictionary), a program of touch or object cues was needed to help the person understand what was happening and they might, in time, learn to use the objects to express themselves (i.e., become object symbols), and a Chat Book might be developed to encourage staff to sit with the person and use pictures and objects to reflect on past events. The support worker might be told to use short, simple sentences. Depending on the thoughts of the speech pathologist, they might also include a switch program to build cause and effect skills, and for a few people Intensive Interaction might be recommended.

However, these recommendation gave limited detail on how to interact with the person in a real way. Often reports had a cook book feel where all people who were assessed to be a the preintentional passive level had the same set of recommendations written in the same way. There was little detailed exploration of the synergy of impairments and the subsequent accommodations needed to be a meaningful communication partner with the person. Most importantly, reports did not leave readers with a sense of how to communicate with the person now.

Inadvertently, and contrary to the intention of the therapist, the model of intentionality could also risk further alienating the person with PID. Support staff told that the person did not initiate interactions, and their behaviours did not carry intention, carried a potential risk of not looking for initiations and not exploring meaning making in interactions with the person.

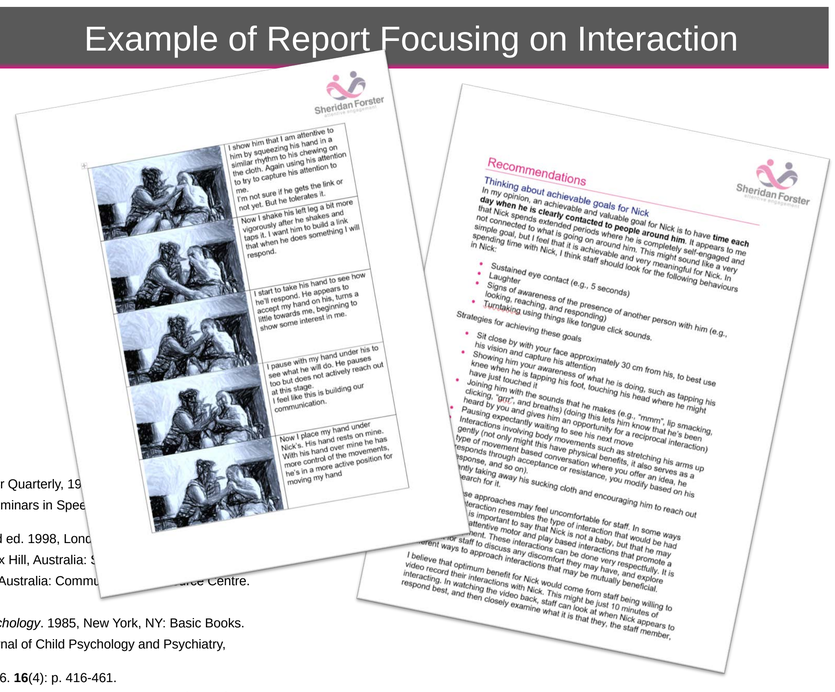
A Shift to Intersubjectivity … Relational Recommendations

Over the same time a problem with the theory of intentionality grew. A number of researchers challenged the theory. The work of Trevarthen, Stern and others have shown that infants at birth demonstrate a form of intention [7, 8, 9]. Infants, from birth, are acting in ways that are responsive (not purely reactive) to the communication partner and are demonstrating the use of behaviours to express distress if the partner deviates from the way they want the partner to be and strategies to provoke the partner back into engagement. Through detailed examination of video recordings of interactions infants have turned the theory of intentionality on its head.

Taking on the changing theories of infant development and the easy availability of video recording equipment, I have been using a model of communication assessment that is not based on the theory of intentionality. Instead the model that I use is based on interaction with the person with a disability and closely examining all of the tiny moves of both the person and their communication partner.

In some ways my assessments start the same. There's a conversation with familiar communication partners; questions about what the person seems to understand, how they express different emotions. I then ask if there are people who seem to interact the best with the person, and what best interaction looks like. If an interaction partner is comfortable and available I may ask to video an interaction of the two people. More often however I will be the interaction partner. I record the interaction. I ask support workers what they thought of it. I will take the video away and watch it. I will chose a segment of the video to focus for the report. I will take still-shots from the video of notable moments, and place these in a written table. Two other columns are made, with the first giving an objective description of the words said, sounds made, or body movements observed. In the third column I will do one of several things: I might describe my interpretation of what I see, propose a hypothesis about the reason for a behaviour, express if I don't understand why the person did something, or describe why I am doing a certain behaviour in the interaction. In describing my behaviour I may give reference to a particular technique or theory. For example, if a person hits their nose I might respond by touching the person's nose to let them know that I saw them touch their nose – which is in-line with theories underlying Video Interaction Guidance [10] and linking to Co-creating Communication with people with congenital deafbliness [11]. I may describe the types of partner behaviours that have been discussed in research to contribute to high quality interactions with people with profound ID. The transcript is exploratory rather than a positivist. It sets a model to the reader of the co-constructed nature of interaction with people with profound ID. The actions that appear to work can then be named in the recommendations with reference back to the evidence of their utility, rather than being recommendations untested.

Example of Report Focusing on Interaction



I show him that I am attentive to him by squeezing his hand in a similar rhythm to his chewing on the cloth. Again using his attention to try to capture his attention to me.
I'm not sure if he gets the link or not yet. But he tolerates it.

Now I shake his left leg a bit more vigorously after he shakes and taps it. I want him to build a link that when he does something I will respond.

I start to take his hand to see how he'll respond. He appears to accept my hand on his, turns a little towards me, beginning to show some interest in me.

I pause with my hand under his to see what he will do. He pauses too but does not actively reach out at this stage.
I feel like this is building our communication.

Now I place my hand under Nick's. His hand rests on mine. With his hand over mine he has more control of the movements, he's in a more active position for moving my hand

Recommendations

Thinking about achievable goals for Nick

In my opinion, an achievable and valuable goal for Nick is to have **time each day when he is clearly contacted to people around him**. It appears to me that Nick spends extended periods where he is completely self-engaged and not connected to what is going on around him. This might sound like a very simple goal, but I feel that it is achievable and very meaningful for Nick. In spending time with Nick, I think staff should look for the following behaviours in Nick:

- Sustained eye contact (e.g., 5 seconds)
- Laughter
- Signs of awareness of the presence of another person with him (e.g., looking, reaching, and responding)
- Turntaking using things like tongue click sounds.

Strategies for achieving these goals

- Sit close by with your face approximately 30 cm from his, to best use his vision and capture his attention
- Showing him your awareness of what he is doing, such as tapping his knee when he is tapping his foot, touching his head where he might have just touched it
- Joining him with the sounds that he makes (e.g., "mmm", lip smacking, clicking, 'grrrr,' and breaths) doing this lets him know that he's been heard by you and gives him an opportunity for a reciprocal interaction)
- Pausing expectantly waiting to see his next move
- Interactions involving body movements such as stretching his arms up gently (not only might this have physical benefits, it also serves as a type of movement based conversation where you offer an idea, he responds through acceptance or resistance, you modify based on his response, and so on).
- Gently taking away his sucking cloth and encouraging him to reach out to search for it.

These approaches may feel uncomfortable for staff. In some ways interaction resembles the type of interaction that would be had It is important to say that Nick is not a baby, but that he may attentive motor and play based interactions that promote a ment. These interactions can be done very respectfully. It is staff to discuss any discomfort they may have, and explore ently how staff to approach interactions that may be mutually beneficial.

I believe that optimum benefit for Nick would come from staff being willing to video record their interactions with Nick. This might be just 10 minutes of interacting. In watching the video back, staff can look at when Nick appears to respond best, and then closely examine what it is that they, the staff member,

Conclusion

The theory of communicative intentionality has been invaluable in making assessment accessible to people with PID. It has lifted them from people who can't communicate, to being people who communicate using means other than speech and symbols. But the theory requires re-assessment – it has paid insufficient attention to interaction and how meaning is co-constructed in small moments and movements. Assessments need to focus on interaction. They need to show how, like a baby has a meaningful interaction with their mother, a person with PID and their support worker can have a mutually satisfying and meaningful engagement – an engagement which can be the core of a good quality of life.

Person images used with permission with pseudonym

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