Assessment of metapragmatic skills in children with typical language development and children with language disorders

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Outline

Pragmatic language impairment: definition and description

Metapragmatic ability: what is it?

Metapragmatic ability: a mediator of intervention?

Method of metapragmatic assessment and implications for further work
Pragmatic Language Impairment

- Pragmatic Language Impairment
- reasoning
- comprehending and producing narratives
- conversational skills
- awareness of the listener’s thoughts, beliefs and intentions
- over-literal comprehension and use of language
Pragmatic Language Impairment

**Specific Language Impairment**
- comprehending and producing narratives
- conversational skills
- structural language impairments

**Autistic Spectrum Disorder**
- reasoning
- comprehending and producing narratives
- conversational skills
- awareness of the listener’s thoughts, beliefs and intentions
- over-literal comprehension and use of language
Pragmatic Language Impairment

“PLI is an intermediate condition between autism and SLI; it shares some of the processing limitations of both groups in social, social cognitive and language domains”. (Adams at al, 2006, p.44)
Metapragmatic awareness (MPA)

- “Metapragmatic awareness is “the ability to talk about a whole speech act or the coordinates of a given speech act [and] develops later and separately from pragmatic competence.” (Savich, 1983).

- “MPA includes that ability to reflect on appropriate [] behaviours, to judge them, and to modify and produce them in hypothetical situations” (Wilkinson & Milosky, 1987).
Metapragmatics and Metalinguistics

- To report and reflect on the rules of conversation necessitates an ability to report speech.
- The ability to report on speech and to mark an explicit boundary between the child’s speech and the reported speech shows developmental trend.
  Hickman (1993)
- Metalinguistic skills are necessary but not sufficient for metapragmatic awareness.
- Metapragmatic skill requires an awareness of the communication act and the communicative situation.
Metalinguistic and Metapragmatic Development

- “Caffi (1994) states that the metapragmatic level differs from the metalinguistic level in that the metapragmatic level is the interface between the linguistic and the extralinguistic”

- “It means being able to relate language and world, by checking the adequacy of utterances with regard to actual contexts”

Metapragmatic Representation

- A metapragmatic representation may include
  - Structured event knowledge (sequential)
  - Social perceptual features (face, gaze, body, voice)
  - Social functional features (pragmatic behaviours)
  - Central motive states (anxiety, happiness, attachment)
  - Predicting the future social outcome
  - Conceptual knowledge of social value (politeness, friendliness, kindness)
Metapragmatic development - Preschool

- Metapragmatic comments and questions have been observed in 3 year olds (Becker, 1988) e.g.
- (1) comments about other people’s pragmatic errors e.g. “I said *hi* to him and he didn’t say *hi* to me.”
- (2) comments and questions about pragmatic rules e.g. “When I say *please* then they say *Yeah, you can have a bite*, and I take it away, and I eat it all up.”;
Sachs et al (1991)

Conversation intrusions to silent and talking addressees in 3-5 year olds.

Metapragmatic judgment about these requests.

Younger children do not alter their responses between silent and talking addresses, whereas older children do.

These responses on the metapragmatic task did not predict children’s behaviour in the actual request task.
Metapragmatic development - Preschool

- Spontaneous vs. elicited
- Implicit vs. explicit
- Contextual support vs. low contextual support
- “These comments appear to exemplify transitional pragmatic behaviours, when children are in the process of internalising pragmatic rules after having heard their parents prompt them over a long period of time” (Becker, 1988, p.465).
“Children’s knowledge about what they should do does not always affect what they actually do...The child’s emerging awareness of appropriate pragmatic behaviour necessarily interacts with cognitive constraints on the child’s ability to inhibit behaviour and hold plans in mind to determine what the child will do in any particular situation” (Sachs et al, 1991 p.370).
Metapragmatic development - Transition

• When does explicit metapragmatic awareness develop?
• What are the cognitive constraints?
  – Typically developing children
  – Clinical populations
Metapragmatic development – school age

- Idiom comprehension in 6- and 9-year-olds (Laval, 2003)
- Promise comprehension in 3-4, 6-7 and 10-11 year olds (Bernicot & Laval, 1996)
- Polite and impolite requests according to degree of familiarity among participants (Baroni & Axia, 1989)
- Politeness, effectiveness and likelihood of direct and indirect requests in 8-12 year olds (Garton & Pratt, 1990).
- Appropriateness of the request made in 5, 7, and 9 year olds (Bernicot, 1991).
Metapragmatic development – school age

• Bernicot & Laval (1996) – metapragmatic judgment of promise fulfillment
  – Up to 6 years – action-related (ie whether the promise was fulfilled)
  – Over 6 years – intention-related (ie speaker’s intentions or listener’s desires)

• Laval (2003) – idiom comprehension and choice justification
  – 6- and 9-year-olds - context affected judgment
  – 9 year olds only - linguistic convention also affected judgment
Metapragmatic development – cognition

- What are the cognitive constraints?
  - Typically developing children
  - Clinical populations
- Context, action and intention
- Language
- TOM
- WM
Bridging the gap

- Paucity of information regarding the development of metapragmatic awareness (MPA) in typically developing and impaired children
- This information would inform therapist decisions about the level of impairment
- Lack of knowledge regarding the potential mediating role of MPA in therapy outcomes
- This information may inform prioritisation decisions / intervention pathways
- Lack of clinical assessments for MPA
Current MPA assessment – Research Tools

- Observation in unstructured conversation
- Performing a pragmatic task
- Story completion
- Rating scales
- Listened to story and made a judgement

- No standardised and systematic metapragmatic awareness (MPA) assessment tool in Britain
Assessment of Metapragmatics

- Video Assessment of Metapragmatics – used as part of the SCIP intervention project
- Video scenarios – In each scenario two children are talking. One of the children breaks a conversational rule and the other child reacts to this.
- Conversational rules include linguistic, paralinguistic and nonverbal rules.
- The children watch each video and are asked a battery of questions relating to the video.
Assessment of Metapragmatics

Question Areas:

- Comprehension check
- The conversational rule that was broken
- The interlocutor’s behaviour
- The interlocutor’s feelings
- The conversational behaviour that should have occurred
- The type of person who breaks the rule
Assessment of Metapragmatics

Example questions:
- What were the children talking about?
- Something went wrong in the talking, what went wrong?
- Why is that wrong?
- The girl felt fed up, what made the girl feel fed up?
- The girl frowned. What made the girl frown?
- What could the boy have done differently?
- The type of person is the boy?
- Why is it important to ...
Research Participants

- 60 children with typical language development
- 60 children with pragmatic language impairment
- 30 children with specific language impairment
- 30 children with autistic spectrum disorder

- Age groups: 6-11 years
Scoring system

Karmiloff-Smith (1986) Level of Representational explicitness

- **A: Non-awareness** No linguistic awareness e.g. “don’t know”, no response, irrelevant/incorrect
- **B: Awareness level 1: Redescription** The child repeats what has been said in the dialogue
- **C: Awareness level 2: Linguistic marker awareness** The child identified the part of the language used in the dialogue which signals the pragmatic behaviour
- **D: Awareness level 3: Pragmatic rule awareness** The child identified the part of the language used in the dialogue which signals the pragmatic behaviour and explicitly stated the pragmatic rule
Research Questions – Normative Study

How does metapragmatic ability develop in school aged children with typically developing language?

How does metapragmatic ability development compare in children with PLI? SLI? ASD?
Research Questions – Intervention Study

- Does metapragmatic ability function as a mediating or moderating variable in speech and language intervention for children with pragmatic language impairment?
- Mediating variable: a variable which is changed to improve the outcome of therapy e.g. metapragmatic awareness
- Moderating variable: a variable that is present at the beginning of therapy which affects the outcome e.g. age, IQ, language skills
Research Questions – Associated Factors

- Language development was the most powerful predictor of metalinguistic awareness (Chaney, 1994).
- What, if any, is the correlation between MPA and:
  - language skills?
  - social cognition (theory of mind)?
  - working memory?
- Between group comparisons?
Research Questions – Behavioural Analysis

• Metapragmatics and pragmatics have been found to develop separately in typically developing children

• What is the relationship between metapragmatic awareness and pragmatic behaviour in a clinical population?

• Relationship to conversational skills

Analysis of Language Impaired Children’s Conversation
(ALICC, Bishop & Adams 1989)
Conversational ability and metapragmatics

- Are the children who have impaired conversation skills the same children who have impaired metapragmatic awareness, or is there a dissociation:
  - if the *same* – an underlying lack of knowledge of pragmatic ‘rules’ stemming from impaired cognitive ability?
  - If *dissociation* – knows the ‘rules’ but cannot monitor, correct, motivate or inhibit own behaviour and unusual conversational abilities
Preliminary data

- **Examples from own behaviour**
  “She was poking at her and she was going back and I don’t do that. It’s called being silly”
  “Then she didn’t really listen. That I sometimes do to Mrs Dalton which I admit.”

- **Examples from other’s behaviour**
  “Not allowed to walk away when someone’s talking to you. My brother does sometimes.”
  “He’s being like Spencer in our class.”
Preliminary data

- **Examples of consequences**
  
  “You won’t get any friends”
  “I bet his family will be really embarrassed”
Preliminary data

• Rules / Principles - not allowed, if, when

“You’re not allowed** to talk loud”

“You’re not allowed to talk about something else **if** your friend’s talking”

“You’re not allowed to walk away **when** someone’s talking”

“When** you’re trying to have a conversation there’s no point in starting a conversation and then starting a new one coz you’re never really gonna get anywhere”
Preliminary data

- Failure to make clarification (c)

0 - That boy just left without speaking to that family

1 - He was going on and on and on about these people and what they do and if they have a dog and the other boy got annoyed

2 - The boy on the left just wouldn’t speak properly and tell him and tell the boy on the right who the people were

3 - He wasn’t answering the other boy wasn’t answering his questions properly
Failure to make clarification (d)

0 - Coz he not like me and the dog not should be in the story

1 - Coz they that boy wanted to speak to his friend Sarah and that one wanted to talk about dogs

2 - Well they need to understand what the other one was talking about

3 - When someone asks you a question you should answer it
Next steps

Mediating and moderating analyses require large amounts of data

Exploratory analysis only

Quantitative and Qualitative data

Potential for contribution to theory as well as therapy for CwPLI
VAMP website

www.psych-sci.manchester.ac.uk/staff/149836

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