Questions directed to children with diverse communicative competencies in paediatric healthcare consultations

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ABSTRACT

Objective: This paper examines question-response sequences, in which clinicians asked questions to child patients who appear to interact using means other than the verbal mode of communication.

Methods: Conversation Analysis methods were used to study questions in 46 paediatric palliative care consultations. These questions were directed towards children who observably used vocalisations and embodied modes of communication (e.g., gaze, gesture and facial expressions) but did not appear to use the verbal mode.

Results: Most questions asked children either about their willingness and preferences for a proposed next activity, or their current feelings, experiences or intentions. Questions involved children by foregrounding their preferences and feelings. These questions occasioned contexts where the child’s vocal or embodied conduct could be treated as a relevant response.

Conclusion: This paper demonstrates how questions are used to involve children in consultations about their own healthcare, and how their views come to be understood by clinicians and family members, even when children interact using means other than the verbal mode of communication.

Practice Implications: Questions can be asked of both children who do and do not verbally communicate. When asking questions, clinicians should be mindful of the modes of communication an individual child uses to consider how the child might meaningfully respond.

1. Introduction

There is widespread agreement that children’s active participation is a priority in paediatric healthcare [1–3]. According to Article 12 of the United Nations (UN) Convention on the Rights of the Child, a child “capable of forming his or her own views” is accorded the right to “express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child.” [4]. Although children’s preferences may vary, many report wanting opportunities to express their views about their care, and for these views to be taken seriously [2,3,5]. In efforts to understand children’s participation, research attention has
overwhelmingly focused on verbal contributions, with other modes of communication less commonly examined [6]. This limits scope to understanding diverse forms of involvement, especially with children who do not communicate verbally, for reasons such as their age or condition. A notable exception is close analysis of therapeutic interactions demonstrating how children’s diverse modes of expression, such as crying and screaming, can be treated as communicatively relevant by other participants [7]. There have been calls to expand understandings of children’s participation to include the range of ways that children with different capacities can express their views and be heard [8-11]. This study responds to this call by focusing on interaction with children who do not appear to use the verbal mode of communication.

Many studies of children’s participation in medical consultations have focused on verbal contributions [6,12]. Because paediatric healthcare is characterised by a three-party dynamic typically constituted of child patients, adult family caregivers and adult clinicians, it is readily possible for the child to be talked about rather than verbally interacted with [13-15]. In this dynamic, research shows how questions can be designed to include or exclude the child [16-19]. For example, there is evidence that clinicians calibrate questions to their assessment of the competence of verbal children, and so are more likely to ask questions of older children, and to ask children questions on particular topics, such as social, preparatory and experience questions [17,20]. When a clinician explicitly directs a question to a verbal child, there is negotiation between the child and parent as to who will answer the question [14,16,21]. In addition to questions asked of children who use the verbal mode of communication, there is some evidence that questions are also asked of children who do not seem to use this mode. A specific type of questioning known as ‘tag questions,’ asked by ‘tagging’ a question to the end of a declarative statement, transform this statement into something to be confirmed by the recipient (e.g., “you’ve grown a lot recently, haven’t you” [22]. Tag questions are considered unlike other types of questions because they make possible, but do not require, a response [22-24]. Although there is evidence that these types of questions are used with children who do not appear to communicate verbally [22], it remains unclear whether other types of question can also be asked of these children.

2. Method

This study examines the involvement of child patients in paediatric palliative care consultations. Palliative care is provided to children with diverse conditions, ages and cognitive function, which means many children with life limiting conditions may not communicate verbally [22,25]. This study focuses on children who use embodied (e.g., gaze, gesture and facial expressions) [26] and vocal (e.g., crying, laughing) modes of communication but are not observed to use the verbal mode of communication within consultations.

2.1. Participants and data

Consultations involving family and clinicians were video-recorded in three palliative care services in Australia. A smaller group of children were observed to communicate using verbal, vocal and embodied modes of communication in recorded consultations (n = 7, 18.4%), while the majority were observed to use vocal and embodied modes (n = 31, 81.6%). The 31 children who appeared to interact using means other than the verbal mode of communication were aged from infancy to 17 years old. The primary diagnoses for most of these children were neurological conditions (n = 24, 77.4%), and the second most common primary diagnoses were metabolic conditions (n = 2, 6.5%).

In total, 83 consultations were recorded, with 51 families and 56 clinicians participating. Analysis focused on 46 consultations involving child patients who communicated using vocal and embodied modes, a total of 31.0 h of data. Recordings were made in four consultation contexts: face-to-face outpatient (n = 19), telehealth (n = 6), inpatient (n = 13), and home visit (n = 8).

2.2. Analysis

The collected extracts were transcribed and analysed using Conversation Analysis methods [27-29], with the transcripts reviewed by a second author to ensure accuracy. Conversation Analysis involves close observation and analysis of recorded social interactions to develop an in-depth understanding of practices that participants use to interact with each other. The validity of the researchers’ analysis is established by examining how participants themselves interpret and respond to the actions of their interactants [30]. Conversation Analysis uses a detailed transcription system, which allowed the range of ways that children participated (such as gesturally, posturally, haptically and vocally) to be represented in detail. The Appendix provides a list of transcription symbols, which capture linguistic, paralinguistic and embodied conduct.

The analysis focused on questions used by clinicians, directed to children who appear to interact using means other than the verbal mode of communication in the recordings. The analysis reported here focuses on one linguistic format, simple inverted interrogatives. These were chosen for analysis because they were the most frequent format for questions in the recorded data that were directed to children who appeared to always interact using means other than the verbal mode of communication. In a simple inverted interrogative, the subject follows the auxiliary verb or copula (e.g., “are you happy?”). When used as questions, these utterances are typically answered with a confirming or disconfirming response [31-34]. A collection was made of all interrogatives that met these criteria, within the context of the talk before and after the interrogative (58 extracts). If there were immediate repetitions or near repetitions of the same interrogative, these were considered part of the same extract.

3. Analysis

Most questions asked by clinicians to children and designed as simple inverted interrogatives related to the child’s willingness to be involved in a proposed next activity or to their current feelings and experiences. Questions about the child’s feelings (physical or emotional), experiences or intentions occurred in 28 extracts and were usually based on something observable about the child (e.g., “Is it sore, sweetie?” ‘Did you hear us Hannah?’). Questions about the child’s willingness or preferences related to activities that the clinician proposed doing with the child, and were found in 21 extracts (e.g., ‘Will I get my guitar?’; ‘Can I have a look at your hands sweetheart?’). Only two questions did not relate to the immediate context in the consultation (e.g., ‘Do you still have your beautiful puppy dog?’). The remaining seven questions focused on the child’s immediate context, with a range of more idiosyncratic functions, mostly involving playful interaction with the child.

Across the collection, there were no instances where a child patient gave an ostensibly clear, immediate and observable confirming or disconfirming response (e.g., through a head nod or shake). The questions nevertheless contributed in important ways to involving children in the consultations. The analysis focuses on the two most common uses of

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Table 1

<table>
<thead>
<tr>
<th>Child participant age groups.</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infancy (Under 12 months)</td>
<td>3 (9.7)</td>
</tr>
<tr>
<td>Toddlerhood (12-35 months)</td>
<td>3 (9.7)</td>
</tr>
<tr>
<td>Early childhood (36 months to 4 years 11 months)</td>
<td>6 (19.4)</td>
</tr>
<tr>
<td>Middle childhood (5 years to 11 years 11 months)</td>
<td>9 (29.0)</td>
</tr>
<tr>
<td>Adolescence (12 years to 17 years 11 months)</td>
<td>10 (32.3)</td>
</tr>
</tbody>
</table>
simple interrogatives in the data: to ask about the child’s willingness or preferences to be involved in a proposed next activity, and to ask about the child’s current feelings, experiences and intentions.

3.1. Asking about a child’s willingness and preferences for a proposed activity

Clinicians used simple inverted interrogatives to ask children about their willingness to be involved in an activity that the clinician proposed to do with the child. Although children did not ostensibly respond immediately to any of these activity proposal interrogatives with explicit agreement or disagreement, clinicians and family members observed and responded to the child’s ongoing displays of willingness – or unwillingness – to be involved in the activity. Although directed to the child, these questions made the clinician’s intentions available to everyone present, which could enable multiple parties to contribute towards engaging the child in joint activity.

The focal question in Extract 1 occurs during Mum’s description of the child’s preference for her support worker (Eleanor)’s company and assistance with her daily routine (Eleanor is present at the consultation). The nurse, sitting opposite to the child and Eleanor, asks whether the child wants help getting into her chair. While the nurse initially assists the child in moving towards the chair, she subsequently stops, after the child displays a preference for Eleanor’s help.

Towards the end of Mum’s description of the child’s preference for her support worker, the child begins to rise from the edge of the bed (line 15). The support worker remains seated next to the child, but positions her left hand to support the child as she rises, and says softly ‘Keep going.’ (lines 15 and 20, Figure 1.1). Observing this, the nurse asks ‘We should pop you in your chair? Do you want some help getting into your chair?’ (lines 21–22), and moves towards the child to support her other arm (line 26, Figure 1.2). As she does this, the child tilts her head dramatically upwards towards the support worker, away from the nurse (line 27, Figure 1.3). The support worker moves in front of the child, taking both of her hands as the child steps closer to her chair (lines 27–28). The nurse releases the child’s arm (line 31, Figure 1.4), and moves several metres away from the child, to stand at the side of the room (line 36), with her arms crossed (line 38). While this unfolds, Mum resumes her description of situations where the child prefers the support worker’s assistance to that of her parents.

The nurse’s questions suggest to the child that she might be assisted in moving to her chair, and the nurse displays an openness to helping (lines 21–22). The absence of a clear immediate display of agreement or disagreement by the child is initially treated as acquiescence, with the clinician asking about the child’s willingness or preferences for a proposed next activity. The absence of any ostensible display by the children of their willingness or unwillingness to be involved (until line 27 in Extract 1), and throughout Extract 2), the progression of an activity by adults treated the child’s nonresponsiveness as assent. Nevertheless, while continuing the activities clinicians could observe whether the child subsequently acted in ways that made their preferences more apparent (as in the child turning her head towards her support worker in Extract 1). Beyond addressing the child, the questions additionally made the clinician’s projected next actions explicit, which contributed to coordinating the actions of other adults in involving the child in the activity (as with Mum turning the child’s head in Extract 2).

3.2. Questions about the child’s current feelings, experiences or intentions

The second major use by clinicians of simple inverted interrogatives was to ask children about their current feelings or experiences, or the intention behind their observable actions. These questions were used to foreground and suggest an interpretation of the child’s behaviour. Nevertheless, by directing these questions to the child, they are treated as the ultimate knower of their own feelings, experiences or intentions. These questions frequently transformed previous discussions between adults about the child, incorporating the child into the conversation as an active participant. For example, in Extract 3, a clinician asks the child a question during discussion between the adult participants of the possible meaning of the child’s facial expression as a display of happiness. In addition to making the child an active participant, this question resolves the adults’ discussion by appealing to the child’s knowledge of his own feelings.

In Extract 3, the adult participants discuss the meaning of the child’s facial expressions. Mum characterises the child’s current expression as ‘potentially his happy face’ (line 1, Figure 3.1). Dad offers an alternative explanation, that the expression means ‘I got something in my eye’ (lines 7–9), and Mum explains her understanding of the difference between the child’s ‘happy face’ and ‘discomfort face’ (lines 11–19, Figure 3.2). Mum and Dad each present their interpretations as based on their detailed observations of their son over time, although Mum describes their child’s emotional expression as something that has been ‘hard to figure out’ (line 21).

One doctor (Dc2) reframes Mum’s description (line 28), and then addresses the child directly, asking ‘Are you happy?’ (line 32), while
Extract 1. “Do you want some help getting into your chair?” [S1/F20/E01/2020-02-24/1:45:35] Age: 14:8 Primary diagnosis: Neurological condition

01 MUM: Even like um; if Eleanor starts at 5 given; (0.3) and we’re up at five; she’ll just stay asleep. So then Eleanor =
02
03 NUR: [Yeah;
04
05 MUM: = walks through an it’s +like [yes]; let’s go.
06 NUR: [“Mmm:...“
07 chi: +points diagonally upwards-->
08 MUM: I’m really.
09 SUP: [huh;uh;
10 chi: touches sup’s shoulder with other hand
11 MUM: >Even if< kid goes in.*
12 chi: -->
13 (0.7)
14 MUM: "Guide."*
15 sup: *holds child’s forearm-->
16 (0.8)
17 NUR: Mn that’s *not* very n*i*ce.
18 MUM: [It’s noit];
19 NUR: [“hm”“mm.”
20 SUP: [#Keep going;]
21 sup: -->*pulls child’s forearm down>*raises c’e elbow-->
22 chi: *starts to stand-->
23 #Fig1.1

24 (0.6)
25 NUR: he[heh;heh].
26 NUR: [mmh].
27 (0.2)
28 SUP: *“Keep *going;.’
29 NUR: [We should pop you in your chair? &; do you want
30 sup: --?> continues supporting and lifting child’s elbow-->
31 nur: *stands-->
32 (some help getting into your chair?)
33 MUM: [Yeah;h.
34 (0.6)
35 MUM: |
36 NUR: [She’s a girl!]
37 sup: *holds child’s right elbow-->
38 #Fig1.2
39 (0.8)*# (1.3) * (1.5)
40 sup: *stands* *moves to stand in front of child-->
41 chi: *tilts head towards sup-->
42 #Fig1.3
43 (1.4)
44 sup: *holds both child’s hands; walks backwards towards chair-->
45 chi: -child walks towards chair; left arm supported by sup
46 MUM: [mmh;mmh;]
47 (0.7)
48 MUM: Ah know; she won’t let us (0.2) brush her hair; only
49 nur: *releases child’s right elbow-->
50 #Fig1.4
51 (0.4)
52 Eleanor & came=hh h although *Timmy ca:in,
53 nur: *smiles slightly*
54 sup: *begins to turn child-->
55 (0.6)
56 NUR: Yeah;h.
57 MUM: (Her- youngest bro);
58 NUR: [Mmm;]
59 nur: *walks towards side of room-->
60 sup: *lowers child into chair-->
61 (0.2)
62 MUM: Can brush her hair?: brush her hair? hain;
63 nur: -->*wheels arms-->
64 sup: --->

rubbing the child on the shoulder. The child does not change his behaviour after the doctor’s question, and Mum immediately responds ‘That’s good’ (line 33). Mum’s response does not make sense as an answer to the doctor’s question, and instead treats the child as having given a positive answer (i.e., answering that he is happy), which she is assesses as being ‘good’. Mum continues to address the child directly, asking him two additional questions, and then moves to a new topic of discussion.

With the child’s emotions being characterised as difficult for others to discern, the doctor’s question brings the child himself into the conversation as an active participant, and the one selected to clarify whether he is happy. The earlier conversation provides a context where no response can be treated as confirming that the child is happy, as the other participants have already established this explanation is most likely. The clinician’s question also begins a longer spate of direct engagement with the child as the recipient of the talk, as Mum continues to address him. Appealing to the child brings the speculative talk about their child’s current feelings, experiences or intentions. These questions brought the children into the adult conversation, treating them as active participants with greater access to, and rights to determine, the meaning of their observable behaviour. The nurse managing this difficulty by addressing her talk to the child, rather than to Mum, and modifying her initial contradiction of Mum’s claim. While the nurse first puts forward ‘being quiet’ as an alternative to being ‘cranky’ (lines 10 and 13), she subsequently reframes ‘being quiet’ as a behaviour that could be enacting a ‘cranky’ attitude (‘Or is that how you do your cranky’) (line 15).

Extract 3-Extract 4 show clinicians using questions to engage with the child directly, asking whether observations of their behaviour have been correctly interpreted as displaying particular feelings, experiences or intentions. These questions brought the children into the adult conversation, treating them as active participants with greater access to, and rights to determine, the meaning of their observable behaviour. The involvement of other participants played an important role, however, in determining whether the child was treated as having given an answer to the question (as in Extract 3), or whether the conversation was progressed without pursuing an answer from the child (as in Extract 4).

4. Discussion and conclusion

4.1. Discussion

This paper has identified two recurrent uses of simple inverted interrogatives directed to children who were observed to communicate using vocal and embodied modes: 1) asking questions about the child’s willingness and preferences for a proposed activity; and 2) asking questions about the child’s current feelings, experiences or intentions. Both uses treat the child as “capable of forming his or her own views” and having a say on matters that affect them [4]. This builds on previous findings that tag questions can be directed to children who use diverse modes of communication in relation to the child’s own knowledge or

01 MUM: An it’s hard to tell...cause sometimes, [0.6] like this
*holds hand towards chi, palm up—>
[Fig.3.1]
  chil: >>>corners of mouth outstretched, mouth slightly open, eyes scruched—>
  potentially his happy face—>
02 DC2: [Yes]h.
03 MUM: [And also his;] [0.3] I
deli: touches child’s shoulder
chi: "slightly moves corners of mouth—>
mum: "—>stands
04 think it’s more the happy face from—>
05 MUM: [I got something in my eye,]
06 DAD: khrhmr "yeah; he— sometimes he gets something in his eyes;
mum: "both hands on child’s knees, leans over child—>
07 an 'e' knows ‘I can’t get it. ah—>
08 DCI: [Mhm.
chi: "slightly drops corners of mouth, holds expression—>
09 MUM: 'Yeah; that was a hap—'I think—()— the difference between
‘points to child’s forehead’
10 a happy [face an ar;]
dci: "rubes child’s shoulder—>
11 DAD: [heh;]
12 (0.8)
13 MUM: An ar;—>
14 (0.7)
15 DC2: [hrs;]
16 MUM: [Discourse] "face is [the forehead would be more]—" "
17 DC1: [Khm khmr khmr; kmr =
mum: "pinches child’s forehead with two fingers"
[Fig.3.2]
18 DC1: = kmr
19 MUM: "khkr; it’s been hard [to i.] figure out* these things, i
 "--------steps backwards---------------"
20 DC2: [More—>
21 MUM: [hrs;] "he a[s]ort ef;"
22 DC2: [LA:th like scru:] ch— like more =
23 MUM: [Like fu—= mum: "pinching motion in front of own forehead"
24 DC2: = [like wrwrwrwi; but that was like, that] was just =
25 MUM: [y e a h i] his brow would be furrowed,]
del: "rubes child’s shoulder—>
26 DC2: = a [smile] with the mouth.
27 MUM: [ Whereas that was,] like a; yes: h.
28 DC2: [‘Yes’ h. ’
29 dc2: —>a
30 (0.2)
31 DC2: "ARE YOU HAPPY?
&rubes child’s shoulder—>
32 MUM: ‘That’s goo[di]
33 DC1: [Khm.]
34 (0.5)
35 MUM: Did I say something funny?
36 Y
37 MUM: I don’t think I did."
38 MUM: —>a
39 (2.0)
40 MUM: Everything’s funny hoy?
41 (0.2)
42 DC2: hhhehehehehe
43 MUM: "[What else can I tell you;]
"looks down towards lap—->
experience [22], showing how questions which do typically require a response are also used with children who appear to interact using means other than the verbal mode of communication.

The two recurrent uses of simple inverted interrogatives correspond with three facets of relationships that are omnirelevant in social interaction: knowledge, power, and emotion [36]. Questions about a child’s willingness and preferences treat the child as having rights to determine action. When these questions are followed by an opportunity for the child to respond, a child’s vocal and embodied conduct can be treated as a response to the question, and their willingness or preference accommodated accordingly. The clinicians’ actions provide tangible evidence of one way that children who do not communicate verbally can be afforded opportunities to express views in matters that affect them, and of their views being given ‘due weight’ by adults [4]. With most research focusing on verbal contributions of children in healthcare settings [6], this paper demonstrates the importance of considering the range of communicative modes children use to express their views.

Use of child-directed questions transforms interaction about the child to interaction that involves the child, and offers the child possible ways of expressing their experience [43]. While children did not necessarily respond to these questions, by asking questions an adult can demonstrate an attentiveness to the child’s feelings as being something that only the child can directly experience.

The use of these questions to accomplish three omnirelevant facets of relationships highlights how children can be treated as competent parties to their interactions [44–47]. As has been found in other settings where participants have differing communicative resources [39,48–50], understandings of the children’s responses were grounded in the interactional context, with the potential for an answer to be inferred from the child’s vocal and embodied conduct, sequenced after the clinician’s question and in the context of family members’ surrounding talk. Because of their contextual grounding, these types of questions may be particularly suited for children who appear to interact using means other than the verbal mode of communication, and further comparative analysis with questions directed to children who use the verbal mode of communication is needed to determine this.

4.2. Conclusion

The type of questions examined for this study are specifiable ways clinicians directly incorporate into consultations children who appear to interact using means other than the verbal mode of communication. These findings highlight ways children’s rights to participate actively in their own care can be accomplished. For children who exclusively use communication modes other than verbalisation, interactional settings that give prominence to the child’s feelings and preferences support the child to be an active participant.

4.3. Practice Implications

Children of diverse ages and communicative capabilities can be asked questions by clinicians, with mindfulness as to the modes of communication that the child uses. Questions about the child’s current feelings, experiences or intentions, and about the child’s willingness and preferences for a proposed activity may be particularly well-suited to children who are not expected to give a verbal answer, because this creates scope to treat diverse modes of conduct (e.g. gaze, facial
expressions, posture) as a response. Family members can be uniquely positioned to help clinicians understand how children respond to their questions.

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**CRediT authorship contribution statement**

**Fleming Sara:** Investigation, Writing – review & editing.  
**Danby Susan:** Funding acquisition, Supervision, Writing – review & editing.  
**Bluebond-Langner Myra:** Funding acquisition, Writing – review & editing.  
**Langner Richard:** Conceptualization, Writing – review & editing.  
**Ekberg Katie:** Data curation, Project administration, Writing – review & editing.  
**Yates Patsy:** Funding acquisition, Writing – review & editing.  
**Bradford Natalie:** Funding acquisition, Writing – review & editing.  
**Watts Janet:** Conceptualization, Data curation, Formal analysis, Methodology, Project administration, Visualization, Writing – original draft.  
**Ekberg Stuart:** Funding acquisition, Supervision, Validation, Visualization, Writing – review & editing.  
**Delaney Angela:** Investigation, Writing – review & editing.  
**Herbert Anthony:** Funding acquisition, Investigation, Writing – review & editing.

**Declaration of Competing Interest**

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:  
Author AH was a participant in the study.

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**Appendix. : Transcription conventions**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>wor-</td>
<td>Hyphens mark a cut-off of the preceding sound.</td>
</tr>
<tr>
<td>[</td>
<td>Left bracket indicates overlap onset.</td>
</tr>
<tr>
<td>]</td>
<td>Right bracket indicates where the overlapped speech ends.</td>
</tr>
<tr>
<td>=</td>
<td>Continuation of the same turn.</td>
</tr>
<tr>
<td>{0.3}</td>
<td>Number in second and tenths of a second indicates the length of a silence.</td>
</tr>
<tr>
<td>{.}</td>
<td>Brief silence (less than 0.2 seconds) within or between utterances.</td>
</tr>
<tr>
<td>wo::rd</td>
<td>Colons represent a sound stretch of immediately prior sound.</td>
</tr>
<tr>
<td>word</td>
<td>Underline indicates emphasis.</td>
</tr>
<tr>
<td>↑</td>
<td>Shifts into high pitch.</td>
</tr>
<tr>
<td>↓</td>
<td>Shifts into low pitch.</td>
</tr>
<tr>
<td>WORD</td>
<td>Load talk is indicated by upper case.</td>
</tr>
<tr>
<td>&quot;word&quot;</td>
<td>Quieter talk is placed between degree signs.</td>
</tr>
<tr>
<td>$word$</td>
<td>Hashes indicate creaky voice.</td>
</tr>
<tr>
<td>$word$</td>
<td>Pound signs indicate smile voice.</td>
</tr>
<tr>
<td>word?</td>
<td>A question mark indicates a substantial rise to mid/mid-high end of the speaker’s range.</td>
</tr>
<tr>
<td>word,</td>
<td>A comma indicates a continuing, slightly rising intonation.</td>
</tr>
<tr>
<td>word;</td>
<td>A semicolon indicates a continuing, slightly falling intonation.</td>
</tr>
<tr>
<td>word!</td>
<td>An exclamation mark indicates an animated tone.</td>
</tr>
<tr>
<td>&gt;word&lt;</td>
<td>Talk is speeded up.</td>
</tr>
<tr>
<td>&lt;word&gt;</td>
<td>Talk is slowed down.</td>
</tr>
<tr>
<td>.hhh</td>
<td>A dot prior to h indicates an in-breath.</td>
</tr>
<tr>
<td>hhh</td>
<td>Indicates an out-breath.</td>
</tr>
<tr>
<td>{}</td>
<td>The talk is not audible.</td>
</tr>
<tr>
<td>{{word}}</td>
<td>Annotation of non-verbal activity.</td>
</tr>
</tbody>
</table>

**Descriptions of embodied actions between two identical symbols, as follows**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Child action.</td>
</tr>
<tr>
<td>*</td>
<td>Parent/guardian or support worker action.</td>
</tr>
<tr>
<td>ψ</td>
<td>Doctor action.</td>
</tr>
<tr>
<td>Δ</td>
<td>Nurse or Doctor 2 action.</td>
</tr>
</tbody>
</table>

**Conventions for embodied actions**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-&gt;</td>
<td>The action continues from a previous line.</td>
</tr>
<tr>
<td>-</td>
<td>The action described continues across subsequent lines.</td>
</tr>
<tr>
<td>&gt;&gt;</td>
<td>The action begins before the fragment’s beginning.</td>
</tr>
<tr>
<td>-&gt;&gt;&gt;</td>
<td>The action continues after the fragment’s end.</td>
</tr>
<tr>
<td>——</td>
<td>Duration of action.</td>
</tr>
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References


