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Teacher responses to toddler crying in the New Zealand outdoor environment



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ABSTRACT

This paper examines crying episodes from a New Zealand study that investigated pedagogical interactions in the outdoor environment between early childhood teachers and children aged 2-5 years. Specific focus is given to the ways in which teachers respond to children's crying through the use of directives that offer verbal, rather than physical, support. Directives are identified as both verbal and embodied communicative practices (Cekaite, 2010) and responses to directives can demonstrate compliance or rejection (Goodwin, 2006). In the research presented here, verbal directives are used by the early childhood teacher in response to a two-year-old child's crying to offer verbal strategies regarding moving through the rough forest terrain. Physical positioning of the child's body is minimal, and avoidance of physical contact is observable. Verbal directives as responses to the child's crying rather than tactile responses such as soothing or embodied assistance prompts the child to independently adjust her body through self-directed and autonomous actions, and so competently move through the rough terrain (virtually) unassisted. It will be argued that teachers' responses to children's crying through verbal directives afford participation frameworks that support children's empowerment and independence, demonstrating teacher's skilful pragmatic and pedagogical strategies to effectively implement their early childhood curriculum.

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1. Introduction: crying and crying responses as an interactional achievement

The interactional pragmatic implication of crying is acknowledged as being a demonstration of emotional upset where an immediate response is needed by those present (Danby and Baker, 1998; Harris, 2006) where cries are attended to in institutionally bound ways (Ruusuvuori, 2013). Responses to children's crying can be supplied by both adults and peers, where the type of responses issued will depend on the cause of the crying in context. In contrast, teacher responses to a child's crying caused by physical discomfort can involve soothing and embracing with the use of directives in an embodied verbal and gestural act to try to alleviate the crying (Holm Kvist, 2020). The context of crying episodes is important when considering the response that the crying receives. For example, when children's crying emerges from a conflict situation, teachers will often respond with comfort to the wronged child whilst directing the wrong-doer to apologise, sometimes encouraging the children to hug each other as a reestablishment of a harmonious setting (Björk-Willén, 2018).

In early childhood education, children's crying is often responded to in an immediate way by early childhood teachers who offer opportunity for feelings talk and comforting touch in their responses (Bateman, 2015; Cekaite and Holm Kvist, 2017) as

well as launching *problem-remedy* sequences (Kidwell, 2013), supporting children's holistic wellbeing in situ. Responses to children's crying episodes are also treated as an opportunity for impromptu moral and socialisation lessons, where perpetrators in conflicts are made to apologise (Burdelski, 2013; Björk-Willén, 2018; Cekaite, 2012) and children are held accountable for inappropriate actions (Sterponi, 2009). Children's whining is found to be responded to through collaborative problem solving between the adult and child, in ways that do not give "overt attention to the emotional display" (Butler and Edwards, 2018, p. 57). The joint problem solving is initiated by the adult and marks an inverted (positive) stance to the child's negative stance, therefore providing a *stance inversion* which works to restore a positive balance in the situation (Butler and Edwards, 2018).

Within this early childhood literature, adult responses to crying have predominantly demonstrated the use of haptic touch in parallel with verbal soothing and comforting (for example, Cekaite and Holm Kvist (2017); see also Takada and Cekaite and Burdelski, this issue). The research presented and explored here offers a somewhat alternative adult response to a child's cries. In the excerpts below, the early childhood teacher observably resists touching the child in such soothing ways, and when touch is secured it is fleeting and minimal. Instead, verbal encouragement is given to the child to overcome her problem independent of adult assistance. This adult response to a child's crying supports the child's autonomy in their problem-solving skills and, as such, actively implements these intentions set out in the national curriculum, *Te Whāriki*. Opportunities for developing pragmatic competence in verbalising the nature of the distress can also be observed (see Excerpts 1 and 2, where the teacher offers a word that the child later uses to communicate her problem and request assistance).

1.1. Directives in adult-child interaction

Adults have been observed using directives as responses to a child's cries in prior research where soothing and comforting touch have also been used as a way to try to calm the child and cease the crying (Cekaite and Holm Kvist, 2017). The ways in which adults respond to children's crying as undesirable has been attributed to the institutional emotional socialisation of crying (Ahn 2016; Holm Kvist, 2018). In family interactions, prior research shows the various ways in which directives in adult—child interactions are used by adults to request and demand children to do everyday household tasks (Goodwin and Cekaite, 2018) and direct children's attention to features in teaching and learning episodes (Marin and Bang, 2018). Directives are often used by parents towards children during family mealtimes (Curl and Drew, 2008; Craven and Potter, 2010) where they are demonstrative of the parents' high or low entitlement to give an instruction to a child, or "right to control the actions of the recipient" (Kent, 2012, p. 712). A directive that shows high entitlement to control the recipient also shows the low contingency of the recipient where they have limited next action choices in their ability and willingness to perform the directed act. Likewise, a directive that shows low entitlement to control the recipient's action will reflect the high contingency to the recipient (Kent, 2012). Parent's giving a directive to a child to do a specific action often shows that the child's next action is limited to having to perform the directed task, demonstrating the adult's high entitlement to give directives to children (Craven and Potter, 2010).

Adult family members have been found to use directives to request a specific action from a child, engaging both parties in the salient activity of morality as children respond by attempting to negotiate a way of avoiding a task (Goodwin and Cekaite, 2018). Directives were often found to be accompanied by controlling touch as an essential component to embodied sequences in a choreography of multimodal activity, observed in haptic actions such as *shepherding* (Cekaite, 2010). The intertwining of verbal and haptic directives prompts the child to respond in compliant ways and shift their trajectory to align with the adult's preference, although a gradual shift in the overlap of physical and verbal directives and controlling touch is evident as children grow older:

Across the families examined, the prevalent organization of directive trajectories from initially verbal to later haptic action shows that parents work and aim to direct and control the child's actions by using predominantly verbal methods. Such verbal directives position the child as responsible and trustworthy, that is to say, as someone who is able to bring about the requested action by himself/herself

(Goodwin and Cekaite, 2018, p. 71, p. 71)

As such, a directive in the shape of a verbal action positions the child as competent and capable of achieving the allocated task independently, whereas a verbal directive with varying positionings of control touch mark the child as needing adult help in performing an action. The combination of a verbal directive and embodied haptic touch provides explicit guidance around what is required, limiting opportunity for noncompliance from a child recipient, where the move to physically shape the child's action might be seen as an upgrade to the directive (Craven and Potter, 2010). Through shaping directives in such a way, the recipient has constraints on how they can respond in their next action, as "contingencies are not alluded to ... [and] the design of the directive does not orient to non-compliance as a response action" (Craven and Potter, 2010, p. 426). In other words, the intertwining of a verbal directive and physical contortion of a recipient's body - for example performed by an adult on a child recipient - leaves little room in the child's response to do anything other than comply. In teacher-child interactions, teachers have to notice and recognise moments in everyday practice where the performance of such embodied directives are an effective pedagogical tool, for that child and in that context. Such skills in observation and implementation are embedded in teacher practice, in what has been otherwise termed *professional vision* (Goodwin, 1994).

1.2. Embodied professional vision

Embodiment and prosody are key elements to the deployment of directives (Goodwin and Goodwin, 2000). Gesture and embodied actions are key in everyday accomplishments between people and within professional working environments "which consists of socially organized ways of seeing and understanding events that are answerable to the distinctive interests of a particular social group" (Goodwin, 1994, p.606). The use of gesture in accomplishing specific tasks is prominent in workplace interactions between professionals. Heath (Heath et al., 2017, p. 306) discusses the disciplinary vision necessary by members in operating theatres where "the ways in which articulation of the hand and the body in touching, grasping, manipulating and exchanging objects is oriented to and dependent upon the emerging bodily conduct and comportment of co-participants". Within each professional environment, members have an institutionalized way to look at the body.

For teachers, professional vision (Goodwin, 1994) — what the teacher sees and orients to as significant — is orchestrated around curriculum implementation and the wellbeing of the child. Teachers' primary concern is dissemination of knowledge — transferring what they know to the pupils they are teaching. In early childhood education, however, pedagogical practices differ in that teachers are given the task to guide children to discover their own working theories of the world. In New Zealand, early childhood teachers are encouraged to develop a professional vision where they *notice*, *recognise and respond* to teachable moments in their everyday practice – how this is achieved is somewhat illusive though. New Zealand curriculum guidance emphasises the importance of gesture coupled with verbal pedagogical strategies where "Adults should recognise children's non-verbal communication styles ... [and] monitor their own body language so that they interact appropriately with children, using expressive actions ... to aid communication" (Ministry of Education [MoE], 1996; 2017: p. 73). A pedagogical synthesis of gesture and verbal resources can offer physical scaffolding for young children (Bateman, 2021).

Pragmatically, we see that adults often use a choreography of verbal and physical actions in response to helping children, particularly when the child is showing distress through crying. Where directives are used in response to crying, these are shaped in ways that direct the child to stop crying and are often accompanied with soothing gesture (Cekaite and Holm Kvist, 2017). Adult directives to child recipients are often accompanied by physical touch, such as shepherding, which can demonstrate an adults' high entitlement or control over a child's actions (Kent, 2012). This article will now demonstrate how adults might also respond to a child's cries by resisting touch, and instead using verbal directives. In alignment with Professional Vision, it is argued here that such responses to a child's cries work to guide the child to solve the problem she is facing independently, and so offers a pragmatic approach to implementation of the national curriculum.

2. Methodology

The interactions transcribed and analysed here are from a one-year (2017) early childhood education project in New Zealand titled 'Learning in the outdoor environment' where the author was the Principal Investigator. The project aimed to investigate pedagogical interactions between early childhood teachers and children aged 2–5 years in the natural outdoor forest environment. An important feature of the footage here is that the children and teachers are walking in a large outdoor woodland space.

The total number of participants included sixty-six children aged between 2 $\frac{1}{2}$ – 5 years, and three teachers; during filming only a small number of this cohort of children were present along with three teachers. Ethical consent for the project was approved by the University of Waikato ethics committee. Consent was then gained from the Director of the early childhood centre, the teachers, the parents of the children and then the children. Teachers were video recorded an hour at a time whilst wearing a Bluetooth wireless microphone during their regular outdoor excursions, resulting in 6 h of footage in total. Once the video and audio were collected, the teachers were asked to identify moments of pedagogical significance that might have occurred during the filming, and these identified moments were then transcribed by the researcher using a conversation analysis approach (see Appendix for transcription conventions used in this paper). During the transcription and analysis stage, the researcher identified inductive themes in the teacher-identified moments, which were then presented and discussed with the early childhood teachers where they were invited to give their analytical thoughts and observations of the data. This process worked well to reveal a better understanding of the pedagogical interactions discussed.

This article reports on one extended interaction that entails multiple crying episodes by a two-year-old child as the group encounters a changing terrain, and the responses of one of the teachers. This specific episode was identified by the toddler teacher as significant, as it was an extended episode that unfolded over the duration of 45 min and was reflected upon in the subsequent teacher-researcher analysis meeting as a 'pivotal' episode for that child in terms of her building resilience. The teacher made the following comment about this particular episode:

"I've had her since she was 6 months old bear in mind. So, I know her very well and I know that I can push, and I know when to pull back and I know when actually, you're going to do this. So, I know how to approach it"

(Teacher reflection meeting: Nov 28th 2017: 37 mins 36 secs)

This single case analysis (Sacks, 1992; Schegloff, 1987) affords an investigation into the progression of the crying embedded within the activity of walking through the forest. As the child was two years old, they are considered as within the 'toddler' age group, with attributing characteristics such as recently having learned to walk and talk, with some children having more developed walking and talking skills then others. The transcriptions (see Appendix) that are presented indicate the real time from the start of the walk, so that the reader can observe how the interaction unfolded.

3. Results: data and analysis

3.1. Question-answer sequences in response to crying

Excerpt 1: 11 min 06 s into the walk

Two early childhood teachers (TCH and TCH2) and toddler children are walking in a line through uneven terrain. One of the two-year-old children, Emma (EMA) displays her first cry in the outdoor situation. In the following transcription, we see how Emma's initial cry is responded to by the teacher in a query or *problem enquiry sequence* (Kidwell, 2013), as she physically positions herself close to Emma and offers a verbal directive to Emma to move her feet, which Emma responds to with compliance. This initial sequence works to explore what the problem, indicated by the cry, might be prior to offering a directive to help solve the problem.

```
I think Ge:nie's gonna take us on a walk.
02 EMA: \rightarrow Uh . hu . hu ha::; ((hand reaching out towards TCH2))
03 TCH2: → °are you° stuck.
04 EMA: \rightarrow yeah.
05 TCH:
            (TCH)'s coming behind you, (0.2) Emma
06
            (3.4) ((Emma remains still. TCH moves towards her))
           what are you st↑uck in. ((bends down towards EMA))
07 TCH: →
0.8
            (0.9)
           [*(the sto:ne).*
09 EMA: →
10 TCH2:
           [it's slippery eh;
11 TCH: \rightarrow just move your feet;
            (0.3)
13 TCH:
           on:e?
           ((moves foot forward)) (0.9)
14 EMA •
15 TCH:
           two:?
16 EMA:
           ((moves other foot forward)) (0.4)
17 TCH:
           vou d↑id it.
```

Emma initiates this sequence through initially signalling that there is a problem with an audible cry and hand reaching towards her teacher (line 2), communicating a *recruitment for assistance* (Kendrick and Drew, 2016) for a problem with which she needs the teacher's help (Kidwell, 2013). The immediate response from one teacher (TCH2) is to offer Emma a confirmation check and verbal resource to better communicate her trouble more specifically, with the offer of the word 'stuck'. Once this word has been presented by TCH2 (line 03) it is responded to as an appropriate word to represent the problem by Emma in her next action (line 04). It is subsequently reused by TCH to further explore the problem (line 07). The use of the word 'stuck' here can be considered as a 'substrate' where "the substrate, the utterance being operated on, provides an actor with a trove of resources, precisely fitted to the current context, that can be used to build relevant next action" (Goodwin, 2017, p. 39). The sequential use of 'stuck' is helpful in the current context for enabling Emma to identify and understand the problem and learn to articulate it in a comprehensive and pragmatic way so that appropriate help can be offered to her.

The teacher's orientation to physical proximity is first observed here (line 05), opening up a problem enquiry sequence (Kidwell, 2013), to facilitate a supportive participation framework for tackling the problem. The teacher moves her body so that she is positioned directly behind Emma, within touching distance (line 06) as she asks Emma for further clarification of her problem and bends down to examine the environmental feature more closely.

Once the teacher is in this proximal position with Emma, she issues a directive to Emma for a physical action 'just move your feet' (line 11), which is responded to with immediate physical compliance from the directive recipient Emma (lines 13–17). Emma has indicated distress at the current situation of being 'stuck' through her crying and in response to this the teacher's formulation of the directive begins with a downgrade 'just', framing the task as very achievable to the recipient. The word structure of the directive here 'move your feet' leaves little room for negotiation (see also Cekaite and Burdelski, this issue) and limits Emma's next turn, as it places her as having the ability to comply with this action. The directive further presents the action as easily achievable as no haptic action or controlling touch (Cekaite, 2010) is coupled with it. Instead, the teacher positions her own body to be physically close, as she bends down to put her head close to Emma's but does not touch or manipulate Emma's body. Through physically locating herself near to Emma, the teacher offers gestural and verbal reassurance that she is near. She resists lifting Emma up and carrying her over the problematic area and instead supports her in a way that encourages her to overcome the physical problem independently. The framing of this interaction through a pragmatically downgraded directive and lack of controlling touch gives Emma autonomy over her actions.

The progression of the execution of the directive is sequentially supported by the teacher, again verbally, as she breaks down the actions that need to be achieved in order to fulfil the directive with minimal one-word directives - 'one' (line 13) 'two' (line 15). After each of these smaller directives, Emma demonstrates physical compliance through moving one foot at a time. A celebration of Emma's competence is then acknowledged by the teacher 'you did it' (line 17), framing Emma as competent and capable in overcoming the difficulty that had triggered her distress. This praising assessment draws attention to Emma's independent problem solving through the use of the pronoun 'you' and limits the focus on the teacher's role in the achievement.

Here, in Excerpt 1 we see how Emma became 'stuck' in the tough terrain and how her cry worked as a call for assistance, which was responded to by her teacher offering her verbal (rather than physical) help to solve the problem independently. In the

subsequent interaction below (Excerpt 2) recorded just a few seconds later, we see Emma once again signalling a problem with her cry as she encounters a large branch which has fallen across the pathway. Initially Emma cries to communicate her upset, and then reuses the word 'stuck' that the teacher has armed her with (lines 03 & 07) to better articulate and specify her problem.

3.2. Teacher directives in response to the child's articulation of problem

Excerpt 2: 11 min 27 s

Here, Emma's initial cries (lines 18 & 20) are not immediately oriented to by either teacher. This prompts Emma to subsequently reuse the word 'stuck' as a substrate to better articulate the details of her current problem. The teacher responds to this articulation of the problem in a similar way to Excerpt 1, by again using verbal directives to encourage Emma to overcome the problem as independently as possible and with minimal physical contact. Such responses encourage Emma to use her body independently to conquer the branch obstacle so that she can claim the victory autonomously.

```
18 TCH:
           s:like going on a bit of a bef:ar hunt.
19
           (2.9) ((walking towards a large branch on the track))
20 EMA: \rightarrow [no:]uh:?
21 TCH2:
         [$we're going on a bear hunt;$
22 EMA: \rightarrowhu . uhhu; ((leaning on the branch))
23 TCH2: actually we're going on a fair:y hunt.
24 TCH:
           we're on a f↑air:y hunt.
25 EMA: \rightarrowI'm stu:ck hu ha:. ((looks behind at TCH))
26 TCH:
          Emma;
27
           (0.3) ((eye contact with TCH))
28 TCH:
           what can we do. ((holds hand out palm up))
29
           (1.6) ((EMA remains still in front of the branch looking
30
           forwards. Both teachers look at EMA))
31 EMA:
           I'm stuck;
32 TCH2:
           are you stuck;
33 EMA:
           ↓yeah:↓
34 TCH:
           (TCH) go over? ((steps over branch))
35
           (1.5) ((TCH stands in front of EMA. EMA raises her arms
36
           up in 'pick up' position: Figure 1))
Figure 1
```





46 TCH: see? (0.8) Not so bad;

Emma once again initiates this sequence through her communication of a problem and a need for help through her cry (lines 20, 22 & 25). Initially Emma's cries are not taken up by the teachers, with her first cry being quite quiet (line 20), escalating to a demonstration of a heightened emotional display through prosodic intonation with a longer, louder cry in the second occurrence (line 22). This second occurrence is coupled with a gesture that draws attention to the source of the problem as she leans on the fallen branch that is in her way on the path. As the teachers do not respond to these actions, Emma's third cry is prefaced with the word resource given to her by the teacher in Excerpt 1 'I'm stuck' (line 25), which is responded to by the teacher. The sequential organisation of the teacher's response to Emma's more precise formulation of the problem through the articulation of a word, rather than an overt emotional display of a cry is significant here, as the teacher demonstrates to Emma that articulate communication resources are more appropriate and effective as they are responded to with help. As such, this sequence demonstrates a pragmatic approach to recruiting and securing assistance.

In her response, the teacher initiates a turn transition place where she returns the problem solving back to Emma with her verbal 'what can we do' (line 28) coupled with her palm up gesture, handing the turn (and problem) back to the recipient to solve (Streeck, 2009). This response to Emma's cry positions Emma as competent and capable in solving the problem herself, demonstrating the teacher's low entitlement to control Emma's actions (Kent, 2012) whilst also using the collective proterm 'we' to signal collaboration. This prompts Emma to reuse with transformation (Goodwin, 2017) the substrate 'stuck', building on the prior use of the word that secured help in the prior turns of talk. Emma's use of the word stuck is coupled with gaze towards her teacher, recruiting/mobilising her request for assistance towards a specific person. The teacher demonstrates that Emma's resources here work to recruit help, with her next action where she physically responds through relocating her bodily position so that she stands directly in front of Emma, presenting herself as present and responding to her call for help. This physical shift in proximity, as with Excerpt 1, formulates a participation framework for tackling the problem at hand. Here it is important to note that toddlers (as we see here with Emma) have restricted vocabulary but still manage to call for help.

The teacher's physical repositioning is met with Emma immediately extending her arms up towards the teacher in a 'pick up' gesture (Figure 1), a gesture that children often use to signal a desire to be lifted up. The teacher offers a somewhat dispreferred physical response to this though, where she touches Emma's hands only to move them to a downwards position (line 39), adjusting the physical positioning framework of the interaction. This action is sequentially coupled with the teacher's directive show me how you would try to come over (line 37), further adding to the call for independence. Together, these actions in response to a cry are in contrast to a usual response of adults' embraces, stroking, and patting (Cekaite and Holm Kvist, 2017 p. 109). These actions downgrade the physical support the teacher is willing to give, aligning with prior research where a child's whining is responded to as an adult "conveys a positive affect that is an inversion of the stance ... delaying provision of the sought-for help" (Butler and Edwards, 2018, p. 56). Here, the unassisted directive calls for the child to show the teacher how she can move herself over the branch independently, therefore indicating the teacher's low entitlement or control and the child's competent ability to perform the directed action (Kent, 2012).

From Line 40, the teacher offers incremental directives which work to de-escalate Emma's heightened emotional state through introducing procedural steps/guidance in how to practically accomplish the task, prompting Emma to problem solve herself. This shows a compassionate response to Emma's cry through physical scaffolding to support Emma to perform her next action providing just enough support to accomplish the task. Rather than lifting Emma over the branch in an action that might better benefit the teacher as it would solve the problem quickly and easily, the teacher orients to Emma's cry in a professional way - as an opportunity to scaffold learning through what can be termed as guided participation (Rogoff et al., 1993). As the task in hand is quite a difficult one that might be impossible for Emma to overcome totally independently, the teacher uses her professional vision to respond to the situation, giving more physical support as the teacher firmly holds Emma's hands to stabilise her as she moves her body over the branch (Figure 2). Through responding to the cries in this way, encouragement for the child to have autonomy over her own actions is given, whilst sufficient physical support is given so that the task is achievable. Emma could decline to cooperate on the ground that she thinks/says she is not willing/able, but she complies, showing that this is a collaborative pedagogical process where both parties co-operate in the accomplishment. As with Excerpt 1, once the task has been accomplished, the teacher offers a celebratory Not so bad (line 46) as a positive professional evaluation of the accomplishment.

3.3. Teacher directives that frame the child as capable and competent

Excerpt 3: 22 min 05 s

Further on in the walk, Emma and her teacher are standing together with a group of children discussing various aspects of their environment, when Emma signals a problem by her outstretched hand towards her teacher (lines 47) and whining noises (lines 53, 56, 58, 60 & 67). As with the prior sequences, the teacher orients to Emma's displays as a teachable moment to promote independence through her verbal directives and with minimal touch. The beginning of the sequence sees TCH framing Emma as competent and capable in achieving the walking independently.

47 EMA: ((reaches hand forward towards TCH: Figure 3))



```
[walk all the way up there ((points))
  TCH.
48
           ↑I sa:w vou
49 EMA:
                       [((drops hand))
50
  TCH:
           and come down by yourself.
51
           (1.5) ((TCH looks at EMA. EMA looks over her shoulder))
  TCH:
           I sa:w you:.
53 EMA:
         → *>uh<* ((reaches hand forward towards TCH))
54 TCH:
           (TCH) will walk next to you. > come=on<
5.5
          →let's follow Sheila. ((points in the distance))
56 EMA:
           *mmm::* ((reaching hand towards TCH))
          →↑Let's follow Sheila; ((moves hand away. Walks))
57 TCH .
58 EMA:
           *aa:rr*
59
  TCH:
           ↑come on↑; ((patting touch with Emma's hand))
            '>uh<*
60 EMA:
        → \right. ((connects hand)) you're gonna ↑sta:rt
62
           ((stops walking. Loose hand)) now you can follow.
63
           (1.2) ((Emma takes slow steps holding onto TCH's hand))
64 TCH:
           [(TCH) is ri:ght behfind you Emma;
65
           [((gently pushes Emma's hand off hers with a jumper she
           is holding: Figure 4))
66
Figure 4
```



```
67 EMA: →hu hu=

68 TCH: → =(TCH)is right [behind you=you ↑look down and watch

where you're putting your feet.
```

This sequence of actions is initiated by Emma through her outstretched arm and hand positioned in the direction of the teacher's hand, suggesting a request for assistance. However, the teacher does not respond in a preferred calibrated action securing the physical call for touch (Figure 3). The teacher justifies her not granting of the request by showing that her hands are busy holding a jumper in front of her body and so are not free for any other business. Rather than give this physical help, the teacher frames her response in a way that presents Emma as competent and capable, as she keeps her hand positioned closely to her body (line 47) and marks that she 'saw' Emma walk independently to their current location (lines 48 & 52), offering a first-hand witness account (Hutchby, 2001) of her capability. The teacher's witness position undermines the status of the call for help in the "first-hand knowledge — which also incorporates elements of abstract expertise, the knowledge base associates with being 'in the trade'" (Hutchby, 2001, p. 493). The teacher's professional vision and knowledge (Goodwin, 1994) and a stance inversion (Butler and Edwards, 2018, p. 56) are mobilised here as a valid witness of Emma's competences.

Emma marks that there is still a problem though in her response, as she makes another whining noise and again holds out her outstretched hand towards her teacher (line 53). The teacher responds this time with a collaborative action as she verbally announces that she will walk next to Emma (line 54). The teacher's action of physically positioning herself directly next to Emma while she is walking suggests a collaborative accomplishment of the task, as does her collective pronoun 'let's' in her subsequent directives 'Let's follow Lina' (line 55 & 57). However, again there is no comforting or controlling touch, but rather resisting of touch as the teacher presents her hands as too busy (this time pointing) to lock into a compliant touch (line 55). As Emma does not comply with this collective action, the use of the words 'come on' (lines 54 & 59) offers an upgraded directive, identifying the "earlier requests as not done and in need of doing" (Craven and Potter, 2010, p. 428). Complying with

directives presents issues regarding autonomy over actions for the directive recipient (Hutchby, 2001) where "if they resist then the control attempt typically gets stronger and harder to resist, progressivity is stalled" (Hutchby, 2001, p. 716).

To avoid further stalling of the progressivity of the walking task, the teacher initiates a topic shift with 'right' (line 61) (Jefferson, 1993) coupled with a receipt of haptic compliance as she drops two fingers down from her hand towards Emma. Emma quickly grasps the fingers, marking a shift from an independent performance of the walking task to the teacher's high entitlement offering the physical scaffolding needed coupled with a further upgrade of the directives 'you'regonna \sta:rt' (line 59) 'nowyou can follow' (line 62). The physical touch here is very loose though, offering no firm support or specific directional guidance. Instead, the directives put the responsibility and autonomy of performing the action of walking squarely back to Emma, where the teacher's hand is a loose object merely offering stabilisation assistance, controlled by Emma. As such, the teacher offers minimal, or just enough support, showing that she is near but that Emma has to do much of the movement independently.

Emma offers a preferred response to this help as she does take some subsequent steps in response, prompting the teacher to remove her minimal physical support by, interestingly, using the jumper that she is holding to gently push Emma's hand away (Figure 4), avoiding further skin to skin contact, again resisting the amount of physical touch between them. Emma uses another cry here to demonstrate her protest at this prior action (line 65) prompting the teacher to reassure Emma that she is close. The teacher gives further support through offering a resource to help Emma accomplish the task independently, advising her to 'look down and watch where you're putting your feet' (lines 68 & 69).

3.4. Teacher physical proximity as a crying response

Excerpt 4: 24 min 42 s

Emma's continued display of distress can be seen a couple of minutes later where the teacher responds with strategies repeated in the sequence in Excerpt 3, with directive upgrades and minimal touch. Here, the teacher moves close to Emma in response to her cries and gives directives for physical movement to support Emma to move closer to her, rewarding her with minimal open hand touch once she has accomplished the task.

```
70 EMA:
            uh:: huh:.
71
            ((background talking))
72 EMA:
73 TCH ·
           \rightarrow \tag{come on\tau}; ((gaze towards EMA))
74
            (2.1) ((TCH stands still. holds hand out towards EMA))
75 EMA:
            whoah ha: ah::
76
            ((background talking. TCH walks towards EMA stopping
77
            before she reaches her))
78 TCH: \rightarrow \uparrow come on\uparrow; little ste:ps:.
            (1.6) ((EMA takes a couple of steps towards TCH holding
79
80
            her hand out palm up))
         →little ste:ps and watch [where you put your feet.
81 TCH:
82 EMA:
                                       [whoahaha:. ((small step))
         \longrightarrowlittle steps and [watch where you put your feet.
83 TCH:
84
                                 [((EMA reaches TCH hand and curls her
85
            fingers around it. TCH hand remains straight: Figure 5))
Figure 5
```

In response to Emma's crying, the teacher reuses her verbal strategies from Excerpt 3, using the upgraded directive 'come on' (lines 73& 78) and 'watch where you put your feet' (lines 81 & 83) offering specific direction on physical actions to be performed. However, this time the teacher adds further directives to take 'littlesteps' (lines 81 & 83) along with watching where she puts her feet. Together, these directives offer explicit direction on specific ways of moving, leaving very little room for adaptation of movement. Although this somewhat restricts the autonomy Emma has over her actions, there is no physical controlling touch to move Emma through the rough terrain in these directed ways. This suggests that, although the teacher demonstrates a high level of entitlement in her verbal orchestration of Emma's movements through the forest, the performative accomplishment of the task rests with Emma.

Once again, the teacher's physical proximity to Emma is oriented to as significant here, as the teacher positions herself close to Emma in response to her cry, whilst leaving a physical distance of terrain for Emma to conquer. This distance marks a physical scaffolding space where support is visible through the close proximity of the teacher (Bateman, 2021) and the

directives she gives but walking through this space needs to be accomplished by Emma independently. As such, the lack of controlling touch maximises the autonomy Emma has over her actions and so her achievement.

On accomplishment of successfully moving her body through the rough terrain independently and reaching her teacher, Emma is rewarded with physical touch as she clasps tightly hold of the teachers' hand. Interestingly, although the teacher allows Emma's physical contact, she responds with a somewhat non-compliant touch, not shaping her hand to wrap around Emma's hand but instead keeping her hand rigid and straight (line 85: Figure 5). As visible in the prior excerpt, the teacher offers her hand as a stiff object for steadying balance rather than as a malleable resource for comforting distress, as she avoids locking into a physical compliance (Heath et al., 2017) with the child's tightly curled hand. In this way, much like the verbal directives, the teachers hand acts as a prop for Emma to act physically upon in her accomplishment of the task.

These intertwined actions of offering a straight hand and verbal support within close proximity demonstrate how the zone of proximal development (Vygotsky, 1962) might look in practice, where the teacher offers just enough support for the child to accomplish the task independently. Although this non-compliant touch might seem unusual in early childhood, the teacher's actions here demonstrate her skilful professional vision (Goodwin, 1994) and pedagogical knowledge as she notices, recognises and responds (Carr and Lee, 2012) to Emma's development of independence in impromptu ways.

3.5. Escalated cries responded to with decreased physical contact

Excerpt 5: 27 min 30 s

A few minutes later, Emma shows a gradually increased cry as she tries to walk through a patch of the forest that she is finding particularly difficult. As with the prior excerpts, the teacher does not pick her up to solve the problem for her but persists with her encouragement that Emma overcome the terrain herself. Interestingly in this excerpt, Emma's escalated cries are responded to with less physical support, as the teacher uses her professional vision to respond in ways that scaffold Emma's independence by giving her just enough verbal and physical assistance for this specific situation.

```
86 TCH: I'm gonna put them— you've got a pocket on [it] but you [ahha]
88 TCH: ca:n't turn round and see it [honey .hh but there's a [owowowowowow?]
90 TCH: pocket on your pants. (0.2) In there.
91 EMA: <*Ah:::*.> hu hu [hu::. ((bends knees. Tightly clenches fists: Figure 6))
```



```
99 TCH: (TCH)'s just in front; >\(\frac{7}{2}\)come on<
1'm gonna help you a little bit?

((\(\frac{EMA}{2}\) takes steps holding on to TCH's fingers))
```

This sequence begins with the teacher engaged in talk with another child where Emma's crying overlaps are not oriented to as significant. Emma's first cry in this sequence is quiet and short 'ahah' (line 87) escalating the next prosody of the cry to a longer (sill overlapping) cry (line 89) and then to a very loud and long cry coupled with gesture (line 91) where Emma clenches her fists and crunches up her body (Figure 6). Through her prosodic escalation and the use of her body display, Emma communicates her distress more effectively to the teachers with "an affective stance that enhances the verbal complaint's sense of grievance" (Butler and Edwards, 2018, p. 60).

This prosodic escalation of cries works to secure the teacher's attention and prompts a response, again with the upgraded directive 'come on Emma' (line 93) with a relentless persistence that Emma manage walking through the forest independent of physical support. The teacher's persistence that a task be completed by a child is likened to research in family interactions (Goodwin, 2006) where the use of 'come on' is used sequentially in response to complaints from the child who shows disapproval of doing an adult directed task. Adult physical soothing in response to a child's cry has been found to deescalate the crying to the point of completion (Cekaite and Holm Kvist, 2017). No such physical soothing is offered to the child here, where Emma gives another long cry in response to the teacher's verbal directive to 'come on Emma'. An acknowledgment of the importance of physical touch is oriented to here by the teacher though, as she couples her directive with an outstretched hand (line 93).

As with excerpt 4, once Emma successfully makes it to the teacher's location, she is rewarded with physical contact, again through the teacher's hand in prop-like support. A reduction of the amount of support that is given through the hand prop is observable here, however, where rather than the full hand in Excerpt 4, this time only two fingers of that hand are offered (Figure 7). This demonstrates further the *just enough* scaffolding support that the teacher offers throughout the entire sequence, as physical scaffolding is gradually decreased.

3.6. Successful completion of the walk

Excerpt 6: 33 min 45 s

Emma, her teachers and group are now the end of the walk. The last final walking accomplishments are focused on here as Emma continues with her cries and the teacher responds to these with the same persistent determination to encourage Emma's independence as has so far been observed. Emma's physical 'pick up' position of her arms in this excerpt is met with verbal directives and visual physical proximity, until the final closing of the walking accomplishment where the teacher finally lifts her up and points out her success to her.

```
101 EMA:
           whoah ha: wah [wah
102 TCH:
                          [no:↑ you're doing so [well;
103 EMA:
                                                  fhu hu
           (TCH) will help [you this bit ((points to dip in terrain))
104 TCH:
105 EMA:
                           [arr:: uh hu hu
106 TCH: \rightarrowcome on (0.3) (TCH) will help you [this bit
107 EMA:
                                               [whu . muh . hu . mhuo:.
108 TCH: \rightarrow come on:
109
           (2.3) ((EMA takes small steps towards TCH))
          ouh [hu:?o uh whoa: ((stops at dip in terrain))
110 EMA:
111 TCH: \rightarrow [we'll find you a tissue] come on this bit here
112
           ((points to dip)) then (TCH) will help [you.
113
                                                     [°uh°
114 TCH: \rightarrow couple more [steps
                       [hu:: ((flings arms open towards TCH))
115 EMA •
116 TCH: \rightarrowcome on to this one. ((points to point on ground))
117 EMA:
          noha:
           yep you can do it; ((nods))
118 TCH:
119 EMA:
           arhu hu hu:.
120 TCH:
           □ ↓you can ↑do it ↓you can ↑do it ¿
121
           (1.3) ((EMA steps forward and reaches hand to TCH. TCH
122
           clasps hand))
123 TCH:
           you did it.
124
           ((TCH reaches forward and lifts EMA down the dip))
125 TCH:
           *aright*.
126
           (1.2)
127 TCH:
           and down↓ High five me↓ (0.9) ((holds hand up))
128
           high fi:ve;
129
           (0.4)
130 TCH:
           look. ((turns to face back over terrain and points))
131
           you came from <wa::y> up th\text{rere all the way do:wn:.}
132
           (2.7) ((EMA reaches for TCH hand))
133 TCH:
           that's pretty >good< come on (0.4) ((places hand on
134
           {\it EMA cheek})) we can follow the path now; let's go.
135 EMA:
           ((runs off shouting))
```

Emma's first cry in this sequence towards the end of the walk is shaped as a long drawn out whine (line 101) overlapped by the teacher responding immediately this time with a stance inversion (Butler and Edwards, 2018) which frames Emma as competent and capable having done so well so far (line 102). We then see a possible opening up of the closing of the entire

walking sequence (lines 104 & 106) — the teacher has encouraged independence through her directives and restrictions of physical help offered all the way through, but now at the end of the rough terrain the teacher gives the so far withheld requested help. The teacher marks this shift verbally as she explicitly states that she will help whilst pointing to a specific piece of particularly rough terrain that lies ahead of Emma. It is possible here that the teacher once again calls on her professional vision to determine the task in relation to ability and decides that this might be a little out of Emma's skill. As Emma has not quite reached the rougher terrain, the teacher remains where she is and Emma is encouraged to walk towards her, again leaving a physical zone between them that Emma has to conquer alone.

An escalation on the prosody of cries is visible again here as Emma communicates her distress, beginning with an overlapped small whimper (line 103) and two sequentially longer cries (lines 105 & 107). This physical display of upset is oriented to by her teacher in attempts to mobilise Emma's physical movement with her persistent upgraded directives to 'come on' (lines 106, 108 & 116), marking the accomplishment of the task as still incomplete. There is acknowledgement of Emma's distress though, as the teacher suggests the need of a tissue (line 111) but still a withholding of physical comforting touch. In the same utterance, the teacher gives a directive to Emma to reach a specific area, both verbally and with pointing gesture and then she will be rewarded with the help, also acknowledging that Emma's request for help. When Emma flings her arms open towards her teacher in 'pick up' position, the teacher once again responds with busy hands, as she points to the area of terrain that Emma needs to get to in order to receive her 'pick up'. The teacher's pointing to the ground here also marks an end point for Emma, offering further scaffolding and just enough support to encourage independence.

Emma shouts out an oppositional response to the teachers' directives here (line 117), met with a *stance inversion* (Butler and Edwards, 2018) as the teacher confirms that she 'can do it'. Throughout the entire episode, Emma's cries have suggested an 'I'm helpless' stance, but the teacher's responses have worked to reframe this stance as one of competence. This positive, lighter more playful stance is observable through the teacher's singing voice (line 120) which offers resistance to the stressful situation (Goffman, 1974; Goodwin, 2006).

Finally, in lines 121 onwards, Emma reaches the teacher and the end of the walk. This is celebrated by the teacher who now fully locks into the 'pick up' gesture as she lifts Emma up (line 124) and reinforces the competency framing as she points out to Emma the distance that she has walked independently, also celebrating the accomplishment through embodied action with a 'high five' gesture.

4. Discussion and conclusions

During a video recorded walk with toddlers through a New Zealand forest, we see how one toddler's crying signals the start of a new problem for her to overcome within the unfolding interaction, as the toddler competently communicates her request for physical support to negotiate the unstable terrain. When the toddler's cry or whimper is not responded to immediately by a teacher in turn allocation place, prosodic emphasis is given in elongated and louder cries, coupled with embodied actions (arms held in 'pick up' position; crunching the body and leaning on the object causing the problem) giving an escalation of the immediacy of help needed. The toddler's crying is responded to by the teacher with verbal directives for independent physical movement, even though the synchronised embodied and crying actions of the toddler indicates a request for recruiting the teacher's physical support. More specifically, the teachers' encouragement involves demonstrations of an *avoidance* of locking into physical compliance. The physical contact that the teacher does offer is observable through her use of her hand as a loose prop for the toddler to operate on to activate locomotion, presenting the limb as offering stability rather than control. The teacher and child engage in an intricate choreography through a physical proximity positioning that sets up a participation framework for the achievement of the task at hand, with *just enough* support.

An important aspect of this initial problem solving can be related to professional vision where the teachers encourage Emma to be independent and problem solve on her own, so turning this moment of trouble, indicated by Emma's cry, into an independent achievement. The way in which the teachers respond to the cry are intertwined with their professional vision for supporting the child to independently learn how to problem solve, as indicated in the NZ national curriculum (MoE, 1996; 2017). As such, these findings align with the work of Burke and Duncan (2015) who identified how NZ teachers often observed children on the side-lines rather than being fully immersed in play with children due to wanting the children to develop their working theories independent of adult interference. It is important to note that, rather than hinder the progress of the interaction, this lack of physical touch also avoids physical controlling and manipulation of the child, affording the toddler autonomy over her own physical actions. The teachers' avoidance of physical touch demonstrates her low entitlement to control the toddler's movements and as such, highlights the toddler's ability to perform the directive action independently. As such, the teacher is framing the toddler as competent and capable of achieving the action that she has identified as problematic through her cry, socialising her into independence both physically and emotionally. From the teacher's directive responses, it is made demonstrable to Emma that crying is not an effective resource for recruiting physical assistance. As such, the teacher socialises Emma into the pragmatic use of crying and so emotional socialisation through responses that are supportive of encouraging independence, verbally through directives and physically through resisting doing the task *for* the child.

The final point to make here is the skilful work of early childhood teachers who, through their professional vision, are able to notice, recognise and respond to such everyday activities as opportunities for significant learning moments. An analysis of these actions can offer insight into how teachers implement pedagogical concepts such as scaffolding (Wood et al., 1976) within the zone of proximal development (Vygotsky, 1962) in everyday practice (Bateman, 2021). Here we see how the teacher responds to Emma's cries by avoiding performing specific actions for her, and instead scaffolding her to do these

specific actions herself, where knowing the child and her abilities is identified as imperative in this process by the teacher. By knowing the child and her abilities, the teacher is able to offer just enough support within the zone of proximal development for that specific child's learning, building on her competencies in context specific ways (Theobald, 2019). The teacher's decision to take children out on regular forestry walks further demonstrates professional knowledge of the affordances of the forestry topography for providing opportunities for toddlers and young children to extend their learning. Not only does the forest environment provide physical challenges to overcome, it also (as we see here) offers opportunities for children to become empowered and confident in their abilities and have autonomy over their bodies. Such learning outcomes can be linked to the New Zealand early childhood curriculum, Te Whāriki (MoE, 1996; 2017). The upshot of engaging in such interactions with a toddler results in her walking unassisted through a difficult terrain where she displayed that she is competent and capable of achieving this task independently.

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Appendix. Conversation Analysis Transcription Conventions

| : | lengthening of the prior sound |
|--------------------------------------|---|
| | at the end of an utterance indicates falling intonation |
| \rightarrow | Points to a phenomenon of interest, to be discussed by the author |
| | during an utterance indicates sticato articulation |
| ن | Intonation rises more than a comma but less than a question mark |
| ((brackets)) | unspoken actions |
| °degree sign° | either side of a word indicates that it is spoken in a quiet, soft tone |
| Bold | heavy emphasis or shouting |
| (0.4) | the time of a pause in seconds |
| (brackets) | utterance could not be deciphered |
| , | slightly rising or continuing intonation |
| [| the beginning of an overlap of talk |
|] | the end of an overlap of talk |
| * | creaky voice |
| ? | raising intonation |
| ↑ sharp | rising intonation in speech |
| ↓ sharp falling intonation in speech | |
| = | latching of speech between the speakers |
| >arrows< | utterance spoken quickly |

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