

Introduction

Dialogic researchers posit the social experience beyond dyadic relationships and intersubjective encounters—to wider social space(s) of encounter (Wegerif, 2013). Seen in this light, relationships are examined by emphasising what can be ‘seen’ by the participants, their interpretations and orientations. As Booth explains: *How a voice sounds is a function of where it is and what it can ‘see’; its orientation is measured by the field of responses it invokes* (Booth cited in Bakhtin, 1986, p. xxxvi).

Dialogic methodology is especially promising in research with the very young. Despite a compelling evidence-base drawing from psychological, developmental and neurological fields of enquiry, infant perspectives are virtually absent from investigations of their social experience.

In the present study the social experience of two under-one-year-old infants in an early childhood education setting was examined from this dialogic standpoint. The early childhood setting provided a first time glimpse of infants’ experience, through their eyes, in the context of a new social ‘normality’ in New Zealand (Carroll-Lind & Angus, 2011).

Research question

What is the nature of dialogic experience for infants in an Education and Care context?



Method

Three hours of polyphonic video capturing the interactions of two infants (4 and 8 months old) and their teachers were coded using *Studiocode*. Since a dialogic approach to *utterance* is determined not only by the *forms* of language that are employed but also by the *response* in the social event, types of language *forms* were classified in terms of their social orientation and response. Variables were created for *verbal*, and *nonverbal* (separately and combined) initiations and responses. Data were analysed using *SPSS* statistical package. Interviews with teachers provided additional information.

Results

Results in Figure 1 revealed that when teachers initiated an interaction they did so most frequently using *verbal-and-nonverbal* initiation (113) followed by *verbal alone* (58) and *nonverbal alone* (29), $\chi^2(2) = 54.61, p < 0.001$. When teachers initiated the interaction, the overall frequency of infant responses was significantly greater when teacher-to-infant initiation was *verbal-and-nonverbal* (88) than when initiation was either *verbal alone* (24) or *nonverbal alone* (22), $\chi^2(2) = 63.10, p < 0.001$

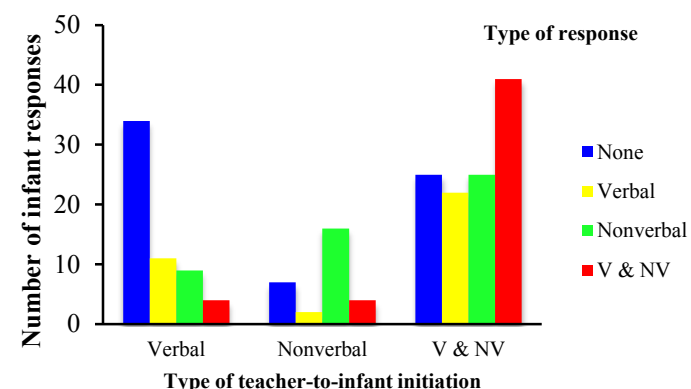


Figure 1. Number of no responses, verbal, nonverbal and verbal-and-nonverbal (V & NV) infant responses for verbal, nonverbal and verbal-and-nonverbal (V & NV) teacher initiations.

Figure 1 shows that when teachers initiated an interaction, infants most frequently did not respond when the initiation was *verbal alone* (34), the next most frequent initiation to receive a *no response* was *verbal-and-nonverbal* (25) and then *nonverbal alone* initiation (7), $\chi^2(2) = 17.18, p < 0.001$.

Results in Figure 1 and 2 show that, regardless of whether the infant or teacher initiated the interaction, significantly more *verbal-and-nonverbal* responses were evident (20 for teacher responses and 41 for infant responses) than either *verbal alone* (8, for teacher and 4 for infant responses respectively) or *nonverbal alone* (6 for teacher and 4 for infant responses respectively); for teacher-to-infant initiations, $\chi^2(2) = 10.12, p < 0.01$, for infant-to-teacher initiations, $\chi^2(2) = 55.88, p < 0.001$.

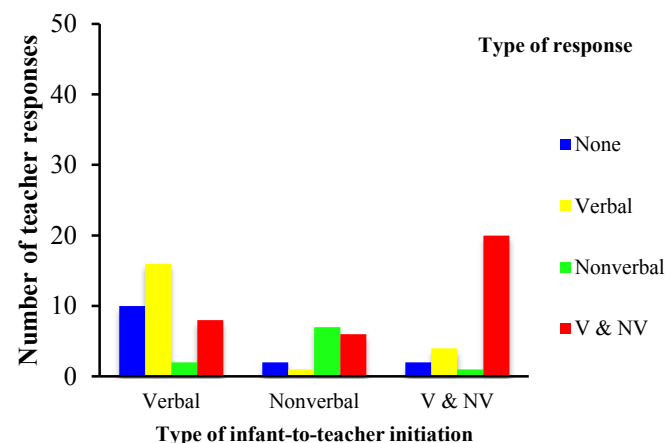


Figure 2. Number of no responses, verbal, nonverbal and verbal-and-nonverbal (V & NV) teacher responses for verbal, nonverbal and verbal-and-nonverbal (V & NV) infant initiations.

Results in Figure 2 show that when infants initiated an interaction they did so most frequently using *verbal alone* initiation (36) followed by *verbal-and-nonverbal* (27) and *nonverbal alone* (16) initiation, $\chi^2(2) = 7.62, p < 0.05$.

Figure 2 demonstrates that when infants initiated an interaction teachers most frequently did not respond when the initiation was *verbal alone* (10), followed by *verbal-and-nonverbal* and *nonverbal alone* (2 and 2 respectively), $p > 0.05$.

Results continued

Out of 199 teacher and infant interactions—where an exchange of dialogue occurs—60 involved an *onlooker* episode. Analysis of these *onlooker* episodes revealed that key infants were watching either a teacher or a peer on 51.7% (31) of *onlooker* occasions; conversely, the teacher was involved in discussions with other teachers or the key infants’ peers on 48.4% (29) of *onlooking* occasions.

Out of a total of 80 *no response* instances (66 when the teacher initiated, 14 when the infant initiated) 48 involved an *onlooker* episode—on 35 occasions infants observed peers or teachers while the remaining 13 occasions included teachers in discussion with other teachers or the key infants’ peers, $\chi^2(1) = 10.08, p < 0.001$.

Infants’ most frequent *nonverbal* component of the responses (across *verbal-and-nonverbal* and *nonverbal alone* responses) was *interaction with artefact or food* (31), followed by *extremities movement* (18), *whole body movement* (10), *touches body of other* (4) and *gaze* (3), $\chi^2(4) = 40.81, p < 0.001$ (see Figure 3).

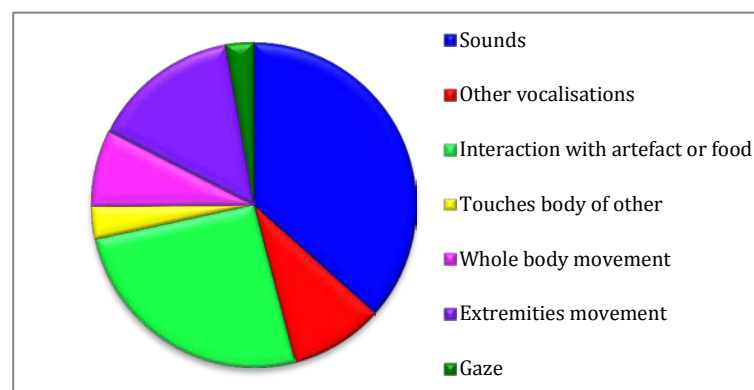


Figure 3. Percentage of infant response forms across all types of teacher initiations.

Infants’ most frequent *verbal* component of the responses (across *verbal-and-nonverbal* and *verbal alone* responses) was *sounds* (50) which occurred significantly more often than *other vocalisations* (13), $\chi^2(1) = 21.73, p < 0.001$ (see Figure 3)

Significantly more initiations occurred during *play* intervals (167) than during *routine* intervals (112), $\chi^2(1) = 10.84, p < .001$. In particular, infant *verbal-and-nonverbal* responses occurred significantly more frequently during *play* (37) than during *routine* (12), $\chi^2(1) = 12.76, p < 0.001$. During *play* there was a significantly greater number of *verbal-and-nonverbal* teacher-to-infant initiations (66) than *verbal alone* (24) or *nonverbal alone* (17), $\chi^2(1) = 39.38, p < 0.001$. Similarly, during *routine* the most frequent type of teacher initiation was *verbal-and-nonverbal* (47) followed by *verbal alone* (34) and *nonverbal alone* (12), $\chi^2(1) = 20.19, p < 0.001$.

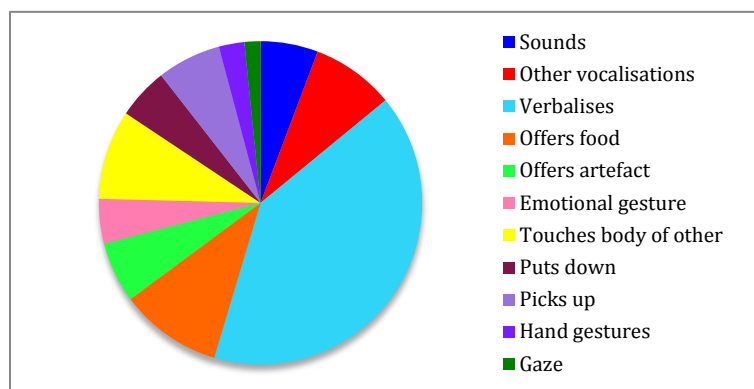


Figure 4. Teacher initiation forms across all types of initiations.

When teachers used *verbal alone* initiations (58) they used *verbalises* (49) significantly more often than *sounds* (4) or *other vocalisations* (5), $\chi^2(2) = 68.31, p < 0.001$ (see Figure 4).



Summary

Results revealed four central features of teacher-infant social exchange:

- (i) reciprocal teacher-infant interactions were more likely to occur during *play* than during *routine* events;
- (ii) *verbal-and-nonverbal* initiations resulted in significantly more *verbal-and-nonverbal* responses than either *verbal* or *nonverbal* initiations alone—regardless of who initiated the interaction;
- (iii) infants did not always overtly respond to teachers’ initiations;
- (iv) infants *observed* ‘other’ (i.e., peers and teachers) in their social environment with considerable frequency—even during interactions with the teacher—which resulted in a *no-response*.

These findings strongly indicate that infants and teachers alike are influenced by how each initiates a communicative act. The extent to which language *forms* invoke a response are not simply associated with the discrete *forms* infants use but also by their orientation towards or away from the ‘other’. *Playful* encounters between adults and infants generate greater incidence of response. Interactions during *routines* are less overt, nevertheless, present in intimate *forms* of communication—for example, *touch* and *emotional gestures*. The wider social environment (i.e., peers, resources, other teachers) plays a significant role in infant social experience and takes priority in some dialogues. For instance, *onlooking* is a significant feature of infants’ social experience—infants are frequently watching interactions between others. Results suggest that teachers need to always consider their dialogues with infants and with others (e.g., peers and adults). Both kinds of dialogues afford important learning opportunities for infants, even when infants do not appear to be involved.

Key References

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