



Symbolic gesturing: Creating opportunities for emotional connections between practitioners and infants in day care.

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Abstract

This article reports on how symbolic gesturing was applied in a nursery setting. Forms of signing systems have been well documented as contributing to communication, predominately used alongside speech when there is a different mother tongue or a physical impairment (Felix, 2018; Goodwyn and Acredolo, 1993) Symbolic Gesturing (SG), is an emerging area to support pre-verbal infants in communicating more effectively. In this article SG was evaluated as way of reflecting and developing practitioner's emotional responses and initiations with the infants in their care. The narratives of three practitioners using SG were gathered over several months and revealed how SG created further opportunities for reflection regarding the emotional relationships with infants they cared for. SG was considered a valuable approach to enhancing the emotional interactional connections with infants, resulting in closer, more attuned relationships.

Key words: symbolic gesturing; infants; day care; practitioner; biographical research

Introduction

A growing body of research recognises the value placed on practitioner's knowledge and understanding around infants' emotions and emotional regulation. Less research however has been focused on the practical integration from the practitioner's perspective, in how emotional wellbeing could be successfully achieved. This article (informed by a larger project on emotional relationships) focuses on whether symbolic gesturing (SG) is viewed by practitioners as an appropriate and beneficial approach to enhance their emotional connections with the infants' in their care. Olson and Masur (2013) concluded mothers responded more frequently and used more verbal responses when infants' communicative attempts involved gestures. Parents' positive responses have shown to increase infants' attempts at vocalization and gestures (Miller and Lossia, 2013). Therefore, this study extends recent studies, beyond the parent relationship to explore whether SG could facilitate more purposeful and intimate practitioner-child interactions within an Early Childhood and Education and Care setting (ECEC).

The questions asked were:

- What is the impact of SG as an approach to enhance emotional connections in an Early Childhood and Education and Care setting (ECEC)?
- Does SG provide a purposeful approach to enable practitioners to reflect on their own emotional connections during everyday interactions with the infants in their care?

Research on the Emotional Relationship in Early Childhood and Education and Care context (ECEC):

The curriculum offered within day care in England is termed the Early Years Foundation Stage (Department for Education, 2014, 2017). The curriculum fosters an approach which refers to the infant needing an individualised intimate relationship, and providing consistent care (Department for Education, 2014, 2017; Dryden, Forbes and Pound, 2005; Elfer, 2006; Elfer et al, 2005; Elfer, et al, 2012). The importance of bonding and attachment has therefore been given increasing emphasis in the current English early years' sector, in growing recognition of the emphasis on emotional relationships in European and US policy frameworks (OECD, 2006; Clarke-Stewart and Allhusen, 2005). In English policy frameworks the practitioner's role has been described as a key person with responsibility for a small group of children, enabling close bonds to be achieved (DfE, 2014; Degotardi and Pearson, 2010; Wilcock, 2007). The emphasis being opportunities for infants to form attachments with one or two key practitioners who can be regularly available to the infant in a sensitive consistent and responsive way (Brooks-Gunne, Sidle-Fulligini and Berlin, 2003; Dowling, 2014; Dryden et al, 2005). Being regularly left with professional carers beyond the home in ECEC settings can potentially result in the infant being anxious and insecure if their emotional needs are met inconsistently or misunderstood. Developing bonds and promoting attachments with key practitioners in ECEC settings has therefore been the catalyst in providing responsive and personalised relationships (Belsky et al, 2007; Elfer, 2008; Lee, 2006; Datler, Datler and Funder, 2010). As well as having a commitment to good quality care, the emotional investment of practitioner's role in looking after infants within a setting is also currently a legal requirement within the EYFS curriculum (DfE, 2012, 2017). The role involves opportunities to support and enable all children to feel safe, express their feelings, be aware of who they are and what they can accomplish. This is achieved through care, attentiveness and interaction (Drugli and Undheim 2011; Hopkins, 1988; Barnes, 1995). A relationship of comfort and knowing, using a range of approaches to bridge the communicative and emotional responsiveness gap, helps reduce these anxieties often faced by infants in transitioning to and regularly attending ECEC settings (Dowling, 2014; Ebbeck, 2009; Mooney, 2010). Interaction by listening to infants enables practitioners to create meaningful activities and aids connections with them (Abbott and Moylett, 2003; Manning-Morton and Thorp, 2006). Practitioners are encouraged to engage young infants to respond to, or mimic adults through approaches such as interactive gesturing. Symbolic gesturing could extend this by gaining an understanding of infant needs and requests, and therefore be valuable in creating and enhancing meaningful relationships (Capone and McGregor, 2002; Daniels, 2004; Nelson, et al, 2012). By tuning in and promoting SG alongside speech, mutual interactions between infant and carer can be enhanced, through physical communicative messages culminating in an emotional communicative dance (Trevarthen 2009). The carer can adapt their interactive behaviour to the rhythms of their infant and encourage the infant to

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3 lead the interaction (Trevarthen, 2015). These early exchanges between infant and carer have been
4 termed proto conversations (Trevarthen, 2001). As the term suggests, the patterns of turn taking
5 include mutual attention, changes in movement, smiling and so on, and these early interactions have
6 been regarded as embodying the fundamental aspects of cognitively developing the emotional
7 relationship and communication between carer and infant (Meil and Dallos, 2005; Gerdhardt, 2004).
8 SG could be an integral aspect of the reciprocal relationship, using meaningful cues to provide an
9 enriched relationship between carer and infant when interacting and communicating together
10 (Dahlberg, et al, 2007; Pizer et al, 2007). Goldin-Meadow and Singer (2003) hypothesised that
11 symbolic gestures could elicit responses from the mother, which in turn may facilitate development of
12 communication (Daniels, 1994; Vallotton 2015). The multi-faceted ways of communicating and
13 developing a diverse language to enhance emotional responsiveness is therefore an empowering
14 realisation with SG becoming part of this repertoire (Barnes, 1995; Hochschild, 2003; Hopkins,
15 2001).

26 **Theoretical Framework: Symbolic Gesturing: meanings and interpretations**

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28 *The literature on symbolic gesturing (SG), as a specific type of a signing system that focused on the*
29 *affective domain of infants' and carers' and carer perspectives using SG were included in the search*
30 *criteria. Studies that evaluated the impact of infant and carer communication were also reviewed. The*
31 *methodological approaches of the studies were assessed, and predominately studies with qualitative,*
32 *alongside mixed method approaches were included in the review.*

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37 Two types of infant gestures are commonly identified: deictic gestures and symbolic or representational
38 gestures (Capirci et al, 1996). Deictic gestures such as pointing and reaching are among the first gestures
39 observed (Locke, 2007). SG are naturally occurring gestures framed in a way so the consistently
40 manipulated gestures of the hand represent something meaningful both to the infant and adult using
41 them. They carry meaning in their form to symbolise and express what is being conveyed and can stand
42 alone in much the same way as words (Goodwyn et al, 2000; Capone and McGregor, 2004; Messinger
43 and Fogel, 1998; Pizer et al, 2007). In verbal and SG communication, the development of reciprocal
44 responses from the caregivers to the infants, interactions and emotional interactional behaviour of
45 infants have been shown to be enhanced (Vallotton, 2009; Capone and McGregor, 2004; Goodwyn et
46 al, 2000). Ochs and Schieffelin (1984) also found that when symbolic gestures were promoted,
47 understanding and naming items improved, thus requesting objects was met with understanding, and
48 from an infant's perspective the desired outcome met. SG has since developed into an important early
49 communication behaviour capable of predicting and supporting language development (Goodwyn,
50 Acredolo, and Brown, 2000; Rowe and Goldin-Meadow, 2008). It has the capacity to integrate infants
51 into their cultural world of communication by developing socially appropriate behaviour.
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3 However, the value of SG has been received with caution (Gwyneth, 2008). Howlett, Kirk and Pine
4 (2011) indicated parental stress could be increased when attending signing classes if visible success was
5 not evident. However, the parents attending such classes were perceived to have possible pre-existing
6 levels of stress and therefore any approach could be reported as stressful with some parents. In a smaller
7 scale study Mueller and Sepulveda (2014) noted that the stress levels in nine families attending infant
8 signing workshops did not increase. They concluded infant signing workshops had beneficial results,
9 such as enhanced interactions, communication and increased bonding experiences between parents and
10 their infants. Vallotton (2009, 2012) and Kirk et al (2013) also supported the notion that using SG
11 compels the caregiver to become more responsive to the child. Both studies demonstrated that mothers
12 who had experience and knowledge of SG were more responsive to their child's needs than those who
13 were not exposed to SG. Similarly, Zammit and Atkinson (2016) evaluated maternal mind mindedness
14 was evident during SG, with the infant considered a communicative partner rather than helpless. They
15 concluded SG aided parents view of their infants as an autonomous individual, owning their own
16 emotions rather than an extension of their mothers'. Vallotton (2017) extended this and evaluated when
17 SG was delivered by adults sensitively and in response to infants needs the infants responded more
18 frequently. In conclusion, qualitative care-giver sensitivity to infant's interactions using SG was as
19 important and more so, than the quantity of SG used. This suggested SG required a sensitive practitioner
20 who was emotionally invested in the infant, practitioner relationship. In extending this research the
21 current study presented in this article adopted a qualitative, rather than quantitative approach.
22 Practitioners' views were explored to discover the potential of SG to enhance their emotional
23 interactions and therefore improved the relationship with infants in their care (Miller t al, 2005; Glaser
24 and Strauss, 1999, Mueller, Sepulveda, 2014; Vallotton, 2008). This paper has drawn specifically on
25 the voices of the practitioners in a bid to understand how fruitful SG became in making emotional
26 connections with the infants in their care. In doing so it aimed to add to the growing but currently
27 minimal body of work that has investigated the effect on emotional relationships of gesturing,
28 specifically in ECEC contexts in England (Namy, et al 2000; Vallotton, 2015; Vallotton, 2008;
29 Tomasello and Farrar, 1986).

30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 **Materials and Methods**

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51 In this case study approach, the focus was upon understanding and illuminating the views of three
52 practitioners using SG during a three-month period about how it enhanced the relationships with the
53 infants they care for (Johnston, et al, 2005). Therefore, the aim of the case study approach was to
54 understand the subjective world of the individual experience and go beyond the observed behaviour in
55 consideration of their perspectives through description and interpretation (Denzin and Lincoln, 2008).

56 57 58 59 60 **Contextual Journey**

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3 A typical privately-owned day nursery was selected in terms of numbers, parent partnerships and age
4 ranges offered in a local community.
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7 An initial group meeting for all the practitioners was held and they were asked if they would like to take
8 part in the study. This was important because coercion of staff to take part would have affected the
9 outcome. Of those willing to participate in the study the participants were recruited according to three
10 criteria: a) working with infants under two years in the daily setting, b) different positions held within
11 the day care and c) prior experience regarding use of signing systems. The sample was therefore
12 considered a reasonably representative of the practitioner population working in a day nursery. All
13 participants worked full-time and held a national childcare qualification.
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19 Practitioner 1: a senior member of the team with managerial responsibilities
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21 Practitioner 2: a senior practitioner with higher level qualifications
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23 Practitioner 3: a practitioner, qualified to responsibly practice with a small group of children
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26 **Interview approach**

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28 Individual interviews were held at the beginning of the three-month period, during the introductory
29 phase of understanding and learning about SG. A further interview for was held at the end of the three
30 months with each practitioner. The interviews were designed to minimise anxiety and create a relaxed
31 atmosphere where practitioners felt able to share their views and understanding of symbolic gesturing
32 (Yin, 2009). The approach was aimed to obtain the voices of the practitioners' experiences as they
33 implemented SG. It was grounded in a desire to illuminate the complexity of the individual lives through
34 analysis of data to provide greater insight into the social, cultural network and lived experience of using
35 SG (Erben, 1998).
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42 **Interview Process**

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44 The interviews were intended to give voice to three practitioners who would not ordinarily have their
45 social situations or viewpoints shared with a wider audience (Kvale, 2006). Each practitioner was
46 therefore allocated time to share their journey and experiences of implementing SG over a three-month
47 period. A broad open-ended question regarding their thoughts of symbolic gesturing was posed at the
48 beginning of the interview. The practitioners then led the remainder of the interview reflecting and
49 sharing their thoughts verbally. The interviewer repeated statements and prompted the practitioners'
50 where applicable so as to remain focused on the purpose of the interview. Awareness of the researchers'
51 own position during the interviews was essential in enabling a trusting and collaborative atmosphere to
52 promote the authenticity of practitioners' responses rather than feel exploited and manipulated (Collier
53 and Collier, 1986; Noland, 2006; Kvale, 1996, 2006). In response to reducing the manipulation of the
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3 dialogue, all interviews were recorded using an audio device and completed verbatim transcripts were
4 given to the practitioners a week post interviews. This member check aimed to the enhance advocacy
5 of the practitioners, validate their own narrative and obtain consensual knowledge (Collier and Collier,
6 1986).
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10 11 12 **Limitations and ethical considerations**

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15 A combination of reasons may create a barrier in sharing thoughts (Elfer, 2006). When the practitioner
16 interpreted the use of SG and their emotional journey, they may have focused more on the approach
17 superficially or be uncertain in how to articulate their emotional connectivity with the infants in their
18 care. Factors such as the practitioner's own upbringing or having had complex and challenging
19 conversations with parents may militate against articulating and sharing information about their
20 professional emotional relationships with infants. Trust and time were therefore essential for the
21 research to have any credibility. In seeking permission emphasis was placed on the commitment to
22 better understand the practitioners' perspectives in delivering SG rather than making critical evaluations
23 of their practice. Protocols including the right to withdraw and opt in were adhered to and guidelines
24 were followed using university criteria as part of a doctoral study.
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31 32 **Analysis Process**

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34 A social constructivist theoretical frame was employed whereby the practitioners drew on their social
35 and cultural resources to construct meaning with the infants they cared for (Yin, 2009). Meaning is
36 defined therefore as constructed rather than fixed and it is open to interpretations by the researcher
37 depending on the practitioner's choice of narratives, they shared regarding the implementation of SG.
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41 The data was analysed thematically using the procedures recommended by Braun and Clarke (2006).
42 Thematic analysis involved searching through the data sets of each practitioner's interviews to find
43 repeated patterns in the transcripts. of ideas and common words. The transcripts were then read and re-
44 read and subsequently organised into categories and colour coded accordingly. These categories
45 included general thoughts about SG, frequency of using SG, the quality of communication using SG,
46 personal reflections and roles when communicating with infants using SG. Common themes between
47 the categories were sought, for example; using SG as a form of non-verbal communication during music
48 time. Further structured analysis then took the form of comparing themes whilst taking note of high
49 frequency words such as body language, tuning in, and emotions. Moving back and forth through the
50 data sets assisted the process of interpreting and making sense of the practitioners' words, so enabling
51 their ideas and meanings to be derived and subsequently clarified alongside theory (Collier and Collier,
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3 1986; Noland, 2006). This process enabled two broad themes to be derived that were refined further as
4 a major and secondary theme.
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7 The two themes developed were;
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- 9 **1. Making emotional and intersubjective connections using SG**
- 10 **2. Understanding infants' emotional wellbeing using SG**
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16 **Results and Discussion**

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21 **Making emotional and intersubjective connections using SG**

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23 At the beginning of the SG journey the practitioners described their emotional relationship with the
24 infants they cared for. Practitioner one stated the objectives of the job description were achieved by the
25 infants being comforted, although how they were comforted was not clearly defined:
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28 *As primary carer in our setting, evidence of settling the infants in is when the infant looks for comfort*
29 *and goes to the key person. They seek for comfort and the key persons seem pleased to be with them.*
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33 In the initial interview prior to SG being used, practitioner two described her role regarding emotional
34 relationships as a person who is aware of personal needs; making the infants feel valued as individuals
35 in addition to meeting their learning needs:
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38 *I feel a key person is somebody who takes care of the children's needs, their complete needs and the*
39 *holistic needs of that child. It is our role to make them feel secure and to make them feel valued when*
40 *they come and play with us.*
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44 Whilst practitioner three, tended towards the practitioner's duties in terms of children's learning rather
45 than the attachments formed in emotional relationships:
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48 *Well the role of the key person in this setting is quite specific and is discussed with members before*
49 *they start working so there is not any doubt what their role is. They have their own key children;*
50 *obviously they have a small group of children who they are responsible for ...they are responsible for*
51 *observing those children for using those observations to plan activities for the children linked to the*
52 *medium term plan and then evaluate those activities and decide the next step for their own children...*
53 *their own. They also keep the children learning journeys files.*
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58 Within the early years curriculum there is an expectation for that practitioners foster individualised and
59 intimate relationships with key infants they routinely care for (DfE, 2014, 2017, Elfer et al 2012).
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3 However, practitioners three predominately defines her role through the responsibilities within a
4 curriculum frame rather than an emotional lens in caring for infants. This rather cool, bureaucratic and
5 official response highlighted the legislative requirements of a key person's role rather than the
6 expectations of care for the infants in their care. Practitioner three was the most senior of the participants
7 with the highest responsibility in the team, she therefore possibly regarded this response as the answer
8 expected. Towards the end of the initial interview with the same key person, it became evident that
9 some personal qualities were recognised as necessary but not fully defined:
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15 *The personal qualities a staff member needs to have are a sense of humour, they need to be kind and*
16 *caring, they need to care about the children to make them feel secure...they need to be interested in the*
17 *children's wellbeing*
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21 These qualities; humour, kindness and care whilst perhaps not recorded in a job description are aspects
22 culminating in developing a bond and attachment with infants. Increasing emphasis on emotional
23 relationships have formed part of the early years discourse within practice (Braun and Clarke, 2006).
24 However, approaches to develop, understand and articulate these emotionally complex relationships are
25 less evident. Findings show that a shift occurred in the practitioners' emotional reflective thinking when
26 they used SG in their daily practice. Rather than describing their job descriptions and broad expectations
27 of their role, they were able to evaluate and articulate how SG provided a way of reviewing their
28 emotional connections during daily routines. They expressed how SG helped to build their confidence
29 in becoming more expressive with the infants in their care. It also allowed the practitioners to initiate
30 a novel approach with the infants and learn together at a self-directed pace rather than having it imposed
31 on them by senior management. As practitioner two revealed in the post-interview:
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39 *The way we learnt how to symbolically gesture was through a dvd, which was actually very musical*
40 *and expressive. We found watching the dvd with the children was much more useful than sending a girl*
41 *to go on a training course who would be then too embarrassed to use signs and try to show us. When*
42 *we did makaton we didn't actually use them in the end, and it was difficult to get other staff to copy*
43 *them*
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48 In practice using SG enabled the practitioner to be less inhibited and natural in their interactions with
49 the infants. Practitioner two considered how the infants felt when being directly spoken and signed to
50 making them feel wanted and cared for, therefore enhancing emotional connections (Pugh and Duffy,
51 2013). It was something that perhaps hadn't been employed previously and therefore focusing upon the
52 emotional relationship and how the child became more aware of the one-to-one relationship was
53 significant as she continues:
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58 *It definitely helped the emotional relationship because of the closeness that has developed during*
59 *signing and I am becoming much more self-aware, the infants are also being responded to on a much*
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3 *more personalised level than before symbolic gesturing...I am even more eager to find out what is inside*
4 *those wonderful brains!! As a key worker, my relationships with my key children are far more personal.*
5 *I find I am helping all the children and responding to them all one by one, not just through signing but*
6 *also through eye contact and facial expressions. I am really observing now! Before with a lot going on*
7 *it was easier to leave the quiet children alone and interact less with them. They didn't seem to need my*
8 *attention as much whilst others I felt were still very dependent on me and needy.*
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14 Practitioner two reflected on how SG interactions enabled her to respond to infants as individuals rather
15 than providing them with group care. She also noted that her responses were influenced by infants'
16 temperaments, and their emotional demands. In viewing the infants as separate individuals and being
17 aware of their own minds as working independently rather than reacting as a helpless and dependent
18 corresponds with the maternal mind mindedness within the practitioner infant's relationship (Zammitt
19 and Atkinson, 2016).
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24 As a result of symbolic gesturing, the 'quieter' infants' who had previously been left for longer were
25 now getting more individual attention with the practitioners becoming more attentive and sensitive to
26 the infants' needs rather than as a general response to the infants' behaviour (Brooks-Gunn et al, 2003:
27 Dowling, 2014). The moment of 'tuning in' to individual infants can be helpful in unexpected ways,
28 because they often express emotions that they find impossible to deal with by themselves (Smith, Cowie
29 and Blades, 2005; Trevarthen, 2001). In responding to singular moments of an infant trying to self-
30 regulate their own emotions internally the practitioner is able to tune in to an infant withdrawing or less
31 responsive by using verbal and visual cues with SG to support them. This can be particularly true for
32 those infants who would perhaps previously been marginalised by the more demanding and expressive
33 infants (Mooney, 2010). Therefore, as an approach to support their role in tuning in and providing
34 comfort and warmth, SG was considered significant by the three practitioners during the subsequent
35 interviews as a way of being physically and emotional available to the infant.
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44 Tuning in to an individual child was therefore recognised by practitioner one as an important
45 contribution of SG to enable her to react to the infant as an equal partner in the relationship and the
46 relaxed atmosphere of using SG enhanced their interactions:
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49 *It was not something the infants could fail at, or be expected to do, and because I and the children were*
50 *learning it together, it was quite nice and more personal with both having time to develop together. I*
51 *think it also enhanced the relationship between myself and child J as he is showing more awareness of*
52 *feelings and his emotions. he faces you when communicating and makes hand gestures for me to come*
53 *when I am wanted or needed, helping me to meet his needs more quickly and appropriately. He did not*
54 *do this before and would seem accepting and passive during the day, not really giving much away. Now*
55 *we seem to flow together more in our interactions.*
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3 The practitioners' responses highlight the emotional communicative dance of attunement with their
4 behaviour adapting to the rhythms of the infant, allowing them to lead the interaction through proto
5 conversations (Trevarthen, 2001). As the term suggests, the patterns of turn taking include mutual
6 attention, changes in movement, smiling and so on. In cognitively developing the emotional relationship
7 meaningful communication was occurring between carer and infant (Meil and Dallos, 2005; Gerdhardt,
8 2004; Trevarthen, 2009; Vallotton, 2017).

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13 Reflecting on this further, practitioner three drew on the interactional challenges' practitioners faced
14 when being confronted with an infant's feelings and emotions. She touched upon the complexities and
15 tensions of their role:

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19 *Any sort of interaction, including generally observing, has to be achieved through one-to-one*
20 *interactions where the practitioner is able to tune-in to the child. I think symbolic gesturing has real*
21 *potential here because signing is something tangible that can be carried out as a way of communicating,*
22 *not just verbally but with your body too. I think it encourages practitioners to think about how they use*
23 *their hands, but also their facial expressions and bodies. There are things you can always teach to*
24 *practitioners and demonstrate, but the emotional interaction aspect of care is very difficult to teach and*
25 *very difficult to model. Sometimes the less experienced staff are so inhibited and concerned they are*
26 *doing something wrong they hold back, not wanting to make a fool of themselves. I suppose one reason*
27 *for this could be their own social care from their own environment and the way they were exposed to*
28 *emotions and interactions as a young infant. Therefore, their own upbringing is undoubtedly influential*
29 *in how they professionally care for the infants at day care. This is why I think signing and supporting*
30 *each other is helpful in relaxing and interacting, trying to understand what the infants they care for*
31 *want and emotionally expressing.*

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40 This highlighted how individualised care could be defined, interpreted and acted upon, to some extent
41 by the practitioner's own experiences and upbringing of emotional relationships. This could be a
42 contributing factor to the amount practitioners emotionally invest in the relationship with the infants
43 they care for. Specifically, they may draw upon - particularly at stressful times - their own experiences
44 of comfort, attending to needs in relation to what they have been influenced by (Belsky et al, 2007). If
45 a practitioner's lack of experience or restraint in love and comfort is prevalent, actively observing and
46 listening to changes in behaviour and tuning-in can be superficial or minimal (Taggart, 2011). This can
47 potentially result in the emotional needs of infants being overlooked and, or misinterpreted (Mooney,
48 2010).

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55 Practitioner three evaluated the way SG has been used as a way for practitioners to approach their role
56 and enhance attachments during interactions:

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3 *If it's used correctly and systematically by enthusiastic key workers it can develop connections and*
4 *security, being in touch with the infants. It slows the adults down in their approaches and interactions*
5 *and provides better eye contact with the child. In a busy day care the staff will sometimes talk to each*
6 *other and talk over the infants' heads, which I know can happen at home too. However, signing helps*
7 *to get down at the child's level and face the child and actually communicate and engage with them*
8 *rather than barking out directions or comments and not really listening to them.*
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13 Practitioner two also reflected back to the time before she used SG and compared it to the present
14 making her more aware and closer to the infant she cared for, thus reducing the likelihood of stressful
15 situations occurring;
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19 *Right from the beginning when we did our first interview, I thought it would maybe help, although I*
20 *was cautious about speech being affected, used less by myself and the infants. I wanted to make sure I*
21 *did the two together. Since using signs, I have noticed my emotional relationships with the children I*
22 *look after has developed. I feel I have communicated my feelings and understood theirs better. It has*
23 *brought a closeness I had not expected. The older children in the baby room, who are using more SG*
24 *are tending to show more self-awareness and I am more aware of meeting their needs too. I feel I more*
25 *confident and expressive of my emotions and read the infants cues better. I would have liked to have*
26 *done something like this when I trained.*
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32 SG is therefore an approach not simply to aid verbal communication but also an opportunity for the
33 practitioner to reflect on their facial expressions, hand and body movements and general behaviours
34 when interacting and emotionally engaging with the infant. As practitioner two noted using SG as part
35 of a multi-faceted way of communicating, recognition of emotional responsiveness from both the infant
36 and her individually and together was therefore an empowering realisation (Hochschild, 2003). It is a
37 form of communication that encourages the practitioner to observe and listen to themselves and the
38 infants in their care, with purpose, thus creating a greater understanding of what the infant is trying to
39 convey and therefore emotionally investing in the relationship (Vallotton, 2010). Whilst there has been
40 reservations and concerns Olson and Masur (2013) found mothers who used SG responded more
41 frequently with signs and verbally, and through these positive attempts in turn encouraged infants to
42 increase attempts at vocalising and signing (Miller and Lossia, 2013).
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50 SG was also thought to be a way to guide the infants through direct communication with them and form
51 a close attachment as illustrated in a response from practitioner two about being a 'mother hen' and
52 guiding the infants. Mother hen is defined as someone who assumes an overtly protective maternal
53 attitude and ambience (Holmes, 2001).
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58 *The practitioners are signalling and guiding their body language... It's more mother henning now in*
59 *the way we work with the infants than we had previously.*
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3 This maternal attitude and overtly protective behaviour forms part of what is considered as creating
4 opportunities for forming attachments. Attachment is not a one-off event but a developmental process,
5 occurring as a function of the developing relationships between babies and young children and their
6 caregivers. Infants develop internalised working models of relationships which change because of
7 experience and, in light of new information they receive, about how people relate and connect to one
8 another, as in the example of the 'mother hen' type approach towards them (Bowlby, 2005; Holmes,
9 2001).

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15 Similarly, practitioner one recognised how SG had not only helped the infants in developing
16 attachments, but also the practitioners in being able to express emotions and bond within the infants:

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19 *It helped me to communicate and let the infants express their emotions to me. Because of this it helps*
20 *me understand their own emotions more, giving me the confidence as a practitioner to connect more*
21 *with my key children and treat them as individuals in their own right. I feel I have really got to know*
22 *them and meet their emotional needs more fully than before.*

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26 Zammitt and Atkinson (2016) considered that SG enhanced infant autonomy and promoted awareness
27 of infants growing independent emotions and therefore as a result parents were adjusting their own
28 interactions with them. As indicated by the practitioner's comments above SG has supported bonding
29 and attachment, facilitated emotional relationships to develop and promoted a nurturing relationship
30 that enabled infants to become autonomous individual rather than completely dependent upon the
31 practitioner.

32 33 34 35 36 37 38 39 **Understanding infants' emotional wellbeing using SG**

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41 Interview responses at the end of the implementation of SG illustrated a shift in how the three
42 practitioners were able to articulate and reflect on their own practice and the complexity of their role.
43 For example, practitioner three referred to the practitioner role as emotional and maternal and that SG
44 had improved their emotional engagement with the infants in their care:

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48 *When you are a mother with a young baby on your own you will do all sorts of daft faces, raspberry*
49 *noises, tickle their tummy. Less experienced practitioners are inhibited to touch the child in that way*
50 *and therefore using signing that doesn't inhibit them helps in a way to train them to actually want to*
51 *do the same sort of things you want to do at home with baby where you would be making your own*
52 *gestures up.*

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57 Practitioner three highlighted the parallels between the relationship of parent and infant with that of the
58 practitioner and infant. The parent-infant relationship suggests a sense of instinctual emotional
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3 responses and initiations at some level with close bonding taking time, effort and attention to develop.
4 Using SG seems to have facilitated a similar bonding process between practitioner and infant (Bowlby,
5 1997). Having an atmosphere that was stress free when introducing SG in a fun and relaxed way was
6 important in its successful implementation in enhancing bonds between infant and practitioner (Kirk
7 and Pine, 2010; Mueller and Sepulveda, 2014).
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11 When bonding is achieved successfully, richer and more personalised relationships occur, with each
12 being valued for the contribution they make when interacting (Zammit and Atkinson, 2016).
13 Practitioner two recognised these closer personal relationships after the period of implementation, in
14 the post-interview she commented that a more intimate form of recognising achievement was
15 sometimes preferable to a more generalised praise:
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20 *It's really being in tune with the individual. Some children appreciate a smile, or a thumbs up a lot*
21 *more than verbal communication such as 'wow, look, at what such and such has done'.*
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24 Celebrating achievement was, therefore, recognised as being approached differently than previously
25 because SG had facilitated practitioners to reflect on their own responses in general and question how
26 they were responding to infants, as key person two discusses:
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30 *Celebrating achievement... it's a lot of clapping and a lot of big movements, you know, and we are*
31 *really celebrating that, but I have noticed that celebration now for me doesn't have to be so obvious,*
32 *now it can be a very small gesture... like a smile.*
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36 Using symbolic gesturing, therefore, lessened regular exaggerated gestures and whilst deictic gestures
37 remained valuable in communication the increased use of SG, and representational gestures created
38 further opportunities for shared meanings (Nelson et al, 2012). The quality of signs and the reduction
39 to a tokenistic recognition of achievement proved to be more effective in enabling practitioners to
40 understand and support the infants' emotional wellbeing. Opportunities to enhance emotional
41 connections were therefore occurring in the practitioners own emotional journey throughout their
42 interactions as a result of using SG.
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47 Practitioner three and two explored this connectivity when they spoke about the relationship becoming
48 more expressive and congruent because of using SG. Practitioner two felt the confidence of both parties
49 was improving and thus they were almost taking more risks in the openness of their personal feelings
50 than had previously been evident:
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54 *Children feel they could come to me a lot more and I have got a lot more open and a lot more expressive.*
55 *I was anyway, but now I am a lot more. I look a lot more open than before. I respond rather than initiate*
56 *and reflect on how I am conveying messages to my group and individually.*
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3 In verbal and SG communication, the development of reciprocal responses from the caregivers to the
4 infants, interactions and emotional interactional behaviour of infants have been shown to be enhanced
5 (Vallotton, 2009; Capone and McGregor, 2004; Goodwyn et al, 2000). It has the capacity to integrate
6 infants into their cultural world of communication and Zammit and Atkinson (2016) evaluated maternal
7 mind mindedness was evident during SG, with the infant considered a communicative partner and
8 concluded SG aided the view of infants as autonomous individuals. This was illustrated with
9 practitioners one evaluating the way practitioners worked together with infants in their care;

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15 *The less confident key persons will copy and model the confident practitioners. An example of this was*
16 *yesterday in carpet time, one of the new apprenticeships who had been working with a more senior staff*
17 *who was really conscious about body language was gesturing really beautifully about the weather today*
18 *and babies were really interested in what she was doing, how she was moving. They seemed to be in*
19 *the moment together and enjoying each other's company. Some even initiated their own signs to the*
20 *songs rather than simply copying! It just goes to show how SG can support and develop confidence*
21 *when we are doing it and demonstrating it. The apprentice was relaxed, and the babies responded to*
22 *her and then the babies responding back. There was a real snowball effect... perpetuates the response*

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28 Current thinking within EYFS (2017) refers to the infant needing a key person relationship and, where
29 possible, a one-to-one relationship where the relationship can become intimate so that consistent care
30 is provided. As the weeks progressed SG was observed to be used a natural part of everyday
31 communication rather than just during focused activities, as practitioner two commented:

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36 *I think when you sign you become more aware of the individual within the group and this is helpful*
37 *during song time or lunch and rest. You sign to an individual and look for the responses. Previously,*
38 *by just using language, it was so easy just to sort of go over the infants, giving instructions about what*
39 *to do, without intending to. Now I try to use it when I can throughout the day, such as when we move*
40 *room or I explain what we are doing next, such as nappy changing.*

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SG was therefore significant in terms of practitioners reflecting on their own behaviour and physical
movement when reacting to the infants in their care. Similarly, in Vallotton's study sensitivity and
responsiveness were more evident to children during interactions in which the caregiver was engaging
with them using SG (2008). As a result of practitioners' initiation in using SG and empathic
responsiveness it facilitated, a process of shared learning and emotional shift within the relationship
with the infant was created.

Conclusion

In this study three practitioners' loved experience of engaging with SG has been explored. SG not only
provided an opportunity for practitioners to interact with each infant in a sensitive way but also

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3 increased their own professional commitment to a pedagogy of emotional care. In using SG both
4 practitioners and infants had the potential to maintain and develop emotional dialogues. Whilst
5 knowledge of infant emotional development is a core aspect of training and theoretical learning as part
6 of the practitioner's professional role, the value ECEC settings place on addressing emotionally
7 supportive linked practices with infants remains diverse. Investing in emotional relationships is
8 complex and subjective, with many practitioners relying on non-verbal infant's external behaviour to
9 evaluate their internal feelings, 'managing' them as a group rather than celebrating emotional
10 individuality. Implementing SG promoted the desire to respond rather than initiate emotional
11 expectations and gain a deeper understanding of what the individual infant is conveying. Therefore, SG
12 would appear to facilitate the development of richer and more meaningful emotional relationships
13 between practitioner and infant. The findings are not intended to be representative of a wider sample
14 but to illustrate ongoing debates regarding emotional connections made through using SG to
15 complement and go beyond popular behavioural approaches that are part of existing practice. This study
16 therefore invites policy makers and practitioners to broaden their focus from the linguistic and cognition
17 features of signing systems more to those that enhance the emotional aspects of the practitioner / infant
18 relationship. Including SG with its emotional value appears to enrich the voice of the infants and the
19 ability for practitioners to reflect on the way they interact with them. It therefore may provide a joint
20 learning experience resulting in meaningful interactions thereby alleviating infants' frustrations and
21 tensions.
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