Communicating through musical play: Combining speech and language therapy practices with those of early childhood music education - The SALTMusic Approach

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Young children's speech and communication skills have been in the spotlight in recent years, often in association with parental socio-economic status and children's 'readiness' for school. Finding innovative and open-ended ways to encourage children with communication difficulties to engage in interactive play was the premise for this action research project. By combining the theoretical knowledge and expertise of speech and language therapists with those of early childhood music-arts practitioners, the interdisciplinary research team expanded their understanding and practical approaches. Caregivers and children aged 24-48 months attended weekly SALTMusic[1] sessions. The team reflected together on their observations after every session, completing the 'SALTMusic Scale' for each child. Drawing together analyses from this tool, and other data collection methods, it was evident that children's communication improved when the need to talk was removed and children and caregivers were encouraged to play with sound and make music together. This paper presents the 'SALTMusic Scale', created through the five cycles of action research. A case study using data collected with the tool reveals the impact of SALTMusic. Findings include 'child-initiated interaction' and 'laughter' - two important signifiers of confidence and trust. Both increased over the course of two programmes of SALTMusic, rather than one. This is an important study offering an evidence-informed approach to working with children and their caregivers that can relieve anxiety and build confidence. The research has grown from practice, with applications for diverse music education contexts. The pedagogical approach is improvisatory, playful and learner-centred. Early childhood music education practice in England is emerging as a distinctive specialism, postgraduate qualifications available for the last decade or so are impacting on the quality of practice in the field, placing theory and research as integral elements of reflective practice.

[1] Speech And Language Therapy-Music

Keywords: early childhood music; speech & language therapy; pedagogy; reflective practice; parents; two-year-olds; interaction; action research

Introduction

The SALTMusic action research project came about through the legacy of joined-up working for children under five, and their families, in England, at the start of the millennium. In one place, the Children's Centre, health care professionals, practitioners from social services, education and care; as well as, in some cases, music-arts practitioners were co-located. Through joint-working, mutual engagement and similarities in working practices were identified by the music-arts head practitioner, who developed the idea to work collaboratively on a project for children with Speech and Language Therapy (SLT) referral. The music-arts professionals with their specialised, playful, multi-sensory and aesthetically rich pedagogy provided a 'non-clinical' space for SLTs to work more effectively with families.

One Speech and Language Therapist (SLT) describes the history of the project from her perspective, "*The Speech and Language team soon crossed paths with the Great Yarmouth Music Team at Priory Children's Centre and heard about their music groups which were oversubscribed and very popular with families in the area. Our team was able to shadow the work of the music team and we soon found that the activities carried out in these groups were approached in a fun, motivating and child-led way which is exactly what we were trying to achieve within our language groups. Through my work, I have particularly noticed how a child who feels relaxed, where there is no pressure on them to 'talk', is likely to use more language during that session and this also puts them in a better place emotionally to take on new language modelling."* (Pitt & Arculus, 2018, 9)

In addition to the funder's[2] requirements of aims and outcomes (for detail see Pitt & Arculus, 2018, 10) the project was designed to answer the following research questions:

[2] Youth Music – an English charity that offers funding for out of school music activities for people aged 0-19 years.

1. How do two different professional disciplines (speech and language therapy and early childhood music-arts education) combine their practices and understandings to form a community of practice?

2. What are the characteristics of the new pedagogical approach that emerges as a result of joint-working?

3. How can we record the experiences of children and families during their attendance at SALTMusic?

4. How does the new pedagogical approach affect the SALTMusic children's communication?

5. What is the impact of the SALTMusic programme on parents/caregivers who attend sessions with their child?

This paper confines itself to research questions two to five. Findings in relation to question will be reported elsewhere. The experiences of the children and families were perceived philosophically as being created through the inter- and intra-actions (Taguchi, 2010) between objects, space, children, caregivers, practitioners and reflections in and on practice. Lenz-Taguchi, inspired by Karen Barad, describes a pedagogy centred on the inter-relationship between all living things and the material environment. She suggests that materials and humans are part of "*an intertwined relationship of intra-activity."* (2010, p.xiv). A new pedagogical approach has emerged from the interdisciplinary working within this project. Children's interactions increased as anxiety about using words was reduced by entering a music-sound world rather than one focused on words and talk. The musical play environment opened up other forms of interaction which demonstrated children's capacity, competence, creativity and expressiveness. This positive environment allowed for children's and caregivers' confidence to grow, and as a natural consequence, vocalisations and word use increased over time.

Literature review

The Social Context

Just over ten years ago the John Bercow review of speech, language and communication services in England made recommendations in several areas, "*Communication is crucial; Early identification and intervention are essential; A continuum of services designed around the family is needed; Joint working is critical; and the current system is characterized by high variability and a lack of equity*" (Bercow, 2008, p.6).

A decade on, findings in the review, '*Bercow: ten years on'*, suggest the picture for children with Speech Language and Communication Needs (SLCN) can still be a difficult one, affecting areas of, "*educational attainment, social emotional and mental health and life chances"* (Bercow, 2018, p.6). The review reports the impact of individual children's communication difficulties on their wellbeing, increased challenges with everything in and outside school, and a lack of understanding from the adults around them (2018, p.11). There are examples in the report where local initiatives based in Children's Centres have had significant impact (2018, pp.12-14). Both reports recommend *Early intervention* and the need for *joint working*. These two recommendations, coupled with some examples in the report of local, successful initiatives, contribute to the rationale for the SALTMusic project's design and outcomes.

Parents/caregivers and the home environment

As far back as the 1970s, speech and language therapists were in short supply and Sir Alan Bullock (1974) suggested attention to children's language and communication skills was given too late. His report recommended that antenatal clinics provide information to expectant parents on the importance of language; it being as essential as an infant's physical and emotional growth (1974, 58). The Millennium Cohort study of 12,644 children born in the UK between 2000-01 provided a dataset that Waldfogel and

Washbrook (2010) used to find statistical associations between poverty and cognitive development. They found that by the age of four / five years old, children in the lowest income band were about 11 months behind their peers in the middle-income band in terms of expressive vocabulary. Parenting and the home environment were suggested by the researchers as possible contributory factors. Law et al. (2017), on behalf of the Education Endowment Fund, investigated the needs, provision and interventions available for children under five years old living in areas of socio-economic disadvantage. This nationwide study suggested there is individual variation in early language development, yet this development is sensitive to environmental context. Formal evidence-based interventions are hard to find and although there are a number of practices that have been found to be effective, these are not found replicated on a large-scale (2017, vii). The report recommends further study of parent-child interaction interventions to promote children's language abilities in readiness for school and highlights the need for training for early years practitioners to work with these approaches with families (2017, vi).

A plan to improve social mobility (DfE, 2017b) suggests that injustices arise from individuals' geographical location and the varied opportunities that exist across the country. The plan proposes to level out the landscape to make sure, *"no community is left behind"* (Justine Greening's Foreword, DfE, 2017b, p.5). To this end the report has four life-stage 'Ambitions', the first of which is to "Close the 'word gap' in the early years" (2017b, p.8). It includes evidence that a parent's education level can impact on children's early outcomes, acknowledging that there is a lack of effective models for working with parents. Solutions are not focused on the children but rather on developing infrastructure for knowledge of what works and how to identify and measure those who are falling behind. This government document conflates

communication difficulties (word gap) with disadvantage and poor parenting. Furthermore, although there were no clear contributory factors in the Waldfogel and Washbrook (2010) study, they suggest that parenting and the home environment might be responsible. This approach to childhood puts responsibility for a child's linguistic capacities and future failure in life on parents and the home, rather than social and economic factors (Blum, 2017; Burman, 2017).

Burman (2017) suggests that the obsession with getting children talking as quickly as possible is unsubstantiated by theory. She points out that while adults are supposed to 'bathe children in language' (citing, Bullock, 1974 p.58) there is no clear idea as to what this actually does to help children talk, nor what specific features of adult speech directed at children help children's language. There are limitations to the methodological and interpretational scope of much of the research in this area to truly understand the complexities of the linguistic process in early childhood.

An alternative interaction space

The word-gap, attainment and school readiness agendas focus on words and their acquisition as the most important achievement point in the early years, with the role of parents viewed as increasing the number of words their child can use. This can cause anxiety for those working in early years, for caregivers and for children. This dominant discourse of 'Wordism' (Blum, 2015, p.74; 2017, p.6) conceives of *words* as the size of the units to signify language. The SALTMusic project challenges this. The perception that language is words, and more words are better, can lead to a sense of pressure and a feeling of blame within those families whose children don't have the words that they feel they should. This discourse is just one way of thinking about language. By focusing on other modes of communication, children can be seen as competent with a varied

interaction palette. Blum (2017) argues from the linguistic anthropology perspective that many other cultures' first unit of language is **interaction**, being demonstrated through sound in various patterns. This has been a helpful way for us to conceive of communication. Musical play offers a sound-rich, talk-poor environment where social interaction and expression can be explored. The tyranny of talk can be less dominant in this space and the focus can be turned towards **interaction** between parent and child, between peers, and between child and practitioner.

Music and Speech

Neuroscience perspectives

The information conveyed by music and speech is very different, yet there are similarities and neural overlaps (see Peretz, Vuvan, Lagrois & Armory, 2015); both are organised temporally and have rules and structures (Lerdahl & Jackendoff,1983). The ways in which the brain processes and integrates the structures of music and speech have similar neural responses (Patel, Gibson, Ratner, Besson & Holcomb, 1998). Indeed, the same area in the brain is activated during music and spoken stimuli, the Sylvian Fissure, which suggests an auditory-motor interface (Hickok, Buschbaum, Humphries & Muftuler, 2003). Stroke patients with injuries to the speech area of the brain have been able to regain tonal and rhythmic aspects of speech with the use of musical approaches (Thompson & Schlaug, 2015). Although there is no conclusive evidence that the two domains are either distinct or collaborative (see McMullen & Saffran, 2004) it is clear from the literature that there is a relationship in the brain between the spoken word and music.

Psychological perspectives

Stern uses the term ‘affect attunement’ to describe a mutual intersubjective connection, and vitality affect to describe the expression of strong experience. His theory of intersubjectivity rests in the power of the present moment. Dance and music are situated in this powerful domain with an interconnectedness between players. Stern described how participating in group-rituals - such as dancing or singing - result in self-identity and belonging (Stern, 2004).

Music and language acquisition

The prosodic aspects of speech (rhythm, tone, contour, pauses) and music perception were found to be equally affected in children with speech and language impairment (Sallat & Jentschke, 2015). Music perception and phonological awareness have been found to be linked to the auditory mechanisms required for reading in young children (Anvari, Trainor, Woodside & Levy, 2002; Bolduc & Montésinos-Gelet, 2005). Nursery rhymes have been found to help with phonological awareness (see Harper, 2011). Music can positively influence perception, understanding and imitation of the sounds within speech. The construction of receptive vocabulary begins at around 12 months, along with an emergent perception of phonemes (Werker & Lalonde, 1988). Phonemic segmentation fluency (the ability to break words down into individual sound components) was improved in kindergarten children who attended music instruction for four months when compared with a control group (Gromko, 2005), with the suggestion that the skills of segmentation would be of transfer value to learning to read. Children aged eight who attended music classes were significantly better at identifying speech segments than those who attended a painting group (Chobert, François, Velay, & Besson, 2014; François & Schön, 2011; François, Chobert, Besson, & Schön, 2012). A review of studies of young children’s emergent literacy and music (Bolduc, 2008) found that musical activities promote auditory perception, phonological memory and

metacognitive knowledge, all three of which are important in the development of linguistic skills.

It is worth noting that the experimental research studies upon which many general beneficial claims are made have limitations which may not always reach the public domain. Results are based on averages; correlation does not imply causation; there may be bias in recruitment of participants and deficiencies in the experimental design - all of which are reported in the original papers but not mentioned in the general statements made more widely (Odendaal, Levänen & Westerlund, 2018).

Musical Play

The Early Years Foundation Stage Curriculum (DfE, 2017a) recommends play-based approaches to teaching and learning. In play, children use their imagination, think critically, explore and experiment, discover the impact of cause and its effect, take risks, repeat and rehearse ideas, express themselves multi-modally, adopt roles and act out stories. The characteristics of effective learning (DfE, 2017a, p.10) of: "Playing and Exploring; Active Learning; Creating and Thinking Critically" are all apparent when a child is absorbed in play.

Littleton (1998, pp.27-28) observed children's free musical play and identified six different types: co-operative, functional, constructive, kinaesthetic and games with rules. The SALTMusic project was based on creating environments where all these types of musical play could be explored by the children (and adults). Niland (2009) points out that in early childhood visual arts education it is commonplace for children to be encouraged to explore the materials, tools and media without needing to be instructed in how to use them, allowing time to think as well as explore. Barrett (see e.g., 2006; 2009); Young (see e.g., 2008); Gluschankof (2002); and Shehan-Campbell

(2010) all suggest, through studies based on observation, that children's music play is distinct from the adult world of music making. The SALTMusic pedagogy is built on the notion that children's musical play is a crucial element of communication and the pedagogical choices and actions must be grounded in observation, interaction and reflection on the process.

The social-emotional-cultural learning space of the music group in a community context

An arts enrichment programme for preschool children from low income families (Brown & Sax, 2013), found that the delivery of core EY learning - when enriched with culturally-sensitive and appropriate daily music, creative movement and visual arts classes – resulted in increased pride, happiness, interest, positive emotions and greater emotional regulation amongst those children who attended, compared with their peers. The implication from the study was that arts enrichment may help low income children's social-emotional readiness for school.

The approaches to group musical activity that have been found to be most effective in this informal community context are improvisational and flexible. Young (2003) talks about the creative process with interaction, in the moment, as the key aspect. This leads to an approach that is improvisatory, child-led with the adult role seen as either 'guide' or play partner in the process. The integration of multi-modal activities that incorporate movement and sensory materials with the sound play is fundamental.

Methodological approach

The project had a core aim to influence or change practice; the natural research design was therefore action research. Robson (2002, 215) outlines three elements of action

research: improvement of practice, improvement of understanding of practice, and improvement of the situation where the practice occurs. Crucial to the research process is the active involvement of all participants. Action research is conducted in real world circumstances and ethical considerations are important as research is built upon open and in-depth communication between all participants. SALTMusic included parents and children in the cycles of action research. The children and their parents/caregivers watched edited film data collected through one cycle of 'intervention' and their reactions were observed as evidence of their 'voice'. The parents' views were sought throughout the process and the data they provided helped triangulate data collected from the team of their observations of the children.

We adopted five cycles of planning, acting, observing, reflecting, then re-planning afresh in the light of the discussions, then repeating the cycle.

Participant Groups

The professional participants comprised three speech and language therapists (SLT), two SLT assistants, three early childhood music practitioners, four trainee early childhood music practitioners, a strategic project lead, a researcher and a project manager (n=15). The SALTMusic programme of activity took place in three different group settings per week in term-time. Each group included up to eight children (aged 24-48 months) with communication difficulties and their parents / caregivers and any younger siblings: these comprised the family participants of the research. Total number of children, n=93. 49 parents completed evaluation forms many more attended each week with their child.

Family participants were invited for at least one term. This began with a taster session for families to decide if the 'research' group would be suitable. This was

followed by the programme of SALTMusic sessions (8 and 10-weeks' duration were both trialled), concluding with a celebration session. In a few cases, children (n=5) attended for two terms. The children were aged between 24-36 months, few of them had a specific diagnosis at this stage. The professional team were aware that for some family participants' attendance at the group sessions was not easy, some felt vulnerable and anxious and many were emotional and concerned about their children. The children were also sometimes vulnerable and anxious. Central to the team's approach, and vitally important when working with families, was the notion of ethics of care (Gilligan, 1982; Noddings, 1984); empathy and compassion were integral to the relational ethics adopted.

Concept of the child

Central to the SALTMusic approach is the understanding that young children are competent and create aesthetic expressions that are valuable and integral to the group's overall experiences that are necessary **for all human thriving and belonging.** This discourse pervaded the approaches used, the environments created, the responses and interactions offered, and the opportunities that were enabled in the sessions. It was a fundamentally important foundation to the project.

Methods of data collection

The qualitative design included the collection of both numerical and qualitative data. By adopting a mixed methods approach to data collection, the range of data collection tools overcame some of the weaknesses inherent in each of them. The tools used were:

- Reflective journals - Professional participants were invited to keep a reflective journal throughout the project. This information was used by some for the focus group discussions.

- Evaluation forms - Caregivers were invited to complete an evaluation form which provided both numerical and text data for analysis.
- Celebration session - to elicit caregivers' and children's evaluation of the sessions and celebrate the achievements of the group members by revisiting highlights.
- Film data - In the celebration session at the end of each term we showed an edited film of the group activities over the 8-week period.
- Audio data – some meetings were recorded and transcribed.
- Focus group – a variety of data collection methods were utilised, such as creating a road map of shared experiences.
- Interview – to supplement findings from the focus group meetings and gather detailed evaluation of using the SALTMusic approaches in different contexts e.g., in a nursery.
- Questionnaire - SLT participants' colleagues participated in a questionnaire to gauge the impact of the project.
- Case study - Several (n=5) professional participants were asked to create a case study of a particular child, these in-depth accounts provided insights from the practice perspective.
- Observation - a crucial data collection method used by the *professional* participants to inform the discussion and completion of the SALTMusic scale.
- SALTMusic Scale - a numerical record of each child's emerging communication and expression.

The SALTMusic Scale

The SALTMusic scale was based on pre-existing materials: Laevers' (1994) scales of wellbeing and involvement, and a reflection tool designed by the music and arts team at GYCT as part of previous funded projects. The scale items grew from observations of significant events in order to track the emergence, development and multiple application of particular communicative, interactive, expressive, musical competencies. At the first planning focus group team meeting, the existing tool was considered, and some additional categories were added by the SLT team. There were four iterations before the final version of the SALTMusic Scale was agreed by the team to capture everything that they were observing in the sessions (see Appendix A). The final version was used for two terms and has provided numerical data that support the other findings. The SALTMusic scale was used by the team (usually comprising one musician, one music assistant, one SLT and / or one SLT assistant) at the end of each session to guide

reflection and discussion about each child that had attended. The team agreed how to score each category on the form, adding a commentary with additional information.

The SALTMusic Scale Categories

Wellbeing & Involvement

Designed as a self-assessment tool for settings to look at quality experiences for children, the Leuven scale (Laevers, 1994) was developed to assess a child's levels of wellbeing and involvement as indicators of quality practice. *"Wellbeing refers to feeling at ease, being spontaneous and free of emotional tension and is crucial to secure 'mental health'. Involvement refers to being intensely engaged in activities and is considered to be a necessary condition for deep level learning and development."* (Laevers, 2005, p.3). Assessment is based on team observation, reflection and discussion to arrive at a score on the scale from 1-5 (1= extremely low, 2=low, 3=moderate, 4=high, 5=extremely high). Each child at SALTMusic was given a score on this scale for their levels of wellbeing (LW) and involvement (LI) at both the start of the session and at their highest point.

Social interaction

Nine variables were devised for this category: Own agenda (1), was initially a single variable to describe children following their own agenda (interests, preferences) during the session, irrespective of what was happening around them. It became clear by the second focus group that some of the team felt that a child having their own agenda was a positive thing to observe and others felt the opposite. Discussions in the focus group revealed the nuances within this variable. It was felt to be welcomed and positive by all professionals during freeplay, perhaps revealing a level of confidence and trust that the

child's ideas were valued. In the group activities it was felt to be less positive by some, as the purpose during this time was to participate as a group member. Therefore, it was decided to create two variables: Own agenda – freeplay (1); and Own agenda – group (2).

Children were observed watching what others were doing, sometimes from a distance. This showed interest in others and an awareness of the social context, hence - Watching with interest (3). At the start of the programme of sessions some children clearly demonstrated with body language or gesture that they did not want attention from others, nor to be a focus for attention during any part of the session. In most cases this gradually eased, and children would demonstrate with their body language, eye contact and gesture that they were more comfortable with others showing an interest in them. They would be happy, for example, to be included by name in a 'Hello' song. This became variable: Comfortable with attention (4).

Careful observation was sometimes required to identify Group participation (5). Participation could be quite subtle to perceive in those who were not comfortable with attention and preferred to watch from a distance. To notice a child joining-in with group activities required sensitive tuning-in to individual children, having several observers in the room helped with this.

Interaction (6-9) -The following variables were easier to define, although we had to bear in mind that 'interaction' could include subtle moments of eye contact, touch, and sharing of an object. Interactions could be observed in the following ways: Family interaction (6); Practitioner interaction (7); Peer-to-peer interaction (8). Child-initiated interaction (9), frequently took some time to emerge, as children grew in confidence and trust. In many cases this form of interaction was seen by the professional participants as

a milestone moment in a child's communication.

Expression

The variables devised for this category were: Laughter (1) - Arculus coined the term 'communicative musical funniness' (2011, p.34), a phenomenon she observed between two-year-olds as they played. 'Funniness' is both emotional and communicative (Reddy, 2010). Laughter has not been considered an integral part of linguistic processes, the meaning implied through laughter can be varied, and it does not have the same constraints as the rules of speech. However, it is thought to be an important component to social interaction (Nwokah & Fogel, 1993). It is a vocalisation – a sound, or utterance that we elicited and valued from babies as a fundamental communicative interaction. Funniness can be framed as musical, with its rhythmic and turn taking characteristics. Arculus (2011) suggests that laughter forms one of the building blocks of communication. Observing a child laugh was considered another milestone communication moment from the professional participants' perspective. Creating opportunities for laughter was a central consideration in the design of the sonic play spaces.

Vocalisations (2) included any sounds, sounds patterns or vocal play that were not word attempts. Some were complex, melodious and communicative. The expressive variables continue with Symbolic noises (3) e.g., Moo (for a cow) and Natural gestures (4) e.g., pointing. Law et al. (2017, 6) point out that early communicative gestures, in particular index finger pointing, are an important milestone in developing communication. Holding objects up for caregivers; waving and shaking/nodding head are all forms of communication and there is large variance in individual use of these. Included also were Single signs / words (5), Sign / word

combinations (6).

Singing (7) included instances where children sang their own composed songs. One such instance occurred when the group had gathered around a piece of fabric, as part of the informal group time. This was enabled by the music practitioner holding the space, allowing the silence with expectation. Barrett (2006) found that young children's invented songs showed examples of belonging, finding and making meaning, and developing competence and elaboration. Bjørkvold (1992) suggests that spontaneous singing may be linked to the development of language and a desire to express thoughts, feelings and a sense of self. The songs were often quite complex in their melodic contour, as Bruno Nettl argues, early human music may have moved around a glissando-like vocal range which he describes as "like emotional speech" (2000, p.471).

Rhythmic activity (8) was one of the most frequently-observed activities. Children would move rhythmically in the space or play with objects in a rhythmic fashion, sometimes before any other form of expression was observed. In addition, the performance of known actions to songs (9) were evident, children were observed performing the popular and commonly recognised actions (e.g., wiggling fingers at the start of 'Twinkle, twinkle little star'). This demonstrated their understanding of a) the cultural practices of the group, b) memory of the actions in the correct sequence, c) joining the 'community' through song singing and, d) demonstrable knowledge of the song (Pitt, 2014).

For all these Social Interaction and Expression variables, a score was given for each child according to how often the particular, communicative behaviour was observed: 1=never, 2=occasionally, 3=sometimes, 4=frequently, 5=always. A commentary box was included on the data collection form for practitioners to note

anything a parent may have said about the child's progress during the week, comments from other family members or to clarify the numerical scores.

SALTMusic Scale Findings

Change requires time

It became very clear to the professional participants early in the programme that one term (i.e., 10-weeks in total: 8 weeks of sessions, plus taster and celebration) of SALTMusic was insufficient for the changes in children's communication to be evident. Five children attended two programmes of SALTMusic (i.e., they attended for two terms) and the SALTMusic scale revealed clearly that these children could build on what they had experienced in the first programme. One child is used as a case study to show how the SALTMusic scale demonstrates an individual's emerging communication.

Case Study – Child E[3] (aged 3 years)*

Child E*'s journey through two terms (16 weeks) of SALTMusic sessions was significant in terms of their increase across all categories of communication. Levels of wellbeing (LW) and involvement (LI) were high in the second term of sessions which could be an indication of the child's feelings of comfort and ease with a group activity that was familiar and met their (and their parent's) needs (these data are presented in Appendices B and C). The levels of social interaction increased across many of the variables in particular: peer-to-peer, practitioner and child-initiated interaction

[3] * applied to the child's pseudonym letter when a child attended for more than one programme of SALTMusic

(Appendices D and E). This could be because Child E* developed their[4] social skills through the group, felt more confident, trusted the others in the group and felt confident to initiate interaction as a result. The expression category showed a real increase in the use of language as well as understanding of cultural norms and behaviours. Their musical behaviour developed alongside other forms of communication and interaction.

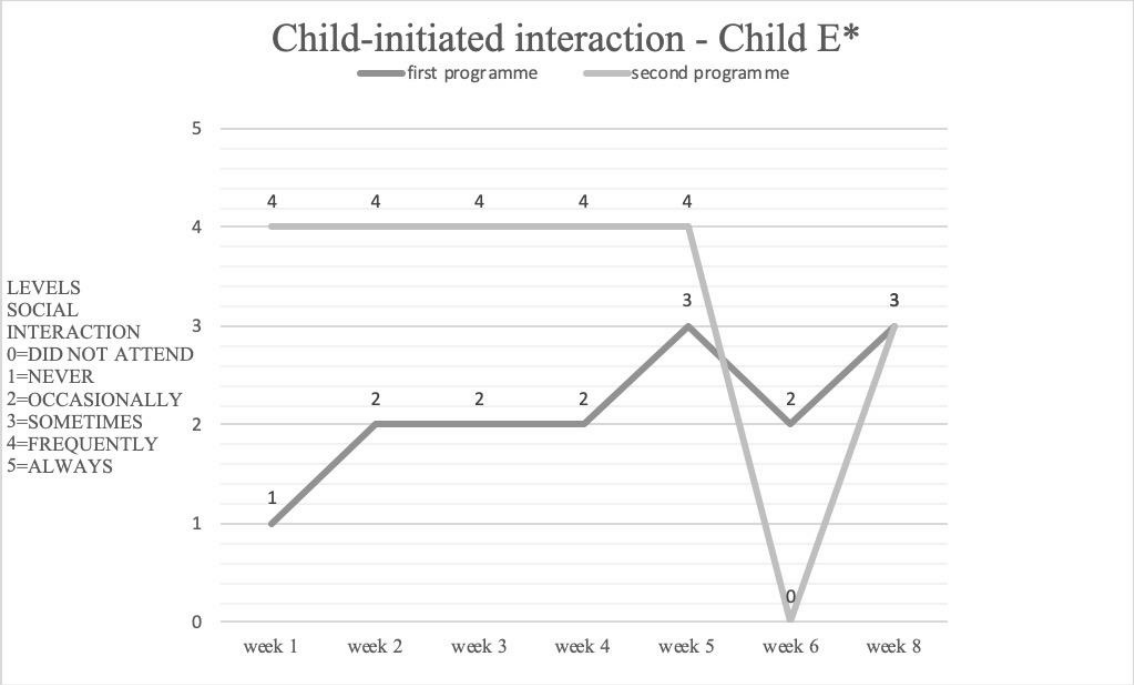

Figure 1. Child E*: Child-initiated interaction across two programmes of SALTMusic

Child-initiated interaction

A child's initiation of interaction signified high levels of confidence and self-esteem. It rarely occurred in the first weeks of a child's attendance at SALTMusic.

[4] The gender-neutral pronouns of they/their have been applied to preserve the child's anonymity

Figure 1 shows that Child E* took time to 'Sometimes' initiate interaction within the first programme of SALTMusic. It is apparent however that they initiated interaction 'Frequently' from week one of the second programme of SALTMusic sessions (Also Appendix E).

Impact of guest musician

On Child E*'s first visit to SALTMusic the only expressions observed were gesture 'occasionally' and rhythmic activity 'sometimes'. Next to emerge were vocalisation and single word or signs. In week five of the first programme of SALTMusic, combinations of words or signs, singing and rhythmic activity were seen frequently (Appendix F). This was a special week as there was a guest saxophonist. Importantly, this was the only session over both programmes where E* was observed to sing. The commentary states:

"Signed 'more, stop, go' Dancing holding mum's hands. Attempting to blow saxophone and got giraffe to blow sax..."

Although the visiting musician seemed to have added greatly to this child's musical expression during the session, this may not be a generalisable finding.

Laughter

Laughter, seen as an important expressive characteristic, took time to emerge. Figure two shows that Child E* only 'Occasionally' laughed towards the end of the first programme of SALTMusic. They started the second programme straight away at a higher level of laughter ('Sometimes') and this grew over the course of the second programme of sessions (week 8 'Frequently') In spite of the fact that there were two weeks when Child E* was absent in the second programme (weeks 6 and 7)

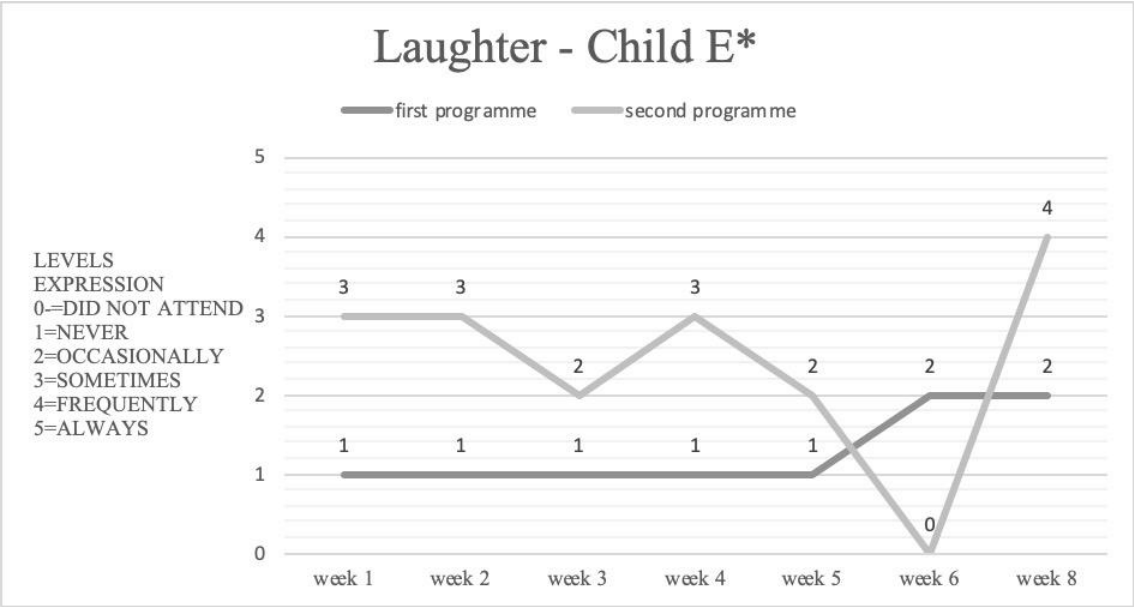

Figure 2. Child E*: Levels of Laughter across two programmes of SALTMusic

During the second set of sessions, Laughter was seen every week and by week two, every item of expression was observed: gestures, combination words / signs and rhythmic activity all occurring frequently most weeks (These data are presented in Appendices F and G).

For Child E*, a constant form of expression was rhythmic activity, which occurred every week during both terms. Participating in this way with movement clearly showed involvement and enjoyment, communicating when little, or no other forms of expression were apparent. Performing actions to songs shows an awareness of the cultural traditions of that particular song in that place / time (Pitt, 2014; Huhtinen-Hildén & Pitt, 2018) and is evidence of knowledge and understanding. By week eight, Child E* frequently demonstrated actions to songs.

Child E*'s use of words increased during this second term, the commentary from Week 5 clearly demonstrates, "*Walks in room and says, 'coat off,' shoes off' Really interested in what other children are doing. Attempts to join in with others frequently. A much better session able to take turns, stopped throwing when asked. Child got*

attached to a soft toy today. Mum zoomed child to the moon and played with foil with [them]."

Comparing two 8-week programmes it was clear that for Child E* the second programme demonstrated consolidation of learning and experiences from the first 8-weeks; further sessions might have shown further progress. This is a report of an individual child and we found that every child was a unique individual, growing and developing their communication skills through the SALTMusic programmes of activity in their own way. For example, some children benefited from the weeks when there were only two children present, others benefited from play with particular objects, some loved to make choices, others did not. What was noticeable, and recorded through the use of the SALTMusic scale, was that every child increased their interaction and expression through attending the SALTMusic programme.

Improvement in communication

Figure 3 reveals that 90% of the parents/caregivers who were able to complete an evaluation form also felt that their children's communication had improved as a result of attending SALTMusic groups.

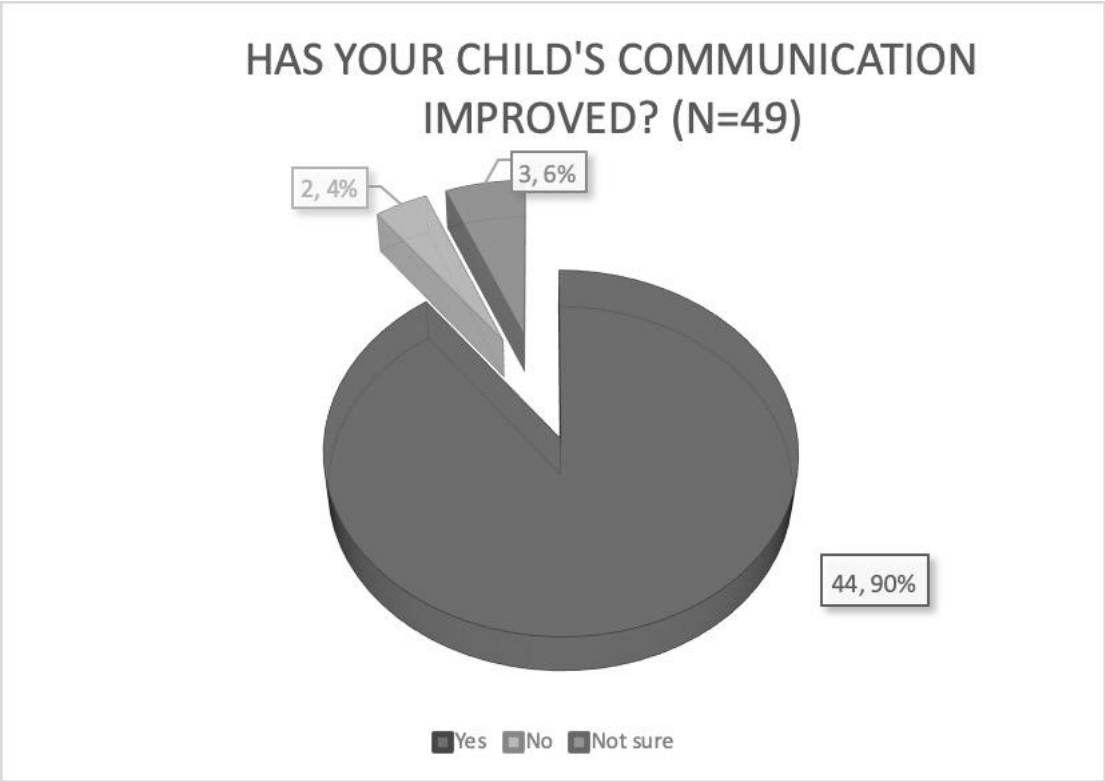

Figure 3. Parents' evaluation of their child's communication as a result of attending SALTMusic

An SLT report about Child A who attended one programme of SALTMusic found a significant increase in their use of words:

"*At the time of referral, Child A was 2 years 5 months. At the screening assessment, she was reported, by parents, to be* ***using a small vocabulary of about five words but was mainly silent****. Her comprehension of language appeared to be at a higher level than her expressive language but needed further assessment[…]*
The Speech and Language Therapist carried out a home visit following the sessions, to assess Child A's communication and language skills in more depth. Mum reported that Child A had made pleasing language development during her time in the group and that ***she was now using a larger vocabulary of over fifty single words to communicate her needs****. Mum said that this marked a positive contrast to her development three months prior to this, at which point she was largely silent."* (Pitt & Arculus, 2018)

Conclusion

What did the intervention show us?

It showed the importance of creative musical approaches as part of education, health and wellbeing. Setting up this kind of collaborative, interdisciplinary work takes time but has the potential to become more than the sum of its parts - for instance the

approach could be used in a variety of different contexts. It demonstrated the 'beautiful risk of education' (Biesta, 2016); space was always created for the unknown to happen and it often did! In this possibility for learning space (Huhtinen-Hildén, 2012; Huhtinen-Hildén & Pitt, 2018) we experienced some treasured moments when children showed us, through their invented songs and musicking, how competent and capable they are.

Talk less and Allow children to take the lead

By adopting a musically playful, improvisatory approach, the children were able to engage in sessions on their own terms, being allowed to explore, lead, and interact with others. This led to increased confidence that transferred to an increase in the use of spoken words or signs. With fewer words and talk kept to a minimum the children were more inclined to lead the interactions. Observe, wait and listen - a strategy developed by the Hanen Centre (Girolametto, Greenberg & Manolson, 1986) for encouraging dialogic interaction between caregivers and children with communication difficulties, was a useful theoretical framework used by SLTs that became incorporated into the SALTMusic practice.

Keep it simple and include micro-songs

We learned that we can pare down our practice to the essentials and still have all that we need and all that is necessary. We also discovered the power of the micro-song, consisting of two or three notes with a glissando up to a pause and then a glissando

release or staccato word such as ‘ping!’ The anticipation and release that are its inherent qualities can draw out a vocalisation from the most reticent participant.

Empowering theoretical knowledge

It showed the importance of knowing the theoretical ideas that underpin practice. These give confidence to practitioners (and parents) and are hallmarks of quality practice.

In what ways was the approach helpful for children?

The improvisatory, child-led, in-the-moment approach to the practice helped to resist the dominance of talk. By adopting aesthetically rich forms of communication in response to children rather than directed at them, confidence grew and as a result of less adult talk began to talk more themselves. The importance of freeplay: with a strong focus on the process rather than any product, the important features of play and creativity could be maximised (Bruce, 2011). By holding the learner at the centre of practice (Huhtinen-Hildén & Pitt, 2018), improvisatory creative processes became the focus rather than on the achievement of specific musical or speech related outcomes / products.

In what ways was the approach helpful for caregivers?

The creation of a joyful aesthetic space where caregivers could be alongside their children, allowing them to relax and tune-in to their child. They were offered practical and theoretical advice as well as the time and space to experiment with these ideas. This proved to be a winning combination for many parents/caregivers who, as a result, felt more confident to help their children at home.

Strengths of the project design

The practice was tested through the action research process with robust methods of data collection which enabled complex developments to be seen without being reduced to a single outcome. The SALTMusic Scale was vital to the process, with plenty of time to reflect and discuss. There was the opportunity to test the replicability of the approach by trying out different models: number of weeks, different personnel (reduced numbers), different resources, and in different settings.

Highly qualified music-arts practitioners

Early childhood music education practice has a distinct character based on attunement, playfulness, sensitivity, and in-the-moment planning. It has been evolving over the last three decades into a specialist area where theory, research and reflection are seen as important features of quality practice. The work often has social justice, community engagement and wellbeing as strong components that are viewed as essential to good music education in early childhood. A masters qualification in early years music that has been available for about a decade in England has produced a significant number of reflective practitioners (three of whom were music-arts practitioners in SALTMusic) able to articulate what counts as professional knowledge, skills and quality.

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SALT Music Project:
Date:
Child pseudonym:
Setting:
Music specialist:
SLT Therapist:

Codes for frequency:

A	Never
B	Occasionally
C	Sometimes
D	Frequently
E	Always

Codes for social interaction: SI

1	Own agenda Freeplay
2	Own agenda Group
3	Watching with interest
4	Comfortable w/attention
5	Group participation
6	Family interaction
7	Practitioner interaction
8	Peer-to-peer interaction
9	Child-initiated interaction

Codes for expression: Exp

1	Laughter
2	Vocalisations
3	Symbolic noises
4	Natural gestures
5	Single signs/words
6	Sign/word combinations
7	Singing
8	Rhythmic activity
9	Actions to song

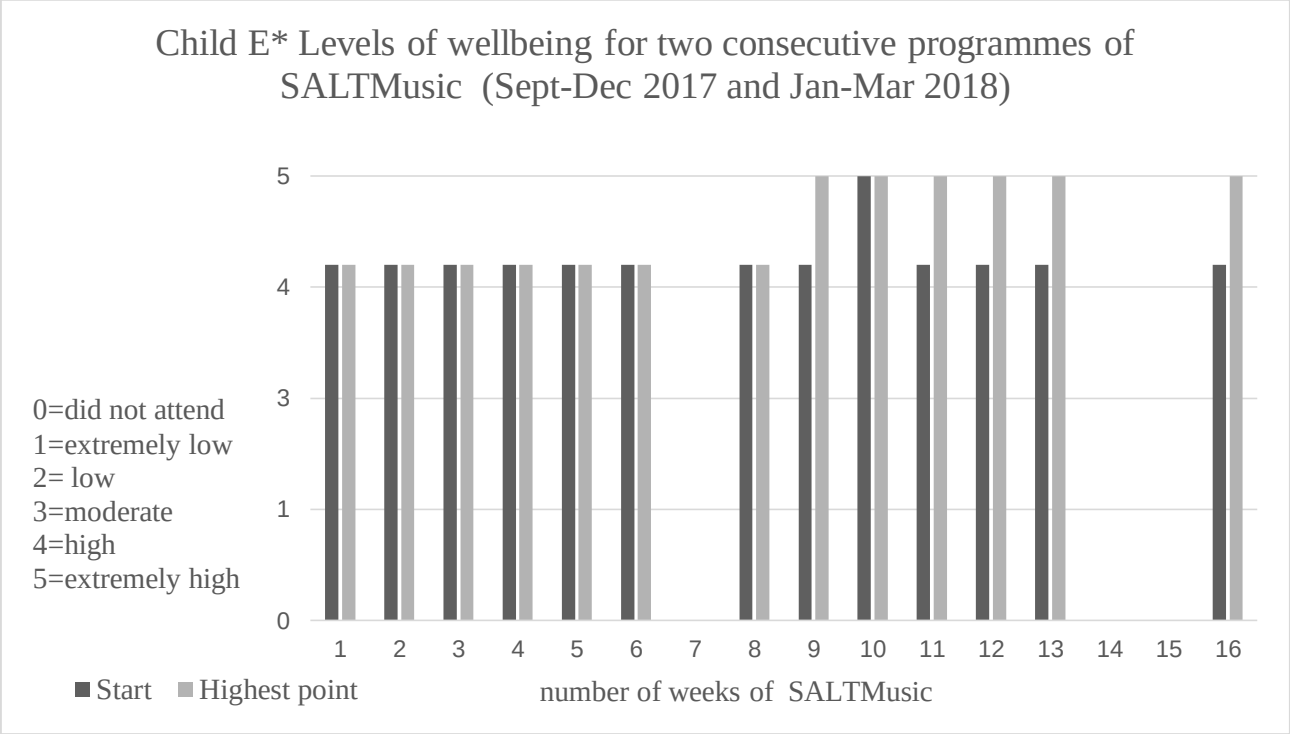
Codes for Laevers Scale - LW & LI

1	Extremely low
2	Low
3	Moderate
4	High
5	Extremely High

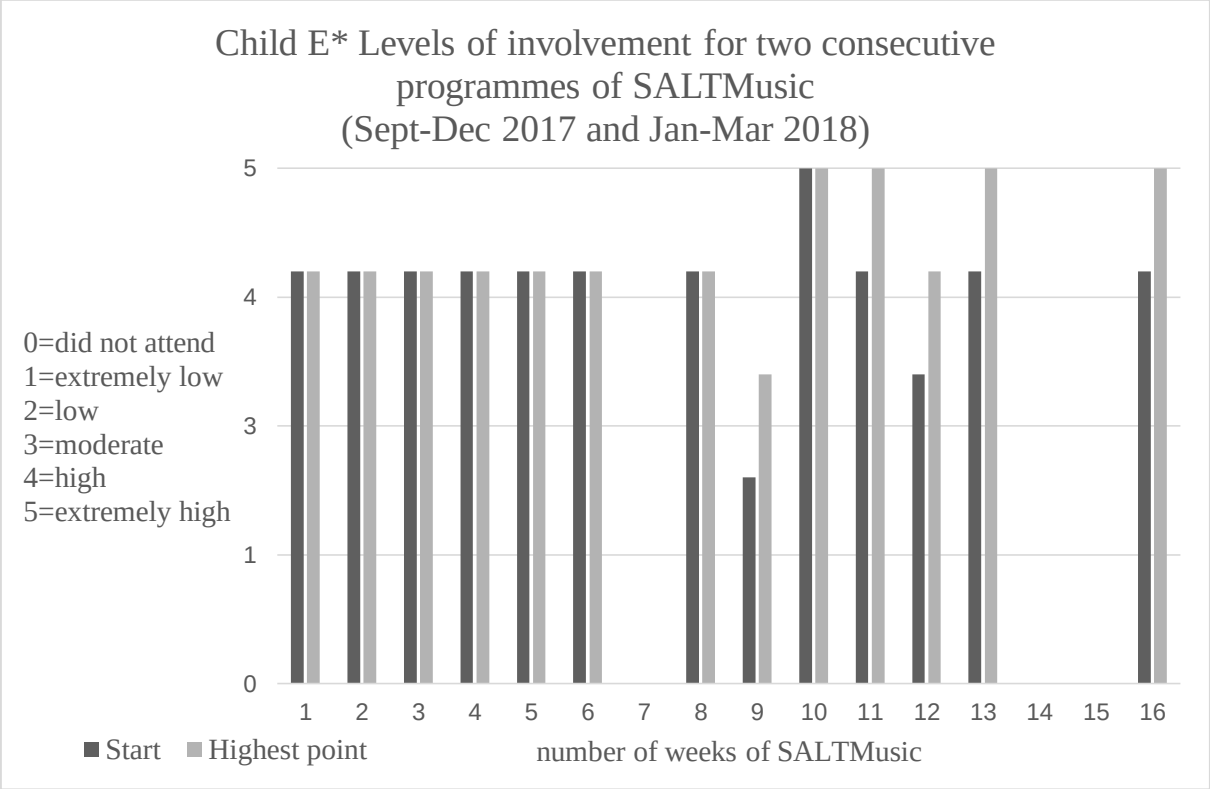
Reflective Journal Questions:
What question do I have at the end of the session? What will I try next time?

LW Start session:	LW High point
LI Start session:	LI High point:
SI:	
Exp:	
Commentary:	

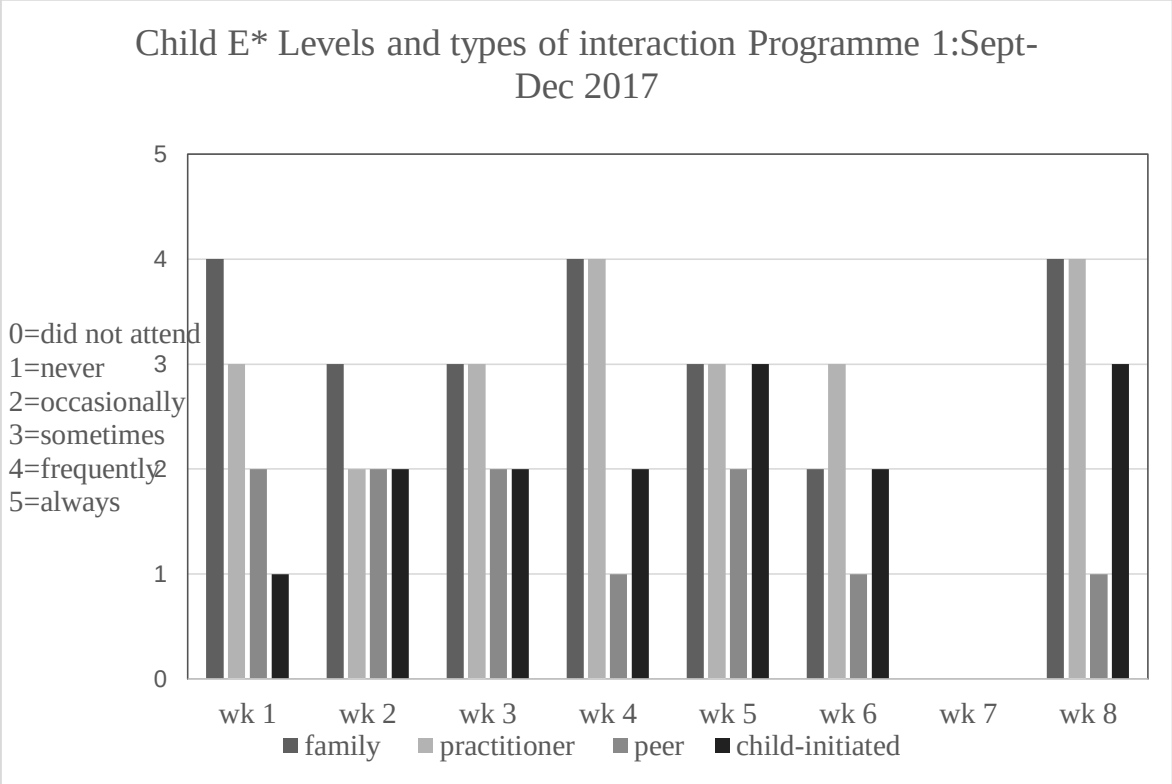
Appendix B



Appendix C



Appendix D



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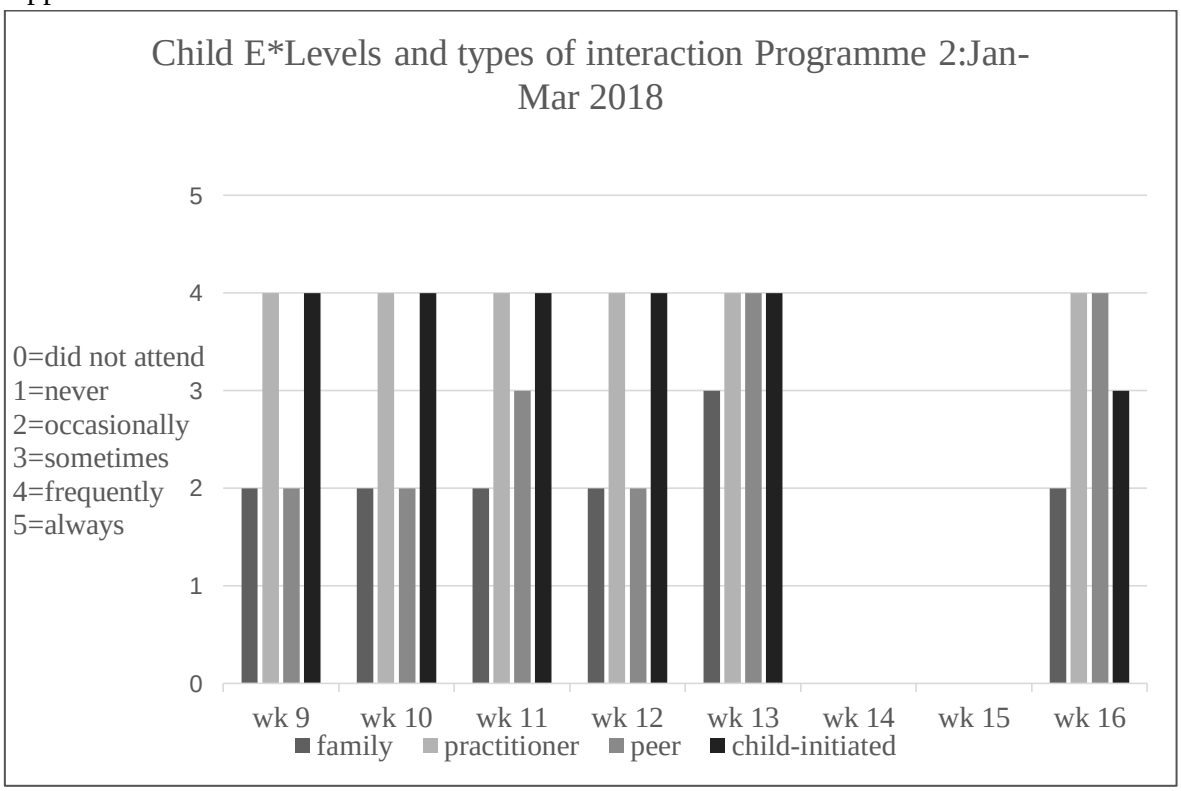
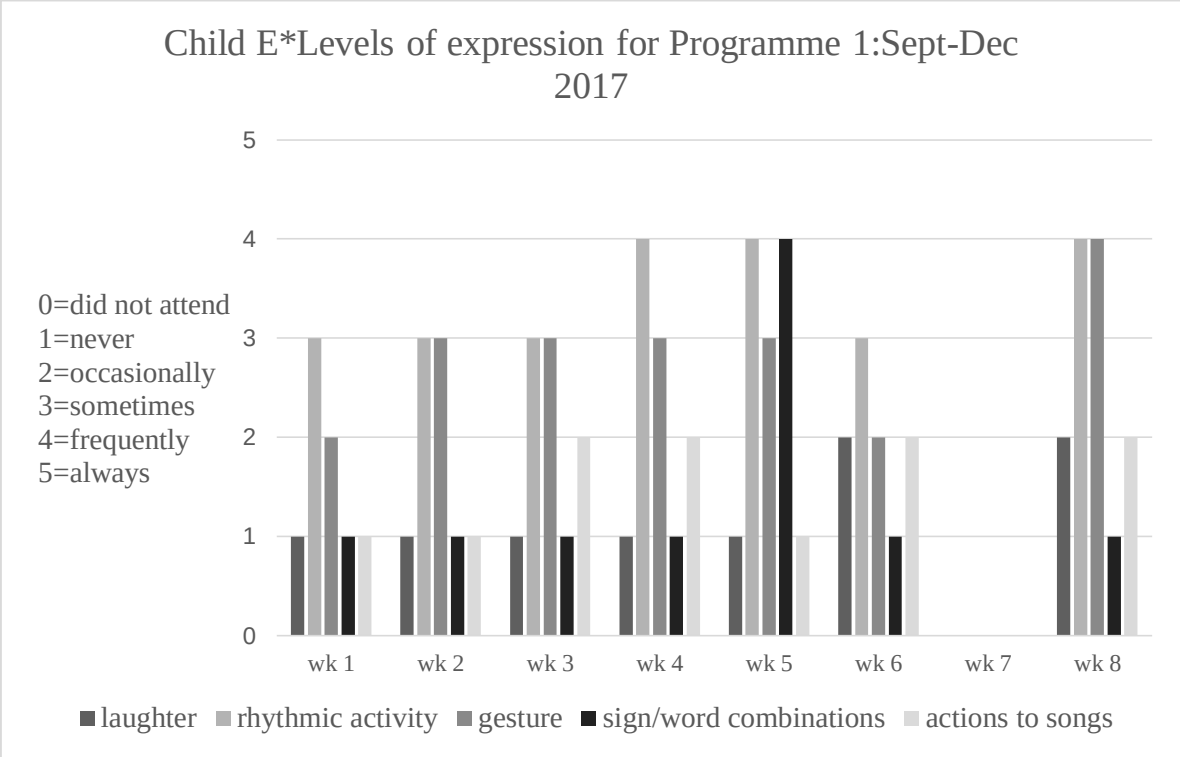


Appendix F



Appendix G