

Soundwaves Case Study: Nell Farrally

Early years musician and freelance evaluator, Nell Farrally, writes about her experience of using research to improve her music practice.

I'm an early years musician, project development specialist and freelance evaluator based in Wiltshire. I received a Soundwaves Bursary towards the travel costs for a Postgraduate Certificate in Evaluation Studies course at the University of South Wales. The summative assessment for the course is a 15,000 word dissertation about a research topic related to the students' work or workplace. I wanted to focus on a topic that was relevant to both my early years music practice and evaluation work, therefore I decided to explore the value of quantitative data collection tools in early years group music-making.

A significant part of the dissertation is the literature review - an overview of published material about the chosen research topic. The purpose of the literature review is to not only give a background to the research topic, but also to critically appraise peer-reviewed research and provide a context for ones' own research. Whilst I've always read research which is relevant to my early years music practice, undertaking this literature review is the first time I've delved into research with such depth. It's stimulated a lot of reflection on my work with young children and influenced how I plan and deliver musician-led sessions.



What follows here are some edited bits of my literature review which highlight some of the key points I've drawn from research which has relevance to *my* practice. It's not intended to be a complete overview of research into early years music, but it may prove a useful introduction for musicians and early years practitioners who aren't familiar with research. After that there are some thoughts about how it's influenced my practice.

Many of the points below concern issues I've encountered either through working directly with children, observing other musicians and practitioners, or from the musical experiences of my own children. It's been really satisfying to place things I believe or think I know within a theoretical framework.

Young (2007)

Young (2007) highlights the disparity between the creativity focused, learning through play activity which predominates in early years practice and the structured, adult-led music activities which form the majority of music-making in early years settings, offering little opportunity for genuinely creative music-making.

Young believes that there is a prevailing notion that to be musical, individuals require an innate talent for music, therefore, for most children music is nothing more than "a pleasant pastime" (p.25). The consequences of this are that children's musical development is not given due consideration. When

music is recognised as important to learning, it is predominately within transfer skills: language development, numeracy and social skills. Young offers an interesting critique on current practice.

The consensual version of practice... fulfils the expectation of music as a collective, sociable activity, rather than fulfilling the norms of early childhood practice that expect play-based, self-initiated activity from which learning will arise. This contradiction is so deeply set it is invisible, even to foundation-stage curriculum planners at the national level. This version of practice constructs the child in a certain version of musicality: conforming to communal nursery music rather than individualized activity or activity that acknowledges their own musical identity. (Young, 2007, p.25)

Custodero (2005)

Custodero (2005) explored “flow” in young children’s musical experiences using participant observation methods. “Flow” is a concept developed by Csikszentmihalyi (1975) which Custodero describes as “an activity considered highly challenging, coupled with confidence in one’s abilities to meet that challenge, results in optimal experience, or ‘flow’” (p.186). She goes on to say, “such engagement creates an ideal learning situation” (p.186). Csikszentmihalyi’s research encompassed a wide age spectrum but did suggest that “children are in flow most of the time” (Custodero, 2005, p.187).



Custodero discusses how, in structured learning environments, children can behave in ways they believe are expected by that environment, which can result in flow decreasing, highlighting the need for adults to be flexible in their approach in order to not inhibit children’s optimal flow experiences.

Gruhn (2002)

Gruhn (2002), studied the phases of musical development in young children using an experimental design. Her findings were that children in the experimental group showed a correlational development in movement and vocalisation, “the quality of fluency and co-ordination in children’s movement interacts with the precision and accuracy of their tonal singing and rhythmic chanting” (Gruhn, 2002, p.58). The control group showed significant development in movement only, which Gruhn suggests was due to either normal developmental growth or the activities they experienced in their usual care setting, rather than the specialist music classes experienced by the experimental group.

Lamont (2008)

Lamont (2008) explored the everyday musical experiences of 32 children aged 3 using experience sampling methods. Families were given a mobile phone which remained with the parent or person providing childcare. Researchers telephoned each family up to 3 times a day for 7 days at “quasi-random intervals” and asked the adult a series of questions including where were they, could any music be heard, what type of music, was the child aware of the music or could they recognise it, was the child responding or interested in the music?

Analysis of the 437 sampled episodes found that in 81% of the samples children were listening to music or had done so in the previous 2 hours. In 30% of the music episodes the type of activity was

watching television or videos. 10.9% of the music episodes were musical play. Only 1 music episode involved listening to music without other activities taking place at the same time.



The format of music children heard was live music such as instruments and singing (15.6%), audio recordings (43%), and multimedia such as television (39%). Lamont categorised the musical episodes into genres: “children’s” music such as nursery rhymes, children’s films and television accounted for 46%, popular music for 33%, classical 7.4% and other genres such as jazz, world and folk all around 1% each. Who chooses the music in these listening episodes was also analysed. 57% of the music episodes took place at home and 17% at nursery.

Lamont compares the findings of the study with similar research which has focussed on adults (North et al, 2004, Sloboda et al, 2001) which shows that children experience twice as much music as adults. Although a large proportion of children’s listening experiences were from television, they were not passive experiences as children often sang along to songs they knew.

Reynolds (2006)

Reynolds (2006) uses a quantitative methodology to study children’s vocal interactions in the initial period of a music group for young children. Sessions were video recorded and the nature of adults’ and children’s vocalisations were analysed, categorised and counted. The data leads Reynolds to 2 conclusions: that children respond more to adults’ musical vocalisation than they do to speech; and a high number of silences following adults’ vocalisation suggests that children need time to absorb musical events before they can respond. She states that these conclusions are consistent with other research (Gordon, 2003).

Anvari et al (2002), Bolduc (2009), Gromko (2005)

Several researchers have focussed on the links between phonological awareness and music in early childhood. Anvari et al (2002) studied the relation between musical perception, phonological awareness and early reading skills in 100 children aged 4 to 5 in schools and day care settings. They conclude that “the auditory processing necessary for music perception appears to be related to the auditory processing necessary for phonological awareness and, ultimately, reading” (p.120) and suggest probable reasons why this is so:

Phonological awareness requires the listener to be able to segment speech into its component sounds, and to recognize those sound categories across variations in pitch, tempo, speaker and context. The perception of music also requires the listener to be able to segment the stream of tones into relevant units, and to be able to recognize compositions across variations in pitch (key), tempo, performer, and context. (Anvari et al, 2002, p.126-7)

Bolduc (2009) also studied the effects of music on the phonological awareness of 4 to 5 year olds in a kindergarten. He divided 104 children into experimental or control groups who both received a daily 60 minute music lesson by a music specialist for 15 weeks. The control group’s lessons were designed using the existing music curriculum of the Ministère de l’Éducation de Québec. The experimental group received lessons from an adapted curriculum from Standley and Hughes’ (1997)

work on early intervention for enhancing pre-reading and writing skills. Both groups were given pre- and post-tests.

Bolduc found that the experimental group performed better than the control group in the post-tests concerning phonological processing, particularly syllable, rhyme and phoneme identification (p.42). He concluded that both programmes for the experimental and control groups “contributed similarly to the development of tonal and rhythmic perceptive skills” (p.37) but that the Standley and Hughes’ adapted programme was more effective at developing phonological awareness. As with Anvari et al (2005), Bolduc feels that his findings are consistent with previous studies and highlights the importance of music in developing linguistic skills in the pre-school years.

Gromko (2005) also conducted pre- and post-tests on an experimental and control group of kindergarten children, the experimental group receiving 4 months of weekly 30 minute music lessons. She found that the experimental group “showed significantly greater gains in development of phoneme-segmentation fluency” (p.206).

Salmon (2010)

Salmon (2010) takes a rather different approach to examining how music can enhance children’s literacy development with an action research project in Reggio-inspired settings in the USA. Salmon draws on Cummins’ (2007) research which highlights drawbacks of “an overstress on systematic



phonics instruction” (p.1). It is her belief that, “... music is connected to children’s lives, it enriches personal narratives that promote language experiences” (p.2). She links this to Vygotsky’s (1978) concept of “private speech” (p.3): sounds and vocalising which children make to themselves, often as part of their play. According to Vygotsky (1978) these private sounds a child makes during play reveals their cognitive processes, making them visible to others.

Salmon’s article focuses on children listening to recorded music as a stimulus to language rather than children creating and actively participating in music-making. She gives an overview of different ways music can be used to extend children’s thinking including visualisation and to generate imagery, as tools that scaffold children’s language and literary development, and to identify children’s zone of proximal development.

Valerio (2006)

Valerio et al (2006) use a case study of 2 children to explore the development of musical syntax in toddlers. They propose that by developing understanding of the processes by which toddlers learn music, adults “may become better equipped to formulate interventions that enhance young children’s musical development” (p.33).

The data collection methods were video-recording 10 children during musical play sessions and general play sessions over a period of 6 months. The case studies focussed on 2 children from the group who were purposefully chosen as they were the “most musically responsive”. The video data was analysed using a coding system which categorised and counted different types of vocal behaviour.

Analysis of the video data found that over the 6 month period both children increased the number of non-musical vocal behaviours. Both children demonstrated more musical vocal behaviour in musical, rather than general, play sessions. For one child the amount of musical vocal behaviour increased hugely by 388%, whilst for the other, it fell slightly (21%). These findings are hardly remarkable, but what is interesting, is the data regarding the number of children's vocalisations which are responses to adult vocalisations. Both children responded significantly more to adult songs and rhythms which included silences, than they did to songs and rhythms without silences. This finding has implications for early years group music-making where adult-led structures often involve turn-taking activities where children are asked for a particular response 'on cue'.

Berger & Cooper (2003)

Berger and Cooper (2003) consider the role of adults in children's musical play. They undertook a case study of 18 children and their parents, whilst taking part in a 10 week music programme specifically designed for the study. The 10 sessions were a mixture of free musical play and adult-led group activities.

During analysis of the data, they identified 3 themes relating to children's musical play: unfinished play, extinguishing play and enhancing play. Unfinished play refers to situations where children's free play was interrupted by being asked to join the group activity. Children demonstrated a range of behaviour which indicated that their play episode had not finished including "bringing items to the group, participation from the periphery, or ignoring group activities" (p.155). Field notes describe how one child kept returning to the ukulele, not only during one session, but in subsequent weeks – an interesting example of how children can revisit and extend play episodes. Extinguishing play refers to both children choosing to cease their play episode, and where adult interaction caused the children's play to cease. The adult interaction fell into 2 categories: "physical proximity, and corrections or suggestions" (p.157). Enhancing play concerns situations where the actions or responses of adults have enhanced the children's play such as verbal or non-verbal encouragement, or valuing musical behaviour.

The authors give several specific examples from the field notes to illustrate each of the 3 themes. They cite other researchers (Littleton, 1991, Taggart, 2000) who have stressed the need for children to engage in free musical play, but they feel that previous research hasn't explored specific adult behaviour that tempers musical play.

Koops (2012)

Koops (2012) also uses a case study approach to explore children's musical play, both at a pre-school music class and in the children's homes. She refers to Berger and Cooper's (2003) research and to others who have explored the effects of adults' behaviour on children's musical play (Addressi, 2009, Tarnowski, 1999). Koops' study extends this work, by not only exploring what inhibits and enhances musical play from the perspective of parents, teachers and observers, but also examines the variation in children's musical play between home and group settings.



Koops utilises innovative methods to capture data, asking parents to video record their children's music making at home and during a music group, and post the video on a private social networking

site where other parents could view and comment on the video. Children could also view their own and other children's videos on the site. Other data includes continuous video of all the group sessions, field notes made by research assistants, and parent interviews at the end of the data collection period.

The findings of the study were that for many children their musical behaviours at home and in the group settings were different.

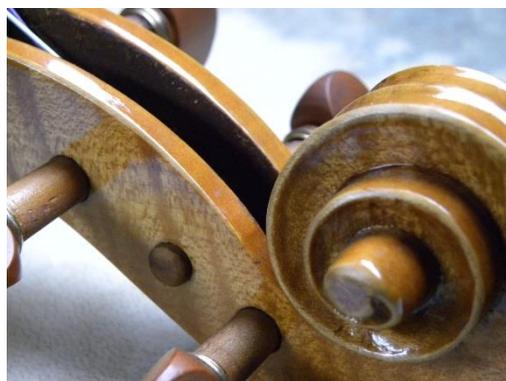
Felicity rarely sang in class; her home videos revealed an operatic-like play world in which she sang recurring themes for various characters in her play. (Koops, 2012, p.19)

The presence of the video cameras had inhibiting and enhancing effects on children's music making: sometimes a child enjoyed performing for the camera, at other times the act of being filmed inhibited their musical play. Specific examples of play enhancing and inhibiting factors are given, similar to those discussed by Berger and Cooper (2003). Koops, however, identifies child agency as a factor in whether adult intervention is enhancing or inhibiting. She discusses the kind of activities where children are able to show a high level of agency and concludes that her study suggests that where children are able to exert their agency, this leads to the extension and enhancement of their musical play.

Implications for my practice

So, here's my top key points which all this research has made me think about:

- When one is contracted to deliver a weekly 30 minute musician-led session it can be challenging to incorporate opportunities for creative music-making and musical play, yet still feel that contractual obligations and expectations of the setting managers are met. I've worked on 3 different funded projects in the past couple of years which all had intended outcomes of enhancing children's communication and language development. Are there situations where too much focus is being given to transfer effects rather than just being musical? I was recently discussing this with friend and colleague, Jane Harwood, who works a lot with children and adults with learning disabilities. Jane had some wise words: *'Outcome driven work assumes much about the hierarchy of skills. This includes 'musical aptitudes'. What's it all for anyway? For me it's about communication. We need communication skills to live on a planet of people. Music can enable and foreground this'*. I think there's much in this. It reminds me of a workshop I took part in a few years ago with a Hungarian violinist who spoke no English. Another member of her band was acting as an interpreter, but his English was limited. As the workshop progressed, she dispensed with the interpreter as it was interrupting the flow, and she just communicated with music, movement, gesture and sounds – but no words. Music is communication.



- In group activities it's tricky to create an environment where all children can achieve optimal flow. Even within a small group there's a wide range of needs, so flexibility is key. A friend

of mine who's a theatre practitioner once said to me about working with young children: 'Go with it, go with it and then go with it some more'. Children are so unique, is it possible to provide optimal flow experiences for all children, all of the time with group activities?

- I need to move more. I love them rhythmic bottom shuffling some children do as soon as they hear music, but they seem to lose their spontaneity of movement as they get older. Perhaps adults need to model moving whilst making music more.
- Children rarely listen to music without other activities taking place at the same time. Does this have implications for how listening to music is presented in early years settings? Do we need to provide more opportunities for just listening?
- I think too often children who don't respond 'on cue' with the expected response are prompted by practitioners and parents too hastily. Spaces for silence are fine. It's the adults who feel uncomfortable with silence. Silence is needed for thinking, creating, choosing a response. Or choosing not to respond.
- When I'm planning sessions I do give a lot of thought to activities which promote language development. I'm always adapting songs, creating new activities and thinking of ways to extend familiar activities. Am I focusing too much on trying to develop children's phonological awareness? If I were to focus on fun and music, would I chose different activities? Possibly not. Perhaps that's a topic for the next research project!
- There is an important distinction between a child who is not participating in a group activity because they are too timid or can't focus their attention, and a child who is not participating because they are engrossed in their own exploratory musical play. Sometimes we (practitioners, parents & musicians) don't recognise what's going on. In a weekly group I lead there's a child who, week after week, chooses the frog guiro when the box of instruments comes out. When she has the guiro in her hands she's not interested in joining in the group activities – she's completely absorbed in the exploring the sound and the tactile nature of the instrument, and it's a delight to see. In spite of the environment (a 30 min musician-led session in the nursery) she is doing her own thing and not, as Young (2007) puts it, 'conforming to communal nursery music'.
- I wish I had a pound for every time I've heard a parent say, of a child who doesn't sing or actively participate in group music-making, something like, 'Johnny never stops singing a home'. I've seen it with my own daughter. When she was two years old I took her to a toddler music group for a while. She never sang a note in the whole 6 months during the group sessions, but as soon as she was in the pushchair on the way home she'd be singing away. It'd be great to have more integration between children's musical lives at home and group or nursery environments.



Conclusion

Having sifted through over 300 peer-reviewed articles, this is the passage that stands out for me.

As well as having many development benefits, music is valuable in early childhood because of the enjoyment it provides for young children. Young children seem to find pleasure in music experience because of the interplay between aesthetic appreciation of the sounds of music, social interaction with significant adults and peers in music making, exploration of music through the use of their bodies and senses, and the opportunity for playful responses. (Suthers and Niland, 2007, p.21, cited in Nyland and Acker, 2012, p.331)

It's such a neat summary which really resonates with my perspective on the value of music making for young children.

I'm happy to share the full literature review should anyone be interested.
Just email me nell@nellfarrally.co.uk .

References

- Addessi, A. R. (2009) 'The musical dimension of daily routines with under-four children during diaper change, bedtime and free-play', *Early Child Development and Care*, 179(6), pp. 747-768.
- Anvari, S.H., Trainor, L.J., Woodside, J. and Levy, B.A. (2002) 'Relations among musical skills, phonological processing, and early reading ability in preschool children', *Journal of Experimental Child Psychology*, 83(2), p. 111.
- Berger, A. A., & Cooper, S. (2003) 'Musical play: A case study of preschool children and parents', *Journal of Research in Music Education*, 51(2), pp. 151-165.
- Bolduc, J. (2009) 'Effects of a music programme on kindergartners' phonological awareness skills', *International Journal of Music Education*, 27(1), pp. 37-47.
- Csikszentmihalyi, M. (1975) *Beyond boredom and anxiety*. San Francisco: Jossey-Bass.
- Cummins, J. (2007) 'Pedagogies for the poor? Realigning reading instruction for low-income students with scientifically based reading research', *Educational Researcher*, 36(9), pp. 564-572.
- Custodero, L. A. (2005) 'Observable indicators of flow experience: A developmental perspective on musical engagement in young children from infancy to school age', *Music Education Research*, 7(2), pp. 185-209.
- Gordon, E. (2003) *A music learning theory for newborn and young children*. Chicago: GIA Publications.
- Gromko, J. E. (2005) 'The effect of music instruction on phonemic awareness in beginning readers', *Journal of Research in Music Education*, 53(3), pp. 199-209.
- Gruhn, W. (2002) Phases and stages in early music learning. A longitudinal study on the development of young children's musical potential. *Music Education Research*, 4(1), pp. 51-71.
- Koops, L. H. (2012) 'Now can I watch my video?': Exploring musical play through video sharing and social networking in an early childhood music class', *Research Studies in Music Education*, 34(1), pp. 15-28
- Lamont, A. (2008) 'Young children's musical worlds musical engagement in 3.5-year-olds', *Journal of Early Childhood Research*, 6(3), pp. 247-261.
- Littleton, J. D. (1991) *Influence of play settings on preschool children's music and play behaviors*. Unpublished doctoral dissertation, University of Texas at Austin.
- North, A.C., Hargreaves, D.J. and Hargreaves, J.J. (2004) 'Uses of Music in Everyday Life', *Music Perception* 22(1): pp. 41-77.
- Nyland, B., & Acker, A. (2012) 'Young children's musical explorations: The potential of using Learning Stories for recording, planning and assessing musical experiences in a preschool setting', *International Journal of Music Education*, 30(4), pp. 328-340.

- Reynolds, A. M. (2006) 'Vocal interactions during informal early childhood music classes', *Bulletin of the Council for Research in Music Education*, pp. 35-49.
- Salmon, A. (2010) 'Using music to promote children's thinking and enhance their literacy development', *Early Child Development and Care*, 180(7), pp. 937-945.
- Sloboda, J. A., O'Neill, S. A., & Ivaldi, A. (2001) 'Functions of music in everyday life: An exploratory study using the experience sampling method', *Musicae Scientiae*, 5(1), pp. 9-32.
- Standley, J. M., & Hughes, J. E. (1997) 'Evaluation of an early intervention music curriculum for enhancing prereading/writing skills', *Music Therapy Perspectives*, 15(2), pp. 79-86.
- Taggart, C. C. (2000) 'Developing musicianship through musical play', *Spotlight on early childhood music education*, pp. 23-26. Reston, VA: MENC.
- Tarnowski, S. M. (1999) 'Musical play and young children', *Music Educators Journal*, pp. 26-29.
- Valerio, W. H., Seaman, M. A., Yap, C. C., Santucci, P. M., & Tu, M. (2006) 'Vocal evidence of toddler music syntax acquisition: A case study', *Bulletin of the Council for Research in Music Education*, pp. 33-45.
- Vygotsky, L. S. (1978) *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Young, S. (2007) 'Early childhood music education in England: changes, choices, and challenges', *Arts Education Policy Review*, 109(2), pp. 19-26.