



## Conference report

# Examining the utility of music interventions for children with learning disabilities

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## INTRODUCTION

This interdisciplinary conference between the Royal Society of Medicine and Live Music Now was the second of its kind, following the inaugural collaboration in November 2015 which explored the evidence base for working through the medium of music with older adults with neurological disorders. This year's conference focused on a similar methodological rigour but with a different participant group in mind. Practitioners, academics, medics and therapists met at the Royal Society of Medicine building in central London to examine the utility of music interventions for children with learning disabilities. This was a particularly exciting focus with potential for rich cross-modal discussions between educational practitioners, musicians, academics, music therapists, health practitioners

and policy makers. By examining the current evidence base for the value and impact of music interventions for children with learning disabilities, the conference aimed to "facilitate communication between interested parties to encourage future research, especially by fostering methodological rigour" (The Royal Society of Medicine 2016).

## SESSION 1 – FOCUS: VISUAL IMPAIRMENT, RETINOPATHY OF PREMATURITY, RETT SYNDROME, BATTEN DISEASE

The morning session was opened by Evan Dawson, Executive Director of Live Music Now, who welcomed delegates and presenters, recognising what he referred to as a "melting pot" of practitioners from diverse disciplines. Dawson

provided a context to the day with a brief history of Live Music Now and the profound and moving impact that work with this participant group in particular has upon its musicians. Dawson feels that there is potential to develop the arts in health movement further if clinicians, musicians and academics work together to capture the evidence base for this impactful practice. Delegates were encouraged to discuss collaborations and ideas for ways forward with Live Music Now representatives during the day, to begin conversations that may enable this development to progress.

The first presentation of the morning session, chaired by Evan Dawson and Amanda Watson, was given by Graham Welch of the University College London Institute of Education, entitled '*Visual Metaphors for Sound for Congenitally Blind Children*'. Welch provided a rich evidence base for the assertion that the experience and perception of music is indeed multi-sited in the brain (Brandt et al. 2012; Schlaug 2015), and how this might relate to a child who has a learning disability. It was proposed that musical processing may be less affected than cognitive development in some children with learning disabilities, and that there may be potential to nurture cross-modal benefits to music interventions and musical experiences.

The seminal research of Robert Walker (Walker 1981, 1985, 2007) was drawn from to explore the experience of music for children who are blind or have a visual impairment, and the potential for early blindness to lead to enhanced auditory perception (Wan et al. 2009). Anecdotal evidence was discussed as well as multiple empirical studies exploring compensation of visual deficit by relying on experience from other sensory domains (Cattaneo et al. 2008); such as perceptually enhanced auditory capacity (Röder et al. 2000) and conceptually developing conceptual networks (Röder & Rösler 2003). This was a very thorough introduction to the evidence base for exploring the musical experiences of children with learning disabilities and/or sensory impairments, and set a clear tone for the empirical rigour of the day. Delegates were directed to Welch's Research Gate webpage to read more about his ongoing research in this area: [www.researchgate.net/profile/Graham\\_Welch](http://www.researchgate.net/profile/Graham_Welch)

The next presentation in the morning session was given by Neurologic Music Therapist Rosie Axon of Chiltern Music Therapy. This presentation, entitled '*Researching the Musical Engagement of Infants with Retinopathy of Prematurity*', reported upon ongoing Chiltern Music Therapy research in collaboration with the Amber Trust, the British

Humane Association and the University of Roehampton. The diagnosis of retinopathy of prematurity was first explained; this comprised problems with the development of retinal blood vessels in babies born prematurely. Reference was made to the assertion that children with retinopathy of prematurity often have a strong interest in music (Ockelford 1988; Ockelford & Matawa 2009) as well as rich anecdotal evidence from parents and carers about an enhanced interest in everyday sounds.

The research project in question is in its second of five years, where music interventions for children with retinopathy of prematurity are being delivered and evaluated by Chiltern Music Therapy. The sample of participants was engaged through 'Bliss', a charity for babies born prematurely (Bliss 2016). The project has three key aims: to research musical development in children with retinopathy of prematurity; to raise awareness of the potential of music for this participant group; and to make freely available musical resources to encourage early musical intervention. An outline of the clinical work was presented, with the timescale and logistics of interventions and resources.

The Ethnographic Observation System was praised as a valuable tool for readily recording interactions on an accessible app (EthOS 2016), and the newly developed Sounds of Intent Early Years Framework was used to analyse the clinical material collected (Ockelford & Voyajolu 2015; Sounds of Intent in the Early Years 2016). This detailed framework, which was outlined further during Ockelford's keynote lecture, "explains how young children (aged 0-7) develop musically, and sets this out in a large circular framework. It gives ideas for activities suited to children at different stages of musical development, and provides a simple way of recording their achievements. Sol-EY is fully inclusive and is suitable for all children, irrespective of their abilities and needs" (Sounds of Intent in the Early Years 2016).

Clinical examples were shared of children engaging in playful interactions through music at levels two to five of the Early Years Sounds of Intent Framework. From the data collected to date, the musical development of children who were blind and those who were neurotypical were compared. Of the small sample of four blind children, two had musical development below their neurotypical peers, one was above their neurotypical peers and one was the same as their neurotypical peers. Although a small sample, these were interesting data to note and indicate that further research is needed to inform practice more fully in this field and better understand the musical development and

experiences of children with retinopathy or prematurity and/or other visual impairments. The outcomes of the work inspired the music therapists to continue to empower and enable parents to work musically with their children, and further resources are being developed by Chiltern Music Therapy to support this aim.

The next presentation, entitled *'Music Therapy with a Child with Rett Syndrome: Longitudinal Observations of Therapeutic Approaches and Adaptations'* was given by Simon Hackett, Arts Psychotherapist, Northumberland, Tyne and Wear NHS Foundation Trust and Cindy-Jo Morison, Principal Music Therapist, Northumberland, Tyne and Wear NHS Foundation Trust. This reflection on a piece of longitudinal clinical work aimed to answer the question, 'What does improvement look like in Rett syndrome?' As with other presentations, an overview of the Rett Syndrome diagnosis was presented to enable meaningful engagement from the interdisciplinary audience. The presentation focused on an individual case study, with significant contribution from the client's mother to inform the presentation from an additional perspective. The aims of the clinical work were to increase communication through socialisation and to maintain or develop function for the client.

The client's mother described the transformative impact of music and its capacity to reintroduce purposeful hand movement for her daughter; the music therapist particularly recognised the positive impact of song in enabling increased and sustained eye contact. Examples of music therapy practice were shared over the ten years of engagement: demonstrating mirroring, matching, choice making, eye contact, fine motor development and the development of the therapeutic relationship. Morison emphasised the centrality of waiting in working through music with this participant group, and shared a model demonstrating potential approaches to working musically relevant to each stage of Rett Syndrome. It was interesting to learn that the therapist's inputs were related to the phases of Rett Syndrome more closely than their potential outcomes. This led to the question, 'Should we be measuring inputs rather than outcomes?' This was a challenging question and may conflict with other established evaluation tools. However, it was recognised that in particular relation to this degenerative and often debilitating diagnosis, it may be more constructive to explore and focus upon the value and impact of specific inputs rather than repeatedly measuring potential outcomes; this was the recommendation for future research which closed this case study presentation.

The final presentation in this first session was presented by Neurologic Music Therapist Rebecca Atkinson of Chiltern Music Therapy, entitled *'Exploring the Role of Music to Enhance the Quality of Life in Children with Batten's Disease'*. This is a collaborative project between Chiltern Music Therapy, the University of Roehampton, Erasmus+, the Amber Trust, the Baily Thomas Charitable Fund and the Batten Disease Family Organisation.

Following on from Welch's earlier discussion of the way the brain responds in a complex and multi-sited way to music, a brief video of an fMRI scan of a participant listening to music was played to affirm this notion. Neurologic music therapy was introduced as the context to this piece of research (Thaut & Hoemberg 2016) and its particular relevance to the clinical work outlined.

An overview of the Batten Disease condition was presented, contributing to the delegates' increasing awareness of highly medical conditions and constructs. This condition was described as a progressive neuro-impairment, resulting in sensory impairment, loss of speech and swallowing, loss of cognitive function and epilepsy. A parent's voice was also central in this presentation, potentially due to the challenges of obtaining the participant's voice due to their impairments. The parent here referenced a strong preference in their child for music in relation to other interests (Von Tetzchner et al. 2013).

A three-year research project with twelve participants was discussed, with the Ethnographic Observation System (EthOS 2016) and the Sounds of Intent Early Years Framework (Sounds of Intent in the Early Years 2016) again used as accessible and appropriate tools for data collection and analysis. Four individual clinical examples were presented, demonstrating meaningful vocal responses, patterned sensory enhancement, retention of lyrical content and expression through singing and pace of speech regulated by tempo. It was demonstrated that the principles and methods of neurologic music therapy (Thaut & Hoemberg 2016) can be particularly pertinent when working in music with participants who have Batten Disease to transfer skills from music therapy to everyday life. The research project will continue for three further years with intentions of determining how children with Batten Disease respond to music; determining whether there is potential for early intervention with music; and with a hope to generate resources and materials to enable such musical engagement and intervention.

## SESSION 2 – FOCUS: AUTISM AND MUSICIANS IN HOSPITALS

After an opportunity to network and discuss ideas with delegates from diverse and interesting modalities over the coffee break, the second session commenced, chaired by Karen Irwin, Strategic Director of Live Music Now and Christos Sideras, Psychiatrist and Council Member, Psychiatry Section, Royal Society of Medicine. The first presentation, entitled '*How and Why is Music Beneficial for Individuals with Autism?*' was given by Pamela Heaton, Professor of Psychology, Goldsmiths, University of London. A similar diagnostic overview preceded the main presentation with clarification of DSM-5 criteria for Autism diagnosis (American Psychiatric Association 2013). The global median of 62:10,000 was presented (Elsabbagh et al. 2012), but the potential for this diminished statistic to relate to the change in diagnostic criteria was recognised. The variability in presentation of autism is further recognised in DSM-5 and was emphasised by Heaton, as well as the range of intellectual ability or learning disability experienced by those who have autism.

The well-known 'island of ability' seen in those who have autism and are recognised as savants was discussed, and a statistic presented from Mottron et al. (2013) who suggest that 45% of those who have autism have such a specialist interest, which is often music related.

Interestingly, of Kanner's (1943) original eleven participants, he noted that six demonstrated what he termed "unusual musical behaviour". A preoccupation with music is indeed widely reported in individuals who have autism (Simpson & Keen 2011). Heaton went on to discuss her own area of research, exploring the notion of 'spared processing of musical structure' in individuals who have autism (Heaton 2003; Heaton et al. 2007), as well as increased sensitivity to pitch and timbre in individuals with autism (Heaton 2009).

Heaton suggested that music processing and perception are often unaffected in the brains of those who have autism. Behavioural studies on music and emotion suggested that responses of those with autism were similar to their neurotypical peers (Heaton et al. 1999; Heaton et al. 2009). An interesting study was referenced (Allen et al. 2009) which explored the nature of the experience of music pertaining to individuals with high functioning autism, and exploited a wide range of purposes in social, cognitive and emotional domains. Further insight was gained by reflecting on the study of Sharda et al. (2014) who suggest that frontal

temporal connectivity is disrupted in those with autism during spoken word but not during music. This meant that the brain of an individual with autism *could* be identified during an fMRI scan when experiencing language but *not* when experiencing music. This provided much food for thought to the audience of practitioners, musicians and academics who engage verbally and musically with those who have autism.

A study which gave particular encouragement to the utility of musical interventions to individuals with autism was the work of Allen et al. (2013) where autonomic arousal was measured in response to music. There was no difference in the results between participants with autism and neurotypical participants. There was less linguistic description from participants with autism and alexythimia despite their high level of arousal. Following on from these findings, individuals with autism were enabled to utilise their intact ability to understand emotion *in music* to understand their own emotions. Musical resources were provided to encourage participants to match their own emotional state with an emotion they recognised in a musical stimulus. A question was posed from a delegate about research of responses to music in men and women with autism diagnoses; Heaton recognised that autism is underdiagnosed in women, and that this is certainly an area worthy of further research.

This fascinating session was particularly complementary to the presentations of clinical work earlier in the day, and emphasised well how academics, researchers, practitioners, therapists and educators may work together to draw from the most thorough and informed evidence base in music psychology as well as music therapy and education, in order to utilise music interventions most effectively. The final presentation in Session 2 was entitled '*Children in Hospitals: Musicians Speak*' and was co-presented by Rosalind Hawley, Professional Musician for Live Music Now and Georgina Aasgaard, cellist and music health practitioner. This was an additionally contrasting perspective, drawing not from a clinical music therapy perspective but from an arts in health and music performance perspective, informed by Costanza and Welch's (2004) work on the context for musical interventions in hospitals. Delegates were encouraged to imagine the hospital environment from the perspective of the child with a disability; an unknown sound environment, isolation, lack of auditory/visual stimulation, reduced opportunities for communication and interaction, and reduced opportunities for self-expression.



An example of a soundscape recorded on a hospital ward emphasised the potentially isolating sound world in which children with disabilities may find themselves when in hospital. The utility, impact and positive effect of musical intervention in this context was presented with some anecdotal examples to support the discussion. A beautiful extract showed playful engagement with toys and a musical soundscape distracting a young boy while potentially painful and distressing medical procedures were carried out. This emphasised the focus of the work on the wellbeing of the child as opposed to the sickness of the child.

Another example demonstrated that through the development of a toolkit of musical ideas and opportunities, many positive outcomes had been achieved by the Songbirds Project through LIME Music for Health (Music for Health, no date). These included reduction of heart rate, increase of oxygen saturation, increased eye contact and smiles, increased awareness of sound, recognition of vocal sounds as musical dialogue and physically reaching out and expressing a desire to communicate. An example of this work can be seen in the case study: *'Lydia's Story'* at the following address: [www.youthmusic.org.uk/lydias-story](http://www.youthmusic.org.uk/lydias-story) (Youth Music 2016). In these examples of practice, musicians came to be seen as a valid provision for supporting children in the hospital environment and were called upon to provide appropriate and valuable opportunities; music enabled families and medical staff to understand the children's mood and communication styles. There was a distinct emphasis on the social model of disability in this presentation, recognising that although children are unwell they are still children first and foremost and should not be defined by their diagnoses. A social model perspective of disability informed by Thomas (2013) is concisely summarised by Conn (2016: 11):

"The social model of disability puts forward the idea that a person's disability can be located within their experience of social relations and the ways in which difference and diversity are accommodated and thought about within society (Thomas 2013)".

### SESSION 3 – VIEWING OF POSTERS AND LIVE MUSIC NOW RECITAL

During the lunch break there was an opportunity to engage with and explore the poster presentations prepared for the conference. The breadth and quality of the posters reflected the diversity of delegates and presenters, and explored a range of

themes including music therapy practice, music therapy services, music education, disability, software, resources, research, methods and more. Poster presentations are available to explore online via the following link: <http://bit.ly/2IC1qUH> and their focuses outlined in Table 1. Delegates also enjoyed a recital by Live Music Now harpist, Rachel Wick.

### SESSION 4 – FOCUS: LEARNING DISABILITY AND THE NHS, A REVIEW OF METHODOLOGIES, AUTISM AND RETINOPATHY

The next session was chaired by Peter Freedman, Former President, Endocrinology and Diabetes Section, Royal Society of Medicine and Trustee, Live Music Now and Gordon Plant, Council Member, Clinical Neurosciences Section, Royal Society of Medicine. The first presentation was given by Dominic Slowie, National Clinical Advisor, Mortality and Learning Disability Director, NHS England, entitled *'Reducing Health Inequalities for Children with Learning Disability Through Participation'*. Slowie began by recognising the passion that was evident from the morning's presentation and his engagement with delegates over lunch.

To open the discussion, three examples were presented of the breadth of individual experience, learning and medical needs experienced by young people who have a label or diagnosis of 'learning disabilities'. This was a powerful reminder that the morning's sessions were highly specific (mostly individual) examples of practice; and that the field under examination could be far greater and more varied than we had discussed so far. An interesting question was put to the audience: "Are these young people *ill?*" Delegates concurred that learning disability did not equate with illness, but a rich discussion unfolded around diagnostic labels as tickets into services.

Learning disability was reflected upon as a construct, both as a medical diagnosis and as a protected characteristic. It was noted that the medicalisation of learning disability had led to many tragedies, with reference made to the scandal of Winterbourne View and the multi-agency response to this incident. A powerful statement was made by referring to antipsychotic medication as "chemical restraint", and the use of drugs to manipulate behaviour being an "ineffective and often inappropriate treatment". Slowie discussed a continuum between treatment and participation, and considered where music may play a part on

Poster title and presenter
<p><b>Microanalysis of a non-directive music therapy session captures the moment of change</b> Beth Pickard, Senior Lecturer, University of South Wales</p> <p><b>Music and the brain: Review of recent evidence of music's role in neuroplasticity across the lifespan, implications for clinical interventions</b> Victoria Lord, Clinical Neuroscience Researcher, University of Roehampton</p> <p><b>Sounds of intent: Online measurement of musical development in children with complex needs</b> Hayley Trower, Research Officer, University of Roehampton</p> <p><b>A mixed-methods case study for primary-aged children, with and without learning difficulties, learning musical instruments for the first time</b> Dawn Rose, Post-Doctoral Research Fellow, University of Hertfordshire</p> <p><b>Music and attachment language development in infants</b> Alistair Clarkson, Music Therapist, Living with Harmony</p> <p><b>Music therapy at Chelsea and Westminster: Engaging in research and developing practice</b> Claire Flower, PhD, Chelsea and Westminster Hospital NHS Foundation Trust</p> <p><b>Music therapy empowering young children with autism and their families: Reporting back from the largest non-pharmacological randomised control trial in autism</b> Grace Watts, Chelsea and Westminster Hospital NHS Foundation Trust</p> <p><b>Lomakatsi's creative rehabilitation</b> Igor Tojic, Founder and Director, Lomakatsi</p> <p><b>Cost-effectiveness analysis of a randomised controlled trial of improvisational music therapy's effectiveness for young children with autism (TIME-A) in the UK</b> A-La Park, Assistant Professor, Health Economics Personal Social Services Research Unit</p> <p><b>Evaluating social and musical outcomes of music lessons in children with low functioning autistic spectrum disorder</b> Christopher Blake, Goldsmiths, University of London</p> <p><b>ADHD and music: An exploration</b> Eva Wilde, UCL Institute of Education, University College London</p> <p><b>Psychodynamic music therapy and the work in classroom practitioners working with children with complex needs in Belarus: A potential space</b> Lisa Margetts, PhD student, University of Roehampton</p>

**Table 1: Authors and titles of poster presentations**

this spectrum. This was a particularly accessible and relevant context to examining the utility of musical interventions for children with learning

disabilities from a refreshingly social model perspective.

Statistics were presented about the mortality rates of individuals with learning disabilities in comparison with the general population, as well as other health-related statistics – e.g. BMI over 30, premature death, with meaningful reference made to the 'Death by Indifference' campaign (Mencap 2007). Contemporary reference was also made to the recent developments in the screening process for Down's Syndrome in the NHS and the implications for the construct of learning disability in light of such medical advances (The NHS Rapid Project 2014). This contemporary context set the scene for a focus upon healthy inequality and the need to improve quality of life for those with learning disabilities, potentially through music interventions.

From the perspective of the NHS, there are increasing numbers of initiatives aiming to invest in health and wellbeing in a proactive and preventative capacity (NHS England, no date). As a core area of focus on the NHS agenda, all 44 Sustainability and Transformation Plans in the UK are being asked to consider the health and wellbeing of individuals with learning disabilities as a matter of priority. To arrive at the musical frame of the conference, Slowie referred to "participation as therapy", and gave examples of a multitude of community music and music therapy initiatives which have meaningful therapeutic outcomes for participants with learning disabilities; as well as his own insights from raising a child who has a learning disability and engages with music therapy.

It was suggested that *visibility* and *participation* are the two main determinants of a society's attitudes towards disability (Scior et al. 2015). This has meaningful connotations for examining the utility but also the context of music interventions for children and young people with learning disabilities. Slowie concluded by suggesting that more opportunities for musical participation would generate health as well as distraction from illness. He advised practitioners to capture valid, reliable evidence of the impact and cost effectiveness of their interventions, and to take advantage of this most fruitful time, in light of the NHS' current priorities in relation to learning disability, to build a more humane society.

The next presentation was given by keynote speaker, Adam Ockelford, entitled '*Gauging the Efficacy of Music Interventions in Children with Learning Disabilities: Towards a Common Framework*'. Ockelford began the session with two

key statements: firstly that music itself remains the under-researched “trumpeting elephant in the room” in the field of music-psychological research; and secondly that the dominant research paradigm of “asking people what they think about music” is often unavailable or inappropriate when working through the medium of music with children and young people with learning disabilities.

The dominant methodology of speaking about music requires language, metacognition, consistency of response and cognitive skills, which result in those with Severe Learning Disabilities (SLD) and Profound and Multiple Learning Disabilities (PMLD) often being marginalised from music psychology research. Reference was made to earlier presentations during the day which had already suggested that some participants with learning disabilities may experience and process music in similar or more advanced ways to their neurotypical peers. Ockelford, therefore, advocated that applied musicology may provide a methodology through which the musical experiences of those with SLD or PMLD could be explored and meaningfully researched.

Ockelford suggests that by analysing the musical experiences and responses of participants with learning disabilities in relation to a given musical stimulus, we can understand their methods of processing and understanding music. Here, the stimulus given and the response received may give some indication as to the way the stimulus was experienced, processed and interpreted. Although the child may not be able to articulate their understanding or experience of music, their music making itself may voice their level of understanding; demonstrating perception of pitch, recall of pitch, reproduction of pitch and comparing of multiple pitches. In the extract shared, a participant with autism who had little verbal language was able to demonstrate through musical play that she had an advanced understanding of the syntax of Western tonality and understood some of the humour of social interaction. This methodology is also closely linked to Ockelford’s more advanced zygonic theory (Ockelford 2013).

In order to explore the rigour, validity and reliability of this methodology, Ockelford suggested that a number of *inputs* and a range of *outputs* are required. Through a statistical approach to the analysis of the body of musical data, underlying intentionality can subsequently be revealed. Another extract was shared of a participant with a degenerative, life-limiting condition, who played 64% of her musical outputs within twenty milliseconds of the beat. Ockelford understood this

as affirmation that music was still part of this child’s functioning and this enabled her to participate in a social and educational experience. The extensive Sounds of Intent work (Ockelford et al. 2005; Ockelford 2015) was shared to provide a contextual framework for exploring and analysing the musical responses and experiences of children with SLD/PMLD.

Each stage of the framework was explained and illuminated with examples from practice. This rigorous, deductive and inductive model underpinned much of the discussion during the day and goes a long way to respond to the demand for methodological rigour in examining the utility of music interventions for children with learning disabilities. Sounds of Intent was developed

“to investigate and promote the musical development of children and young people with learning difficulties... This evidence should in turn enable those working with children with learning difficulties or autism both to offer more effective support in engaging with music as an activity in its own right, as well as better enabling them to use music as a scaffold to structure other learning and development” (Sounds of Intent, no date).

There are a vast range of open access resources available to practitioners via the Sounds of Intent website ([www.soundsofintent.org](http://www.soundsofintent.org)).

The final presentation was contrasting to others in that it was co-presented by Marie Owen, Retired Consultant Paediatrician, formerly Gloucestershire Royal Hospital, Ockelford and Ashleigh, a young lady who has autism and retinopathy of prematurity. Owen shared her experience of being Ashleigh’s doctor, and after a brief medical history, shared some insights into Ashleigh’s continued engagement with music. It was a privilege to hear Ashleigh perform some of her favourite pieces on the keyboard, supported by her teacher, Ockelford.

Ashleigh performed with expression and technical ability as well as humour. She shared some Grieg repertoire that she enjoys as well as her favourite, Abba. Requests were also taken from delegates and Ashleigh responded to questions about her musical life. This was a valuable addition to have the voice of a musician with a learning disability at the centre of a prestigious, academic event.

## **SESSION 5 – PANEL DISCUSSION WITH ALL SPEAKERS**

The final session of the day was a panel discussion involving all speakers from the day’s proceedings.

Questions were welcomed from the floor, and are summarised in Table 2:

Summary of questions and answers
<p><b>What's the point of 'non-live' music in a hospital environment?</b></p> <p>Live music can be responsive and thus adapted, this is not always so for recorded music. However there is potential and value to creating site-specific recordings for some hospital situations.</p>
<p><b>Is there evidence of what music works best with people with autism?</b></p> <p>There is evidence that the musical preferences of adults with autism are as varied as those of neurotypical adults. It is important to get to know the individual.</p> <p>Preferred music can have a positive effect on pain. In such cases it would be essential to know the individual's preferred music.</p> <p>There appears to be a critical period of music preference from ages 14-21, potentially related to hormones and strong emotions. It is often the music of that particular period of an individual's life which will be their favourite.</p>
<p><b>What are your thoughts on age-appropriateness of musical choices?</b></p> <p>It is the child's right to choose but the practitioner's responsibility to share a breadth of repertoire for the child to make an informed choice.</p> <p>An interesting way to broaden repertoire can be to introduce something wholly unfamiliar and unexpected to see if an interest may be peaked.</p>
<p><b>Should we teach those with autism to be musicians rather than to engage with a medical model – e.g. therapy?</b></p> <p>Learning music certainly has advantages for <i>all</i> children. There will be an event at Goldsmiths, University of London on 20<sup>th</sup> January 2017 specifically on teaching music to those with autism, entitled '<i>Sharing the Magic</i>'; it was acknowledged that there is certainly a gap in provision here. Opportunity is integral to this becoming a reality. Important that Music Hubs are aware of this and allocate funds accordingly.</p>
<p><b>Could Sounds of Intent link education, music therapy and arts in health practices?</b></p> <p>The panel agreed that today's presentation had certainly demonstrated that Sounds of Intent could be a valuable resource across disciplines.</p>
<p><b>What is the barrier to music making in hospitals and special schools?</b></p> <p>The PROMISE Report was referenced (Welch, Ockelford &amp; Zimmermann 2001; Welch et al. 2016) which showed that 2% of special schools had a music therapist in 2000 while 20% of special schools had a music therapist in 2015, therefore progress is being made in acquiring musical provision. Ockelford suggested that it was</p>

everyone's responsibility to "bang the drum" to raise awareness of the need for musical provision.

**Is there potential for ensemble work with children with learning disabilities?**

Yes, and there are examples of good practice here, however progression routes outside of clinical settings are often limited.

**Do you feel it is important to involve health economists in this discussion?**

Yes, we need strong economic evidence. Health economists could be involved from the outset. There is an awareness that the 'gold standard' of tools for measuring impact in health economics are not relevant to autism/learning disabilities. We need to develop more sensitive tools to measure quality of life.

**Is there still a place for approaches to music making like Montessori or Steiner?**

Ockelford stated that "no system is bigger than the child", and advocated that we all start with the child and explore their own learning needs. There are many benefits to these systems and also some transferrable qualities between them. Kodaly was also referenced as a useful system. The focus should be on the child regardless of the orientation or role of the practitioner.

**Table 2: Summary of question and answers from panel discussion**



**Photograph 1: Panel discussion**

## REFLECTION

As a music therapist who has worked and researched in music with participants with learning disabilities, it was exciting to see such a rigorous and informed focus to this rich day of learning and sharing. Of particular note was the interdisciplinary dialogue during questions and breaks where doctors, academics, musicians, teachers, therapists, health economists, clinicians,



researchers and many more interested parties came together to learn from one another. The venue and host organisation also gave a sense of prestige to the occasion, recognising the potential of music as a valid intervention in this medical field; there were, however, some interesting, inherent medical model connotations to this affiliation. It was insightful to note the prevalence of clinical music therapy alongside applied musicology research and discussion around music education and arts in health interventions; there was a sense of acceptance and interest between disciplines and a recognition of the value of each distinct way of working.

From a disability perspective, it was interesting to note the highly medicalised terminology which often accompanied and articulated the rigorous research methods. This was not always aligned with the focus of the research which both recognised and highlighted the abilities as well as the impairments of participants with learning disabilities. This led me to wonder whether there is an evolving shift in research and practice to move away from a normative, deficit-based paradigm of disability (Straus 2014; Thomas 2013) to explore the rich and multifaceted experiences of participants with learning disabilities, both within and beyond music. Each presentation in its own way recognised music's potential to enable and empower participants with learning disabilities. It was encouraging to welcome a presenter who had a learning disability to share a performance of her work, and the words of parents were articulated and valued during multiple presentations.

Ockelford advocated several times for a "child-centred approach", recognising that while not one musical approach would accommodate or benefit all children with learning disabilities, there are potential developmental frameworks which can guide and inform the work in a meaningful and rigorous way. This valuing and celebrating of individual differences felt important in such a medical context and institution.

It was exciting to revisit Ockelford's work in a slightly different context, and to learn about diverse applications of his theories. The most refreshing session for me personally was that of Dominic Slowie, who spoke passionately about society's understanding of learning disability and how, at a systemic level, this will dictate engagement with and provision of music interventions for those with learning disabilities (Scior et al. 2015). It was exciting to note a practitioner in such a senior position discussing a social model interpretation of disability, and recognising the centrality of societal

factors in the potentially disabling impacts of impairments (Barnes 2014; Burke 2012). I wonder whether the language of disability will continue to evolve, informed by Slowie and Scior et al.'s (2015) sentiments on visibility and participation shaping society's attitudes towards disability.

This day successfully wove together expert perspectives from diverse disciplines to create a highly informed examination of the utility of music interventions for children with learning disabilities, and provided many insightful ways forward, relating to practice, policy and attitudes to disability.

## REFERENCES

- Allen, R., Hill, E., & Heaton, P. (2009). The subjective experience of music in autism spectrum disorder. *Annals of the New York Academy of Sciences*, 1169(1), 326-331.
- Allen, R., Davis, R., & Hill, E. (2013). The effects of autism and alexithymia on physiological and verbal responsiveness to music. *Journal of Autism and Developmental Disorders*, 43(2), 432-444.
- Allen, R., Walsh, R., & Zangwill, N. (2013). The same only different: What can responses to music in autism tell us about the nature of musical emotions? *Frontiers in Psychology*, 4, 156.
- American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5<sup>th</sup> Ed.). Washington DC: American Psychiatric Publishing Inc.
- Barnes, C. (2014). Understanding the Social Model of Disability: Past, Present and Future. In N. Watson (Ed.), *Routledge Handbook of Disability Studies* (pp. 12-29). Oxfordshire: Routledge.
- Bliss (2016). Bliss: For babies born premature or sick. Retrieved from <http://www.bliss.org.uk/>
- Brandt, A., Gebrian, M., & Slevc, L. R. (2012). Music and early language acquisition. *Frontiers in Psychology*, 3, 327.
- Burke, J. (2012). "Some kids climb up; some kids climb down": Culturally constructed play-worlds of children with impairments. *Disability and Society*, 27, 965-981.
- Cattaneo, Z., Vecchi, T., Cornoldi, C., Mammarella, I., Bonino, D., Ricciardi, E., & Pietrini, P. (2008). Imagery and spatial processes in blindness and visual impairment. *Neuroscience & Biobehavioural Reviews*, 32(8), 1346-1360.
- Conn, C. (2016). *Observation, Assessment and Planning in Inclusive Autism Education*. London: Routledge.
- Costanza, P., & Welch, G. F. (2004). Music in a hospital setting: A multifaceted experience. *British Journal of Music Education*, 21(3), 329-345.
- Elsabbagh, M., Divan, G., Hog, Y. J., Kim, Y. S., Kauchali, S., Marcin, C., Montiel-Nava, C., Patel, V., Paula, C.S., Wang, C., Yasamy, M. T., & Fombonne, E. (2012). Global prevalence of autism and other pervasive developmental disorders. *Autism Research*, 5(3), 160-179.
- EthOS (2016). Ethos: Ethnographic observation system. Retrieved from <https://www.ethosapp.com/>
- Heaton, P. (2003). Pitch memory, labeling and disembedding in

- autism. *Journal of Child Psychology and Psychiatry*, 44(4), 543-551.
- Heaton, P. (2009). Assessing musical skills in autistic children who are not savants. *Philosophical Transactions of the Royal Society B Biological Sciences*, 364(1522), 1443-1447.
- Heaton, P., Hermelin, B., & Pring, L. (1999). Can children with autistic spectrum disorder perceive affect in music? An experimental investigation. *Psychological Medicine*, 29(6), 1405-1410.
- Heaton, P., Williams, K., Cummins, O., & Happe, F. (2007). Beyond perception: Musical representation and on-line processing in autism. *Journal of Autism and Developmental Disorders*, 37(7), 1355-1360.
- Heaton, P., Allen, R., & Hill, E. (2009). 'Hath charms to soothe...' An exploratory study of how high-functioning adults with ASD experience music. *Autism*, 13(1), 21-41.
- Kanner L. (1943). Autistic disturbances of affective contact. *Nervous Child*, 2, 217-250.
- Mencap (2007). Death by indifference: Following up the *Treat Me Right!* report. Retrieved from <https://www.mencap.org.uk/sites/default/files/2016-06/DBIreport.pdf>
- Mottron, L., Bouvet, L., Bonnel, A., Samson, F., Burack, J. A., Dawson, M., & Heaton, P. (2013). Veridical mapping in the development of exceptional autistic abilities. *Neuroscience & Biobehavioural Reviews*, 37(2), 209-228.
- Music for Health (no date). 'Songbirds'. Retrieved from <https://musicforhealth.wordpress.com/songbirds/>
- NHS England (no date). Sustainability and transformation plans. Retrieved from <https://www.england.nhs.uk/ourwork/futurenhs/deliver-forward-view/stp/>
- Ockelford, A. (1988). *Some observations concerning the musical education of blind children and those with additional handicaps*. Paper presented at the 32<sup>nd</sup> conference of the Society for Research in Psychology of Music and Music Education, University of Reading.
- Ockelford, A. (2015). The Sounds of Intent Project: Modelling musical development in children with learning difficulties. *Tizard Learning Disability Review*, 20(4), 179-194.
- Ockelford, A., & Matawa, C. (2009). *Focus on Music 2: Exploring the Musical Interests and Abilities of Blind and Partially-Sighted Children with Retinopathy of Prematurity*, London: Institute of Education.
- Ockelford, A., & Voyajolu, A. (2015). With intent: A new national project uses music to support wider development. *Nursery World*, 21, 18-19.
- Ockelford, A., Welch, G., Zimmermann, S., & Himonides, E. (2005). 'Sounds of Intent': Mapping, assessing and promoting the musical development of children with profound and multiple learning difficulties. *International Congress Series*, 1282, 898-902.
- Röder, B., & Rösler, F. (2003). Memory for environmental sounds in sighted, congenitally blind and late blind adults: evidence for cross-modal compensation. *International Journal of Psychophysiology*, 50(1-2), 27-39.
- Röder, B., Rösler, F., & Neville, H. N. (2000). Auditory memory in congenitally blind adults: A behavioural-electrophysiological investigation. *Cognitive Brain Research*, 11(2), 289-303.
- Scior, K., Hamid, A., Hastings, R., Werner, S., Belton, C., Laniyan, A., Patel, M., & Kett, M. (2015). *Intellectual Disabilities: Raising Awareness and Combating Stigma – A Global Review*. London: University College London.
- Schlaug G. (2015). Musicians and Music Making as a Model for the Study of Brain Plasticity. In E. Altenmüller, S. Finger & F. Boller (Eds.), *Music, Neurology, and Neuroscience: Evolution, the Musical Brain, Medical Conditions, and Therapies* (pp. 37-55). New York: Elsevier.
- Sharda, M., Midha, R., Malik, S., & Singh, N. C. (2014). Frontotemporal connectivity is preserved during sung but not spoken word listening, across the autism spectrum. *Autism Research*, 8(2), 1-13.
- Silberman, S. (2015). *Neurotribes: The Legacy of Autism and How to Think Smarter About People Who Think Differently*. London: Allen & Unwin.
- Simpson, K., & Keen, D. (2011). Music interventions for children with autism: Narrative review of the literature. *Journal of Autism and Developmental Disorders*, 41(11), 1507-1514.
- Sounds of Intent (no date). Sounds of intent. Retrieved from <http://soundsofintent.org/>
- Sounds of Intent in the Early Years (2016). Sounds of intent: In the early years. Retrieved from <http://www.eysoi.org/>
- Straus, J. (2014). Music therapy and autism: A view from disability studies. *Voices: A World Forum for Music Therapy*, 14(3). Retrieved from <https://voices.no/index.php/voices/article/view/785>
- Thaut, M., & Hoemberg, V. (Eds.). (2016). *Handbook of Neurologic Music Therapy*. Oxford: Oxford University Press.
- The NHS Rapid Project (2014). NIPT for Down Syndrome. Retrieved from <http://www.rapid.nhs.uk/guides-to-nipt-nipt/nipt-for-down-syndrome/>
- The Royal Society of Medicine (2016). Examining the utility of music interventions for children with learning disabilities. Retrieved from <https://www.rsm.ac.uk/livemusicnow16>
- Thomas, C. (2013). Disability and Impairment. In J. Swain, S. French, C. Barnes & C. Thomas (Eds.), *Disabling Barriers – Enabling Environments* (3<sup>rd</sup> Ed.) (pp. 9-16). London: SAGE.
- Von Tetzchner, S., Fosse, P., & Elmerskog, B. (2003). Juvenile neuronal ceroid lipofuscinosis and education. *Biochimica et Biophysica Acta*, 1832(11), 1894-1905.
- Walker, R., (1981). The presence of internalised images of musical sounds. *Bulletin of the Council for Research in Music Education*, 66-67, 107-112.
- Walker, R., (1985). Musical imagery and musical concepts: Some evidence from the congenitally blind. *Bulletin of the Council for Research in Music Education*, 85, 229-238.
- Walker, R. (2007). *Music Education: Cultural Values, Social Change and Innovation*. Springfield, IL: Charles C Thomas.
- Wan, C. Y., Wood, A. G., Reutens, D. C., & Wilson, S. J. (2009). Early but not late-blindness leads to enhanced auditory perception. *Neuropsychologia*, 48(1), 344-348.
- Welch, G., Ockelford, A., & Zimmermann, S. (2001). *Provision of Music in Special Education (PROMISE)*. London: RNIB/University of London, Institute of Education.

Welch, G., Ockelford, A., Zimmermann, S., & Wilde, E. (2016).  
*The PROMISE report 2015*. In the proceedings of the 26<sup>th</sup>  
International Seminar of the ISME Commission on Research  
(pp. 292-303). London: ISME.

Youth Music (2016). Lydia's story. Retrieved from  
<https://www.youthmusic.org.uk/lydias-story>

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