

<b>Institution:</b> University of Huddersfield		
<b>Unit of Assessment:</b> Unit 4		
<b>Title of case study:</b> Impact through training: using music in the care plans of people living with dementia in the UK and Japan		
<b>Period when the underpinning research was undertaken:</b> 2016-2017		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b> Dr Kagari Shibazaki	<b>Role(s) (e.g. job title):</b> Senior Lecturer in Developmental Psychology	<b>Period(s) employed by submitting HEI:</b> May 2016- present
<b>Period when the claimed impact occurred:</b> 2017 - 2020		
<b>Is this case study continued from a case study submitted in 2014?</b> No		
<p><b>1. Summary of the impact</b></p> <p>Dementia is an emerging global health crisis, with approximately 850,000 individuals currently living with the condition in the UK alone. Research conducted at the University of Huddersfield identified how musical activities for people with dementia can be used as an integral and important tool for assessment, rather than merely as a form of entertainment or pastime. Key behaviours and responses to music were identified to provide critical information about the overall wellbeing of those in care, and to provide carers with additional insight. The research influenced and informed the development of training materials that were used in the training of over 900 caregivers and musicians in the UK and Japan. This training equipped caregivers with the knowledge, skills and ability to assess in a more detailed way the overall physical, social, cognitive functioning, and individual care needs of clients living with severe dementia. The research has positively influenced care procedures, carer attitudes and quality of life for people living with dementia, as well as providing an evidence base for the charity Music in Hospitals to secure funding of £27,000, which in turn has allowed them to hold an additional 135 concerts in a range of care facilities.</p>		
<p><b>2. Underpinning research</b></p> <p>In the UK, concern for the number of people living with dementia (850,000) and associated costs for care, generated the UK Government's '<i>Dementia Challenge</i>' in 2012. In Japan, where the number of individuals living with dementia is significantly higher (6.02 million), this was followed by '<i>The Orange Plan</i>' (2015). Both government policy publications clearly outlined the need for improvements in individual care plans and acted as a catalyst for an ongoing programme of research which began in 2012, with the charitable organisation Music in Hospitals and Care (MiHC).</p> <p>The research, led by Shibazaki (University of Huddersfield) and supported by Marshall (University of Sussex), moved into phase two (2016 onwards), where it was demonstrated that care givers, musicians and family members considered musical events to be 'enjoyable entertainment', effective in prompting memories, and relieving anxiety, agitation and depression. This link between music and wellbeing is well established but little previous research had been conducted, to inform how music could be incorporated into dementia care. Although staff were somewhat aware that music can be beneficial for people living with dementia, very few understood the real potential of using music as an assessment tool. Even in cases where staff were positive about musical experiences, there was limited awareness that the information gained through observing clients' responses to musical activities could potentially be used as a significant part of a systematic assessment procedure, and become an integral part of client care plans (3.1).</p> <p>The arts have commonly been included in dementia care in the UK as a non-pharmacological intervention to treat, modify, and / or relieve any number of physical and mental conditions. However, musical events have typically been viewed in terms of providing relatively temporary relief for a range of conditions and symptoms displayed by those with dementia; prior to Shibazaki's research, the true potential to be gained from understanding the unique contribution music can make to the client's overall care remained underexplored. The research also clearly highlighted the need for appropriate training materials for caregivers (3.2). These were</p>		

subsequently designed at UoH, specifically to bring the findings of the research to the attention of those involved in dementia care in both the UK and Japan, where there are relatively high numbers of individuals living with the condition. Prior to this research being undertaken, there was a limited amount of supporting academic literature, and no structured training specifically designed for caregivers to outline or detail the effects of music, and how it might be used as an integral part of dementia care.

The longitudinal research by Shibazaki was carried out at the University of Huddersfield over a period of 2 years and involved observations and interviews in 23 care facilities in England and Wales, along with periodic questionnaires to care staff, musicians and family members (n=246). The same data collection processes were used in Japan across 35 care facilities - in this case 135 questionnaires were returned. Shibazaki designed and led the data collection in both countries and her analysis enabled the development of the training materials which generated the impact. While Shibazaki provided overall leadership for the research, Marshall (University of Sussex) took responsibility for all English translations, provided technical expertise, led communication with UK participants and performed some of the UK data collection.

In addition to highlighting the need for comprehensive training materials for caregivers, research conducted found that musical events promote and motivate unique behaviours in individuals living with final stage dementia. Whereas other activities often require significant levels of manual dexterity and language, music is responded to in an individual way, frequently enabling individuals to communicate information regarding their overall level of physical, cognitive and social wellbeing (3.3). For example, whilst clients cannot easily communicate changes in their breathing following an infection, or explain changes in their ability to speak following a stroke, they can demonstrate this during their singing if caregivers are provided with appropriate training to make the relevant observations. The research was based on the widely-held belief that any channel of communication that assists the carer more fully to understand their client would benefit the way in which care was provided (3.4). The findings from the aforementioned underpinning research were used to design and develop a set of training materials with a number of specific aims, namely: (i) to increase the knowledge and understanding which all those involved in dementia care have towards the value and potential use of music in dementia care; (ii) to create a tool for professional development with the capability to change attitudes, and increase observational skills; (iii) to impact on the everyday care processes and policies in care facilities for the benefit of those in care; and, (iv) to improve the quality of assessment and extend the range of information included in the care plans of clients. Subsequently, the outcomes were disseminated widely through i) professional development training with a significant number of care givers, ii) on-line training materials, iii) academic publications and iv) public and academic conferences (3.5).

### 3. References to the research

Evidence of research quality: The underpinning research was published in high-quality, impactful international, peer-reviewed journals specifically aimed at the professional care sector. 3.3 achieved a significant number of downloads (n=2420), placing it in the 1st percentile and of above average interest than outputs of the same period. The research was awarded 'Runner Up' out of 43 presentations in the Aneurin Bevan University Health Board, Annual Research and Development Conference (3.5) and was also nominated for the Alzheimer's Society Research Leaders award and gained 'Research Commended'.

- 3.1 Shibazaki, K.** and Marshall, N.A. (2016). Exploring the Benefits and Uses of Musical Experiences in the Context of Dementia Care. *Asian Journal of Human Services*, 10(1).1-15. <https://doi.org/10.14391/ajhs.10.1>
- 3.2 Marshall, N.A** and **Shibazaki, K.** (2016). Seeking Asylum: The Benefits for Clients, Family Members and Care-givers of Using Music in Hospice Care. *Asian Journal of Human Service*, 11(1). 18-30. <https://doi.org/10.14391/ajhs.11.18>
- 3.3 Shibazaki, K.** and Marshall, N.A. (2017). Exploring the impact of Music concerts in promoting wellbeing in dementia care. *Ageing and Mental Health*. 21(5), 468-476. <https://doi.org/10.1080/13607863.2015.1114589>

**3.4** Marshall, N.A and **Shibazaki, K.** (2017). Promoting Wellbeing: Amylase as an Indicator of Changes in Stress Level in People with Intellectual Disabilities. *Asian Journal of Human Service*, 12(1). 60-76. DOI: 10.14391/ajhs.12.60. <https://doi.org/10.14391/ajhs.12.60>

**3.5** **Shibazaki, K.** and Marshall, N.A. (2017). *Seeking Asylum: An investigation into using music in hospice and end of life care*. Aneurin Bevan University Health Board, Annual Research and Development Conference. NHS Wales. 20 June 2017, Newport, UK. [can be supplied on request]

#### **4. Details of the impact**

Training materials were developed (5.1) enabling face-to-face and online training to take place across 3 hospitals, 9 care homes and 4 universities in the UK and Japan between January 2017 and June 2020. On average, each facility provided care for around 45 residents hence the care staff training impacted on a minimum of 360 residents. However, due to the age and health status of the study population, the participants changed over the period of 2 years, hence the more accurate total would be higher than this. In total, 967 individuals took part in the training, including all care staff, musicians, academics, and charity trustees. There are three key areas of impact - improvements to care, increased understanding and skills, and an evidence base for fundraising:

##### **Improvements to service provision and care procedures for dementia patients**

Training developed by Shibazaki has been incorporated into care plans and procedures in 12 facilities across the UK and Japan, resulting in revisions to internal care policies, and improvements in communication amongst staff, as described by one manager of 35 care homes in Japan, who enrolled all managers on the training program: *"We have now incorporated our observation data into our individual assessments, and added our observations to the daily care plan with a clear rationale. We have also started sharing and discussing this process and these issues during the whole staff meeting at care homes"* (5.2). More accurate assessments of the patients' overall level of wellbeing have been facilitated through the training and this has enabled caregivers to share useful information with families and loved ones, which may not have otherwise happened. One care worker observed that, *"our increased knowledge of the meanings within their responses has enabled us to provide family members with more positive information of their current physical and mental abilities"* (5.3a).

Staff training has not only impacted on key individuals; improvements to service provision have been replicated within care facilities, with new and visiting staff along with those awaiting training already making use of the improved procedures. One care home manager who participated in the training explained: *"...the skills and techniques I have assimilated from the training have 'snowballed' throughout the care staff in the home, with colleagues assimilating many of the techniques and observational skills brought out in the training. In this respect, the impact of the training has spread; influencing others and changing the way we care for all our clients"* (5.3b).

Following the training and observation of the benefits to patients and staff, many care facilities have shifted their focus towards musical activities. The new knowledge has acted as a catalyst for raising funds, and care facilities have invested in musical instruments and used them as a tool for assessment. Musical activities have been incorporated into daily routines, and the perceived scope of 'music' has been expanded beyond entertainment. For example, one care manager noted that *"Listening and singing have now become their favourite activities, and this has improved both care workers' motivation and clients' quality of life....as a result of the training and the monthly music sessions, we have purchased a new piano for music activities with dementia clients"* (5.2a). Another care home employee explained that *"The training has motivated the volunteer carers to continue with their pledge to find additional funding to give music a more central role in the life of the facility"* (5.3a).

The subsequent increase in wellbeing of dementia patients, as a result of the move towards more musical activities, was described by a care manager in Japan, who explained that *"As clients sing well, they also feel thirsty, they started drinking more water. Overall the amount of taking in liquid has increased. The advantage is that some clients previously tended to reject drinking water, but this situation improved because of the musical activities...as musical activities reduce their levels of anxiety, our clients requests to go home have decreased"* (5.2b).

**Increased understanding and skills in using music as an assessment tool for dementia care**

As a result of the research, over 960 individuals with care responsibilities for those with dementia, including volunteers, gained an increased awareness and understanding of the role and the wider benefits that musical activities can provide, beyond alleviating symptoms such as depression and agitation; these individuals also enhanced their observation and communication skills.

In Japan, the number of managers and students undertaking the training facilitated an opportunity to measure the impact of the training. One company required all their care home managers to attend the training sessions (n=51). Pre and post test questionnaires highlighted that managers self-rated their observation skills of clients physical and cognitive abilities to have increased from 65.8% and 93.8%; to 72.8% and 95.8% respectively. Similarly, managers' attitudes towards the uses of music in assessing the social, cognitive, emotional and physical condition of clients increased by an average of 18.25 % over the 4 aspects, with the largest increase (28%) occurring in understanding how musical activities can be used to assess a client's physical condition. As one manager reported, *"This training session gave me further confidence and pride as care staff, and I gained more knowledge of observing the dementia clients. This is not only about the clients but also about ourselves – who we are"* (5.10). Similarly, pre-post training measures amongst 147 trainee Social Work students revealed an average increase of 21.25% in students' attitudes towards using music for the assessment of clients' social, emotional, cognitive and physical conditions. Again, the largest and most significant increase (46.5%) was in understanding how music can assist in the assessment of clients' physical condition.

Care givers were trained to use music as an assessment tool to identify physical, emotional and social behaviours - to improve physical health by encouraging increased levels of exercise or fluid intake for example, which can be a particular challenge when caring for individuals with dementia. Consequentially, many caregivers who participated in the training, have changed the way they communicate with those they are caring for and are better able to understand them. One care manager of a facility in the UK commented that, *"Observation and assessment techniques I learned from the materials have been extremely important in managing their [the patients] behaviour, and increasing my understanding of their emotional state and assessing their individual needs more accurately... I am also more aware of the way in which music can be used to assess clients' physical and emotional conditions. This has increased the level of communication I feel I have with clients and my understanding of their individual needs"* (5.3b).

The increase in understanding and awareness has extended to volunteers in care facilities, who felt that the knowledge gained from the training had allowed them to be more useful to the permanent care home staff. As the Chair of one volunteering society commented, *"Volunteers now feel they can be more effective 'additional eyes' for the nursing staff. They feel they can be more aware of the physical condition they observe in the individual clients and feel more confident in passing information on to the care staff"* (5.4).

The training has been incorporated into the curriculum for caregivers in 4 Universities in Japan, providing trainee professionals with the knowledge and expertise required to observe and assess patients more accurately and provide a better level of care once qualified. This differed to previous training, which tended only to focus on music for wellbeing and did not teach individuals how to use it as an assessment tool. A Professor at Toyo University, Japan, where the training materials were introduced into the curriculum in 2020 for trainee care workers, explained that *"The biggest benefits obtained through this training session, is that they [the students] have a belief that they are able to engage with dementia clients actively and confidently ... they now have a better understanding of using music with people with dementia, and can provide a better quality of care"* (5.5).

Feedback provided by the student care workers receiving the training, demonstrated clear improvements in understanding and an awareness of how to interpret observations more accurately: *"I could understand through the training sessions how music stimulates our memory and improves different abilities, such as swallowing, chewing, paralysis and motivation to the rehabilitations"*. Another student commented that *"I have known the music therapy, however, my*

*understanding was only the surface. This training session gave me further ideas and I have now understood in depth how music could be used for dementia people (sic)" (5.5).*

Over 600 professional musicians working or volunteering in hospitals, care homes and cognitive impairment centres participated in training and, as a result, many have increased the degree to which they reflect upon their repertoire and performance. An increased awareness of the responses of patients with final stage dementia has allowed them to adapt the mode of delivery they adopt within each setting and has given them the confidence to promote the benefits of music in care. One musician who undertook the training explained that *"it helps to validate my understanding of the benefits I can offer through my concerts and to persuade those in the position to make arrangements for activities that music can offer great value to clients which extend way beyond the pleasantries of sound"* (5.7). The former CEO of Music in Hospitals & Care, a charity that provides over 4,000 live music concerts in care settings annually, commented that *"The training events have offered musicians the opportunity to reflect on their interactions with clients. It has enabled them to feel more confident...musicians continue to build on the strengths of their performance which has increased the positive benefit for all those who attend"* (5.6).

#### **Providing an evidence base to support charitable organisations and care facilities in raising awareness and funds to provide musical activities for dementia patients**

The research conducted by Shibazaki, provided a robust evidence base (5.8, 5.9) which enabled the charity to move from issuing annual reviews to producing an annual impact report, providing more assurance to potential funders and ultimately increasing the funding opportunities to continue vital work in care facilities. The former CEO of Music in Hospitals and Care (MiHC) explained that *"...the research contributed to securing one award of £27,000 donated by a national health insurance provider. As a direct result of this grant, approximately 135 more concerts took place in a wide range of care facilities including hospice and dementia care facilities, hospitals, special needs schools and day centres for cognitively impaired adults. Approximately 312 musicians were employed and almost 6,000 individuals got to appreciate the events"* (5.6).

The research was incorporated into a report by MiHC, which was presented to the Commission on Dementia and Music in the House of Lords in 2018. This resulted in a number of recommendations being made to improve wellbeing and quality of life for dementia patients. The former CEO of MiHC went on to say that: *"The evidence-based beneficial outcomes from the research proved to be a significant factor in fundraising initiatives. Previously these had been based on anecdotal evidence rather than empirical evidence based on the research which had been conducted in a rigorous and verifiable fashion...it is difficult to overstate this aspect of the research as funding (and therefore fundraising) is such an important part in sustaining the charity and its ability to deliver live music"* (5.6).

#### **5. Sources to corroborate the impact**

- 5.1 Training toolkit [https://padlet.com/n\\_a\\_marshall/6bk9yazgadnv](https://padlet.com/n_a_marshall/6bk9yazgadnv)
- 5.2 Testimonial from (a) care manager, Japan (b) care home manager, Japan.
- 5.3 (a) Testimonial from Lead Activities Co-ordinator, Surrey, (b) Testimonial from care manager, Surrey) and (c) Testimonial from Chairman of Volunteer Carers
- 5.4 Impact survey data from online training participants in Japan
- 5.5 Testimonial from (a) Professor Kazutoshi Furukawa, Toyo University, including statements from care work students undertaking the training, (b) Professor Yukari Tokimoto, Osaka University of Science, (c) Professor Miyauchi Toshihiko, Jumonji University.
- 5.6 Testimonial from CEO of Music in Hospitals and Care
- 5.7 Testimonial from professional musician, working with MiHC
- 5.8 Music in Hospitals and Care webpage, describing work conducted with University of Huddersfield and University of Sussex <https://mihc.org.uk/music-health/> and referencing all underpinning research.
- 5.9 Music in Hospitals and Care Newsletter, July 2017.
- 5.10 Testimonial from care manager, Japan.