Journal of Applied Arts & Health
Volume 10 Number 3
 doi: https://doi.org/10.1386/jaah_00003_1

MARGARET A. COULTER SMITH, ANTHONY SCHRAG, FIONA KELLY AND CLAIRE PEARSON
Queen Margaret University

‘Like a Dance’: Working creatively with healthcare practitioners to explore mobility and osteoporosis

ABSTRACT

Collaborations between health sciences and creative arts can generate insights into complex health phenomena. This article describes a creative workshop derived from an action research project that aimed to raise awareness of fracture risk in health practitioners supporting people with osteoporosis. The creative workshop aimed to provide opportunities for practitioners within the action research community to create new knowledge and share their practice insights. The article considers the notion of creative arts as a physical, embodied process that can facilitate learning by enabling tacit knowledge to be made explicit. Rather than applying an instrumental approach to arts within healthcare, the workshop became a mechanism for the convergence of ideas, disciplines and support structures and provided a learning environment where old beliefs could be challenged, practice insights shared and new knowledge constructed. We discuss the workshop development and outputs and suggest the utility of this approach for collaborative learning.

KEYWORDS

creativity
learning
arts
osteoporosis
moving and handling
action research

INTRODUCTION

Collaborations spanning the health sciences and creative arts can generate important insights into complex health phenomena. Aesthetics, healthcare research, professional education and experiential learning can together give access to practice knowledge yet to be articulated by experienced practitioners, develop this knowledge further, expand knowledge through dissemination of findings and provide stimuli for creative artwork that has an end in itself. The Lydia Osteoporosis Action Research Project (LOARP) explored healthcare practitioners' knowledge and understanding of osteoporosis and fracture risk and the care experiences of persons with osteoporosis (Coulter Smith et al. 2016a). Following the action research, healthcare staff research participants and a range of project stakeholders (health and social care staff, academics and members of the public) were invited to participate in a conference to share preliminary research findings and to further develop the findings by engaging in an innovative collaborative Creative Movement and Osteoporosis Workshop (henceforth referred to as the Workshop). This article documents the process used to generate creative outputs in the Workshop, and how this entailed the uncovering of practice knowledge and engagement in creating new knowledge building upon participants' and stakeholders' earlier involvement with the LOARP.

The Workshop described here followed the main action research project and was the result of the collaboration between academics, artists, researchers, practitioners and those affected by osteoporosis. It drew on creative and experiential methods to prompt embodied cognition (EC), reflection and the uncovering of practitioners' tacit knowledge when working with people with osteoporosis.

BACKGROUND

Osteoporosis is a highly prevalent bone disease that degrades bone structure, making the spaces in bones larger, the bone struts thinner and less strong, thus leading to increased fracture risk, morbidity and mortality, with hip fractures potentially having the most serious consequences. Over three million people in the United Kingdom, including 250,000 in Scotland, are affected by osteoporosis (Royal Osteoporosis Society 2020). The majority of fractures occur in the over 65s, many of whom will have osteoporosis (Scottish Intercollegiate Guidelines Network [SIGN] 2015).

The public health problem of osteoporosis and increased fracture risk has necessitated an extensive and ever growing body of medical, biosciences and pharmacological research that aims to advance understanding and the scientific evidence base for practice. There is a need to distil the important features of osteoporosis and the relevant practice principles for frontline practitioners and people affected by it so that care can be tailored to individuals' requirements and their health and well-being maximized, and these are key drivers for the Lydia Osteoporosis Project.

The new knowledge emerging from the Workshop relied on the active engagement of the Workshop participants and built on the preliminary findings from the action research project and earlier research (Coulter Smith et al. 2016a, 2016b, 2016c). The Workshop team sought to engage professional and lay audiences to uncover healthcare staffs' beliefs, understandings, conceptions or mental models, their professional tacit knowledge and to address misconceptions that could surface in the care of older people with osteoporosis at risk of fracture (Watts and Blessinger 2017; Jonassen and Land 2012; Polanyi 1966).

THE ARTS IN HEALTH CONTEXT

There is considerable literature focused upon proving the health benefits of 'Arts in Health' in general, with policy recommendations from the All-Party Parliamentary Group on Arts, Health and Wellbeing Inquiry Report titled *Creative Health: The Arts for Health and Wellbeing from the All-Party Parliamentary Group on Arts, Health and Wellbeing* (2017). There is also increasing recognition of the therapeutic value of using different art forms in healthcare settings (Wilson et al. 2016), with reported benefits including improved mood and reduced stress, pain management and improved sleep (Wilson et al. 2016), while reported benefits for staff include enhanced communication between patients and staff 'through building rapport between people making compassionate care more likely' (Bungay et al. 2014: 52). Parker et al. stress the importance of the arts within healthcare projects, suggesting it can provide a 'forum for thoughtful expression and engaged listening' (2013: 145). In contrast, Putland (2008) discusses how the fragile and affective experiences of artistic projects risk becoming 'lost in translation' and specific art practices receive inadequate attention (McNaughton 2007) when operating in healthcare contexts. The confluence of arts and health is therefore not an automatic success, with Rooke suggesting there is a risk that 'art becomes a mode of treatment, potentially losing its critical potential' (2014: 3) which begs the question: are there unbridgeable gaps between the remits of 'art' and those of 'health'? It is not within the remit of this article to answer this question, nor to examine the affective differences between art and healthcare approaches. Rather, the authors place their attention on the methodological impact of this unique artistic workshop on the larger LOARP project.

Similarly, it is beyond the scope of this text to comprehensively define what is meant by 'art': we do, however, frame our definition via the Canadian artist Liz Magor who said: 'art is the thing that challenges our perceptual habits' (2002). This definition suggests that art is always contextual and based upon conceptual processes, rather than something which is medium-specific. It differs from craft-based notions of aesthetics that suggest the primary value of creative expression lies with the object produced. We position ourselves with Magor (2002) and suggest the value lies in the concept behind the act; art is a process of thinking about the world. It is not just a visual expression of something, but also a *challenge* to think differently: the visual, expressive form is a clue to the concepts behind it. It is not what we see, but what we *think* that is important. Thinking, however, is not just a mental process: it can also be physical.

THE CORPOREAL EXPERIENCE AS ART, AND THE CONCEPT OF EC

> Four centuries after Descartes, we are still having trouble with the concept of mind-body dualism. The first problem arises from intellectualist tendency to regard body praxis as secondary to verbal praxis […] [but in order] to discover the nature and sources of human meanings, we must explore our non-conscious bodily encounters with our world.
>
> (Johnson 2008: 46)

The above quote delineates the importance of exploring the role of our bodies in meaning-making. It also alludes to an ontological issue concerning a physical methodology: the body is a language in-and-of-itself. Physical acts do not translate to something else, but use the grammar and syntax of themselves

to make meaning of themselves. 'Meaning should not be reduced to a sign which, as it were, lies on a separate plane outside the immediate domain of an act' (Jackson 1983: 328). This fact makes analysis of physical experiences as art seemingly difficult, because to *analyse* suggests that we *speak* about that physical experience. In this sense, it is problematic to derive a conceptual framework for a physical methodology in any discursive sense that is not physical. The solution to this problem lies in a field that involves developing an intellectual schema for a physical methodology: EC.

EC scholars argue that 'embodiment seems to be at the root of seemingly disparate relationships between higher-order thoughts and basic bodily action' (Balcetis and Cole 2009: 762). EC theorists recognize cognitive and identificatory processes as inherently 'embodied' – in other words, our understanding of the world primarily stems from the body's physical perceptions, and these in turn shape ontological frameworks. Human beings' shared sensorial physicality gives rise to general shared (social) understandings where

> […] meaning emerges (mostly) automatically and without conscious awareness from the way we – as bodily creatures – engage with our surroundings. The fact of being embodied means that we are all subject to biological and physical events that move us, change our body states, and constrain thoughts and actions.
>
> (Johnson 2008: 46)

Therefore, our shared physicality gives a base knowledge that requires no intellectual/conceptual translation because we are already all embodied and understand physicality tacitly. We may not be able to *speak* about physicality in a linguistic sense, but we do understand it because we share the biological touchstone of the body.

While it cannot be questioned that physicality influences the sensory fields of our experience – visuospatial understanding, distance perception, perspective – EC theorists also explain that more complicated, higher mental and conceptual activities, including self-perception, memory, language comprehension and reasoning, are also informed and framed by our physical selves: 'the logic of our bodily experience provides all the logic we need to perform every rational inference we can make' (Johnson 2008: 47). Therefore, to make 'meaning' of complex theories we speak of them via our bodies: i.e., a *long* way to go to understand (a body's knowledge of time and space); a *rushed* idea (speed); *competitive* theories (physical interaction); a *weak* proposition (strength). Physicality is already part of our conceptual frameworks, and understanding physicality is embedded into cognitive processes.

CREATIVE ARTS, LEARNING ENVIRONMENTS AND PARTICIPANT AS LEARNER PERSPECTIVES

Outlined below is a framework used in the Workshop that provided a context for thinking differently about complex phenomena in health. In essence, the Workshop can be viewed as an example of a creative artistic process that supported participants to delve into complex healthcare contexts and address troublesome phenomena, in this case, increased fracture risk in osteoporosis. This approach resonates with Moustakas's heuristic quest to recreate 'lived experience; full and complete depictions of the experience from the frame of reference of the experiencing person' (1990: 39).

There has been much discussion of the *instrumentalization* of art, especially those collaborative methods in which artists work with other people in participatory manners such as in workshops or within other fields, such as social work or health. On the one hand, critiques from Belfiore (2002), Hewitt (2011) and Hope (2012) have provided substantial arguments against this approach as being – at best – poor substitutes for social work and/or appropriate education, or – at worst – neo-liberal and colonial strategies that use art to sustain inegalitarian hegemonies. On the other hand, Matarasso (2011) and Kester (2004) argue for the possibility of an ameliorative artistic agenda that might align with the notion that art can be useful to fields beyond the aesthetic. While it is beyond the scope of this text to reconcile these debates, it is important to recognize that rather than antithetical poles, there may be scope for some form of synthesis, or at least a continuum of the two positions.

The goal of the Workshop was to provide an opportunity for participants to reflexively decontextualize and reframe their ways of working with those who might have osteoporosis via an artistic methodology. This is important because, as Donald Schön suggests, professionals are not necessarily able to describe the basis on which they act (1987). Professionals often operate tacitly and instinctively, and so have few opportunities to unravel what they do, how they know and why. Schön therefore suggests that the aim of '[P]rofessional development is to make this "knowing-in-action" explicit so that it can be the subject of further reflection and conscious development' (Moon 2000: 3).

The Workshop process was supported by the seven principles of model-based learning as outlined by Pirnay-Dummer et al. (2012). In this, the concept of Mental Models and their relationship to problem solving is introduced: 'People construct mental models to match the behaviour of both predictable and unpredictable changes in the world in order to exercise better control and make changes more predictable to them' (Pirnay-Dummer et al. 2012: 68). In regards to learning, they suggest, 'the most interesting points of intervention are where the world does not meet parts of the learner's expectations' (2012: 68) and it is in these processes of 'cognitive conflict and puzzlement', 'de-contextualisation' and via a 'diversity of surfaces' where learning occurs. This process, Pirnay-Dummer et al. suggest, is an intersectional process where the learner interacts with their surrounding learning environment in ways which challenge pre-existing beliefs and their personal knowledge structures to stimulate change: 'The learner necessarily needs a real-world experience in order to learn […] with explicit opportunities to confront the old beliefs or to construct new aspects into them' (2012: 72).

To do this, the Workshop team focused on corporeal, embodied knowledge and, using a diversity of materials, developed ways to provide cognitive conflict and puzzlement and de-contextualization. Specifically, the artists' aim was to *make visible and embody* the potential of fracture: as such they designed tissue paper exoskeletons that would both visualize but also mimic the fragility of osteoporotic bones. 'By coming to their own conclusions, learners learn' (Pirnay-Dummer et al. 2012: 76); a similar process to Kolb's learning cycle in which the learner moves from *Abstract Conceptualisation* to *Active Experimentation* (1984).

The Workshop stages and variety of processes were designed to provide opportunities for participants already engaged in the care of those with

osteoporosis. Many of the participants had been actively involved in LOARP, and had engaged with the online module, 'Caring for my bones'. The Workshop aimed to uncover their practice knowledge and make this more tangible, confront their beliefs and/or construct new aspects into them. This was not a didactic process, but rather an artistic, facilitative, experiential one guided by the learners themselves. By enacting moving and handling processes in creative and new ways while wearing the tissue paper exoskeletons, participants were able to examine how they had worked in the past, and find new ways to challenge, refine and change their knowledge.

These artistic processes; informed by professionals with relevant healthcare knowledge and research expertise, provided the opportunity for learning, rather than merely being applied for illustrative potentials. If art is indeed the 'thing that challenges perceptual habits' then the Workshop aimed to develop that process in alignment with notions of 'cognitive conflict and puzzlement', de-contextualization and via a 'diversity of surfaces', thus being both artistic *and* educative. The Workshop, therefore, did not instrumentalize art solely for the service of another field, but rather offered a potential for productive trans-disciplinary working. Nor did it trivialize the very serious and complex disease of osteoporosis and the increased risk of fractures that can be life changing.

RECRUITMENT OF WORKSHOP PARTICIPANTS

A flyer was circulated to the LOARP stakeholders, which included healthcare staff, clinical managers, academics and members of the public (i.e., patient participants). This included an invitation to explore osteoporosis and fracture risk as an embodied phenomenon in a workshop facilitated by artists and the action research project team, and to discuss implications of osteoporosis and increased fracture risk for staff and people affected by osteoporosis. Participation was voluntary and they could withdraw at any stage. Before the Workshop commenced, participants provided their written informed

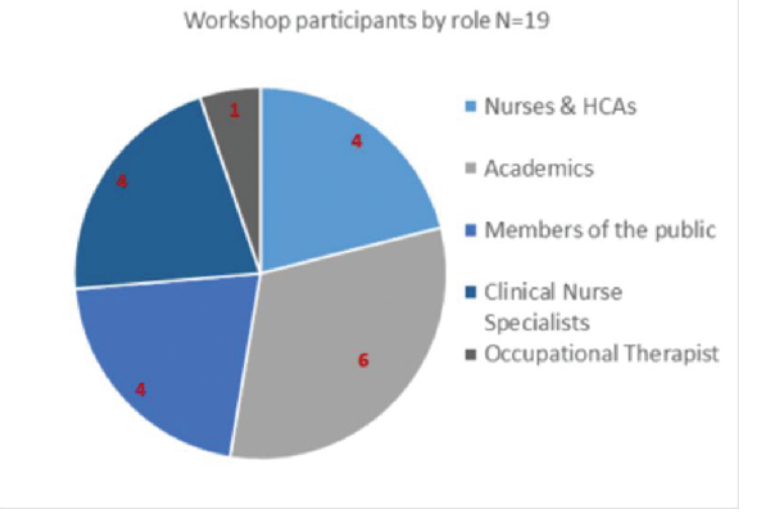


Figure 1: Workshop participants by role.

consent. Many also consented to use of photographic images generated in the Workshop as part of the wider dissemination of the original action research project.

The Workshop participants comprised six volunteers from the original action research project, and a further thirteen volunteers (experienced health and social care staff, university academics and members of the public) who responded to an invitation by e-mail with a flyer to advertise the workshop (Figure 1).

Planning and conducting the workshop

The Workshop was designed to build-up layers of experience that began in the 'mental' and moved to the 'physical' in five stages. The first stage (Figure 2) consisted of warm-ups and contextualization games focused on the 'traditional' expectations of artistic workshops such as drawings of human figures. The aim of these activities was to both set the participants at ease, and introduce the concept of 'the body and its movement' as a subject – and object – of the Workshop.

The next activity (Figure 3) focused on the notion of collaboration to prompt participants to consider their relationship with other bodies. To do this, Schrag and Finbow constructed collaborative drawing utensils that built on the previous drawing activity, but also added an element of collaboration (and still focused on the 'body', as the subject of the collaborative drawing was 'bones'). The aim of this second activity was to consider the patient/healthcare professional relationship as a collaborative one, rather than a service-driven one.

The third activity (Figures 4, 5 and 6) introduced the concepts of EC by asking the participants to apply tissue paper 'exoskeletons' to their hands and enact daily, small movements, such as writing a note, or answering the phone, etc. The aim was to do these movements without tearing the tissue paper. These simple, bright strips of tissue paper became an external visualization of the effects of osteoporosis and how un-considered movements could result in the tissue paper tearing – i.e.: a metaphorical fracture. As such, they were key in providing Pirnay-Dummer et al.'s intersectional process of cognitive conflict and puzzlement that would challenge pre-existing beliefs and knowledge structures and may lead to recognition of a need for 'knowledge change' (2012: 72).

The fourth stage (Figure 7) built on the previous activity; asking participants to incorporate the exoskeletons to the entire body, thus applying the thinking to the whole body, and inviting them to do larger movements, i.e., sitting in a chair, putting on a jacket. Again, the goal was to do the activity without tearing the exoskeletons. Thus, participants were to consider their movements and how they might be different if they had osteoporosis.

The fifth stage (Figure 8) invited participants to work with each other in imagined care contexts while one participant wore small and larger tissue paper exoskeletons, and to consider how their (professional) actions might need to change considering this new embodied knowledge, provided by the built up layers of experience from smaller simple actions to larger, more complex movements with patients. This encouraged the participants to consider their daily actions and how they might need to be different if living with osteoporosis themselves, or moving and/or handling a patient who might be at risk of osteoporotic fracture. As above, this reflects Pirnay-Dummer et al.'s work on the value of real-world experience in learning (2012).

Figure 2: Alice Finbow and Anthony Schrag, Creative Movement and Osteoporosis Workshop documentation (2017), Edinburgh. Digital image. Copyright Finbow and Schrag.

Figure 3: Alice Finbow and Anthony Schrag, Creative Movement and Osteoporosis Workshop documentation, (2017), Edinburgh. Digital image. Copyright Finbow and Schrag.

Figure 4: Alice Finbow and Anthony Schrag, Creative Movement and Osteoporosis Workshop documentation (2017), Edinburgh. Digital image. Copyright Finbow and Schrag.

Figure 5: Alice Finbow and Anthony Schrag, Creative Movement and Osteoporosis Workshop documentation (2017), Edinburgh. Digital image. Copyright Finbow and Schrag.

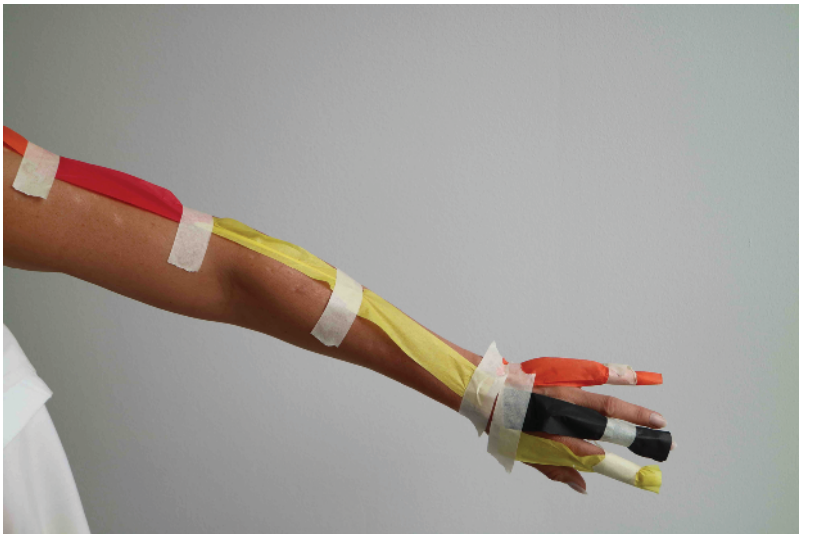


Figure 6: Alice Finbow and Anthony Schrag, Creative Movement and Osteoporosis Workshop documentation (2017), Edinburgh. Digital image. Copyright Finbow and Schrag.

Figure 7: Alice Finbow and Anthony Schrag, Creative Movement and Osteoporosis Workshop documentation (2017), Edinburgh. Digital image. Copyright Finbow and Schrag.

Figure 8: Alice Finbow and Anthony Schrag, Creative Movement and Osteoporosis Workshop documentation (2017), Edinburgh. Digital image. Copyright Finbow and Schrag.

CREATIVE OUTPUTS FROM THE WORKSHOP

Returning to the ethos of the action research methodology adopted in the main research project (Ackroyd and Karlsson 2014; Reason and Bradbury 2013), the Workshop outputs represent forms of creative learning and new knowledge drawing on aesthetics and EC. Below, we illustrate the co-production of this new knowledge with Workshop participants, and explore examples of the creative turn that an action research project committed to action learning might aspire to in the later stages (Reason and Bradbury 2013: 5).

The Workshop was punctuated by feedback and sharing sessions encouraging participants to reflect on their learning experiences and it ended with an exercise in which participants wrote down their 'Take Home' messages, which were later distilled into six themes. These themes were incorporated into a small 'calling card' (the front and reverse are shown in Figures 9 and 10) and has been widely distributed, thus continuing the action research process. A key metaphor emerging from participants' 'Take Home' messages was that mobilizing with osteoporosis resembled the intimacy of dancing with a partner: although moving together, sometimes you will lead and sometimes you will follow. It is a collaboration.

The Workshop was evaluated via a short questionnaire completed by fifteen of the nineteen participants. Key questions were: *what did I enjoy most about the Workshop?*; *what did I enjoy least?* and *what could be included in future creative movement and osteoporosis workshops?* All responses were collated by Kelly and checked by Coulter-Smith. Nine participants valued

Figure 9: Anthony Schrag, front of Take Home Messages 'Calling Card' (2017), Edinburgh. Digital image. Copyright Schrag and LOARP project.

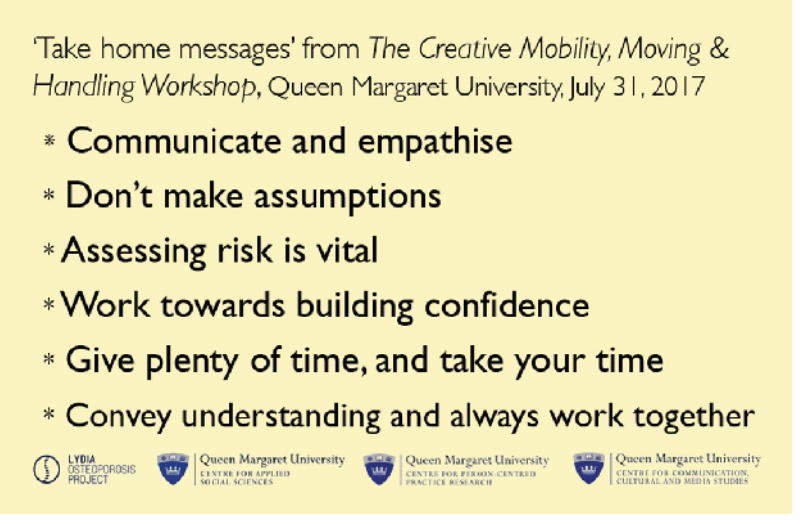


Figure 10: Anthony Schrag, back of Take Home Messages 'Calling Card' (2017), Edinburgh. Digital image. Copyright Schrag and LOARP project.

the opportunity to experience the small and larger challenges of moving simulated by the tissue paper exoskeletons and the implications of fracture risks while living with osteoporosis. For example: 'I most enjoyed the tissue paper and tape. So effective and memorable' and 'I enjoyed the tissue paper exercise, I found it helpful to "visualise" the patient's experience'.

Four participants valued the opportunity to learn more about osteoporosis and to share their experiences. In future events, participants would like to

explore useful strategies for working with someone with osteoporosis, more opportunities to 'experience' what it is like to live with osteoporosis and some feedback from more people living with osteoporosis.

The artists, Schrag and Finbow, produced images of themselves after the Workshop in an 'artistic response' and these were uploaded to their website showcasing their artistic projects. These images can be seen here: https://lopcreativeworkshop.wordpress.com/artistic-response.

DISCUSSION

The overall intention of the Workshop collaboration between healthcare researchers and artists was to work outside our respective fields and to pool our collective expertise in creative art and embodiment, healthcare research, professional education, osteoporosis and the care of older people. This helped to uncover experienced practitioners' tacit professional knowledge about how they promote mobility and deliver person-centred safe and effective moving and handling interventions for an older population with increased risk of fracture. The members of the collaborative team were committed to a cooperative leadership approach within the Workshop and similarly, they viewed the participants as their collaborative partners in the learning experience. Co-facilitation and co-production methods were used to enable the participants to 'discover' aspects of their practice knowledge in a safe and creative learning environment.

Whilst it is difficult to retrospectively account for imaginative leaps or their precise source, the Workshop planning process involved moving back and forth from the clinical to the artistic and vice versa, always with a cooperative exchanging and sharing of ideas across our respective domains. An example of this interchange is the suggestion about using 'exoskeletons' by Schrag and Finbow and shared in conversation with Coulter Smith, 'What do you think about this idea (referring to "exoskeletons")?', and 'Could this work, might this signify the fragility of bones in osteoporosis?'

The evaluation feedback, which included positive responses to small movement and larger movement activities using tissue paper exoskeletons, illustrates the utility of taking a sequential approach to the Workshop to engage participants' EC and to facilitate and make explicit Schön's *knowing-in-action* (1987) in the context of reflection. Thus, the Workshop used the artistic to not only *explore and further disseminate* the LOARP project's findings in creative ways, but also to *unravel and highlight* practitioners' knowing-in-action to support practice development when working with older people at risk of fracture. It is important to recognize that the Workshop participants were mainly experienced healthcare professionals, many had engaged with the online education module 'Caring for my bones' as participants in LOARP, and all were actively involved in the care of older people with osteoporosis in their daily practice. They were all self-selecting volunteers and, due to their exposure to the larger LOARP research project, they were able to access and articulate their deeper practice knowledge while engaging in the workshop activities. This is evidenced by the themes in the 'Take Home Messages' 'Calling Card' (Figures 9 and 10), and the insightful comments received in the Workshop evaluation questionnaire.

Creative learning methods offer scope for groups of learners to explore complex concepts in professional practice. In this Workshop, we used

aesthetic and experiential learning methodologies to assist participants to explore issues surrounding osteoporosis and increased risk of fracture. The Workshop was designed to stimulate 'cognitive conflict and puzzlement' (Pirnay-Dummer et al. 2012) and it achieved this by creating a 'safe environment' through multiple surfaces and by building from smaller fine movements of upper limbs through to larger whole body movements in a physical space. This echoes Moustakas's comment that 'all heuristic inquiry begins with the internal search to discover with an encompassing puzzlement, a passionate desire to know, a devotion and commitment to pursue a question that is strongly connected to one's own identity and selfhood' (1990: 40).

In addition, by de-contextualizing the activities, participants were invited to think afresh about osteoporosis, increased risk of fracture and the implications for practice. This is vitally important, as osteoporosis tends to be under-recognized by practitioners due to its largely hidden and silent presentation until fractures occur, and experienced healthcare professionals may not always externalize the reasons for particular actions. Creative learning methods offered a potent way (through EC) to capture attention and engage experienced healthcare professionals in uncovering and articulating deeper knowledge structures and rationales for their practice. They also offered a way for less experienced participants to learn through the various senses (EC); thus potentially maximizing their learning experience. Towards the end of the Workshop, the activity focused on formulation of participants' 'Take Home Messages' as reported earlier in this article and these demonstrated that learning had indeed taken place. Clearly this process was limited by the short time available, but the day closed with all expressing their enthusiasm for their learning experience and that they had achieved a deeper insight into this aspect of their real-world practice.

We see this creative and learning experience having useful application in other fields, such as working with people with dementia or other frailty/arthritic/rheumatoid conditions, as these people face many similar challenges that such a collaboration with artists might be able to explore. Similarly, we recognize that while the Workshop was a creative act in its own right, it was also useful to consider it an extension of clinical study, as the Workshop allowed much more experiential learning and collaborative co-creation of knowledge with other practitioners. The benefits of such an approach have been highlighted in this article.

Since hosting the Workshop two further creative movement and osteoporosis workshops have been delivered to nine participants in a subsequent LOARP in community health and social care settings in July 2019. These received very positive evaluations from all participants. In May 2019, the Workshop was included in a Lydia Osteoporosis Project research poster at an annual publicity event of the Cross Party Group for Arthritis and Musculoskeletal Conditions at the Scottish Parliament at Holyrood (The Elephant in the Room Event) attended by Members of the Scottish Parliament and Members of the European Parliament, medical and other healthcare professions, charitable organizations and members of the public. Visitors to the poster commented on the visual impact of the Workshop images selected to convey the embodied experience of increased fracture risk in osteoporosis.

CONCLUSIONS

This Workshop was a collaboration between academics, researchers, practitioners and those affected by osteoporosis and successfully applied creative and experiential methods to stimulate EC, reflection and the uncovering of practitioners' tacit knowledge when working with people with osteoporosis. We have shown how the process of working collaboratively generated new ways of understanding that have been disseminated to practitioners and wider audiences beyond the Workshop. It is important to take into consideration the specific nature of the artists' practices and the background contexts that resulted in this particular confluence of ideas, support structures and situations: these – much like anyone's practice or like a shared dance – are unique, and cannot be exactly modelled or repeated by anyone else. As such, we do not suggest this experience can be wholly replicated, but rather suggest the open, respectful collaborative approach of the artists, healthcare practitioners and participants has resulted in a process that could be invaluably applied in supporting practitioners to develop necessary skills in other fields.

ACKNOWLEDGEMENTS

Grateful thanks to the members of the public, NHS and Social Care staff, academics and QMU support staff who willingly gave their time and enthusiasm to this project, and the service managers who supported their staff's participation in the Lydia Osteoporosis Action Research Project. Particular thanks to: QMU Centre for Applied Social Sciences for the Research & Knowledge Exchange funding for a creative movement workshop proposal; The Lydia Osteoporosis Project anonymous benefactors; and the QMU Centre for Person-Centred Practice and to Alison Bacigalupo, project administrator.

REFERENCES

Ackroyd, S. and Karlsson, J. C. (2014), 'Critical realism, research techniques, and research designs', chapter 2, in P. K. Edwards, J. O'Mahoney and S. Vincent (eds), *Studying Organizations Using Critical Realism: A Practical Guide*, Oxford: Oxford University Press, pp. 21–45.

Balcetis, E. and Cole, S. (2009), 'Body in mind: The role of embodied cognition in self-regulation', *Social and Personality Psychology Compass*, 3:5, pp. 759–74.

Belfiore, E. (2002), 'Art as a means of alleviating social exclusion: Does it really work? A critique of instrumental cultural policies and social impact studies in the UK', *International Journal of Cultural Policy*, 8:1, pp. 91–106.

Bungay, H., Munn-Giddings, C., Boyce, M. and Wilson, C. (2014), *The Value of the Arts in Therapeutic and Clinical Interventions*, East Anglia: Anglia Ruskin University.

Coulter Smith, M., Pearson, C. and McCormack, B. (2016a), 'Research proposal: An action research and evaluation study focusing on moving and handling practice in the acute care of older people with osteoporosis. Short title: Lydia Osteoporosis Project (LOP 2)', presented to QMU Senior Management Team and the LOP 2 Funders, QMU, Edinburgh, 20 April QMU internal publication.

Coulter Smith, M., Pearson, C., O'May, F., Tropea, S., Irvine, L., Rush, R. and Wilson, R. (2016b), *Final Project Report for the Lydia Osteoporosis Project (LOP 1)*, QMU, Edinburgh, https://eresearch.qmu.ac.uk/bitstream/handle/20.500.12289/4419/4419.pdf?sequence=1&isAllowed=y. Accessed 1 December 2019.

Coulter Smith, M A., O' May, F., Tropea, S, Berg, J. (2016c), 'Framing moving and handling as a complex intervention in the acute care of older adults with osteoporosis: A qualitative study', *Journal of Clinical Nursing,* 25:19–20, pp. 2906–2920, Wiley Open Access, https://onlinelibrary.wiley.com/doi/full/10.1111/jocn.13344. Accessed 1 December 2019.

Hewitt, A. (2011), 'Privatising the public: Three rhetorics of art's public good in "Third Way" cultural policy', *Art & the Public Sphere*, 1:1, pp. 19–36.

Hope, S. (2012), 'Participating in the "Wrong" way? Practice based research into cultural democracy and the commissioning of art to effect social change', Ph.D. thesis, London: University of London.

Jackson, M. (1983), 'Knowledge of the Body', *Man New Series*, 18:2, pp. 327–45.

Johnson, M. (2008), 'Body meanings', *New Scientist*, 2367, pp. 46–47.

Jonassen, D. and Land, S. (eds) (2012), *Theoretical Foundations of Learning Environments*, London: Routledge.

Kester, G. (2004), *Conversation Pieces: Community and Communication in Modern Art*, Berkeley and Los Angeles: University of California Press.

Kolb, D. (1984), *Experiential Learning: Experience as the Source of Learning and Development*, London: Prentice-Hall.

Macnaughton, J. (2007), 'Art in hospital spaces', *International Journal of Cultural Policy*, 13:1, pp. 85–101.

Magor, L. (2002), 'Seminar 12: Art In the Public Realm', lecture discussion, Sculpture 4010, at Emily Carr Institute of Art and Design, Vancouver, delivered 12 March 2002.

Matarasso, F. (2011), '"All in this together": The depoliticisation of community art in Britain, 1970-2011', in E. van Erven (ed.), *Community, Art, Power: Essays from International Community Arts Festival (ICAF),* Rotterdam: ICAF, pp. 214–40.

McCormack, B. (2015), 'Action research in complex interventions' in D. A. Richards and I. Rahm Hallberg (eds), *Complex Interventions in Health: An Overview of Research Methods*, London: Routledge, pp. 300–11.

Moon, J. (2000), *Reflection in Learning and Professional Development: Theory and Practice*, London: Routledge.

Moustakas, C. (1990), *Heuristic Research: Design, Methodology, and Applications,* London: Sage.

Parker, R., Labrecque, C., Candler, S., Newell-Amato, D., Messler, J., Wolf, M., Caughman, S. and Raggi-Moore, J. (2013), 'Communicating through the arts: Lessons for medicine and public health', *Journal of Health Communication*, 18:2, pp. 139–45.

Pirnay-Dummer, P., Ifenthaler, D. and Seel, N. M. (2012), 'Designing model-based learning environments to support mental models for learning', in D. Jonassen and S. Land (eds), *Theoretical Foundations of Learning Environments*, London: Routledge, pp. 66–94.

Polanyi, M. (1966), *The Tacit Dimension*, London: The University of Chicago Press.

Reason, P. and Bradbury, H. (2013), *The Sage Handbook of Action Research: Participative Inquiry and Practice*, 2nd ed., London: Sage.

Rooke, A. (2014), *Arts and Mental Health: Creative Collisions and Critical Conversations,* 17790, Arts and Humanities Research Council, https://ahrc.ukri.org/documents/projects-programmes-and-initiatives/arts-and-mental-health-creative-collisions-and-critical-conversations/. Accessed 10 January 2020.

Royal Osteoporosis Society (ROS) (2020), 'Burden of broken bones caused by osteoporosis costing the NHS unnecessary billions, new report warns', 19 October 2018, https://theros.org.uk/what-we-do/latest-news/2018/october/19/burden-of-broken-bones-caused-by-osteoporosis-costing-the-nhs-unnecessary-billions-new-report-warns/. Accessed 1 December 2019.

Schön, D. A. (1987), *Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions*, San Francisco: Jossey-Bass.

Scottish Intercollegiate Guidelines Network (SIGN) (2015), *Management of Osteoporosis and the Prevention of Fragility Fractures*, SIGN Guideline 142, Edinburgh: SIGN.

Watts, L. S. and Blessinger, P. (2017), *Creative Learning in Higher Education*, International Perspectives and Approaches, London: Routledge.

Wilson, C., Bungay, H., Munn-Giddings, C. and Boyce, M. (2016), 'Healthcare professionals' perceptions of the value and impact of the arts in healthcare settings: A critical review of the literature', *International Journal of Nursing Studies*, 56, pp. 90–101.

SUGGESTED CITATION

Smith, Margaret A. Coulter, Schrag, Anthony, Kelly, Fiona and Pearson, Claire (2019), '"Like a Dance": Working creatively with healthcare practitioners to explore mobility and osteoporosis', *Journal of Applied Arts & Health,* 10:3, pp. 295–313, doi: https://doi.org/10.1386/jaah_00003_1

CONTRIBUTOR DETAILS

Dr Margaret A. Coulter Smith is a principal investigator with the Lydia Osteoporosis Project and a senior lecturer in the Division of Nursing, School of Health Sciences, Queen Margaret University. Her current research interests include bone health, osteoporosis, fracture risk and older persons' moving and handling needs, clinical judgement/patient assessment, the focus of her 2004 Ph.D. thesis at the University of Surrey, complex interventions and evaluation. She undertakes qualitative, mixed methods and survey style research and has doctoral completions. She has published in academic journals since 1987. She currently supervises doctoral students in public health and nursing related topics including obesity in pregnancy, smoking in adolescents, out of hospital cardiac arrest and health ombudsman role. As principal investigator for the 'Lydia Osteoporosis Project' at QMU she has led three research projects focusing on osteoporosis. The team works in collaboration with specialists in the NHS and the Osteoporosis research community (www.lydiaosteoporosis.com).

Contact: Queen Margaret University, Queen Margaret Drive, Musselburgh, Scotland, EH21 6UU, UK.
E-mail: msmith1@qmu.ac.uk

https://orcid.org/0000-0003-2944-5348

Dr Anthony Schrag is a lecturer in creative industries and cultural management, School of Arts, Social Sciences and Management, Queen Margaret University. His practice-based Ph.D. – completed in 2016 – explored the relationship between artists, institutions and the public, looking specifically at a productive nature of conflict within institutionally supported participatory/public art projects. Schrag's general research overview includes cultural policy, institutionally supported art projects, and examining how 'art' and 'culture' is supported in wider institutional frameworks. He is interested in exploring the relationship between artists, institutions and the public, looking specifically at the productive nature of 'conflict'. Other research interests include the history of participatory practices (socially engaged art/community art/dialogic practices, etc) in addition to how this type of practice is 'professionalized'. This includes other interdisciplinary/trans-disciplinary experiences of art in 'non-art' contexts, in the lineage and legacy of the Artist's Placement Group.

Contact: Queen Margaret University, Queen Margaret Drive, Musselburgh, Scotland, EH21 6UU, UK.
E-mail: aschrag@qmu.ac.uk

https://orcid.org/0000-0001-8660-7572

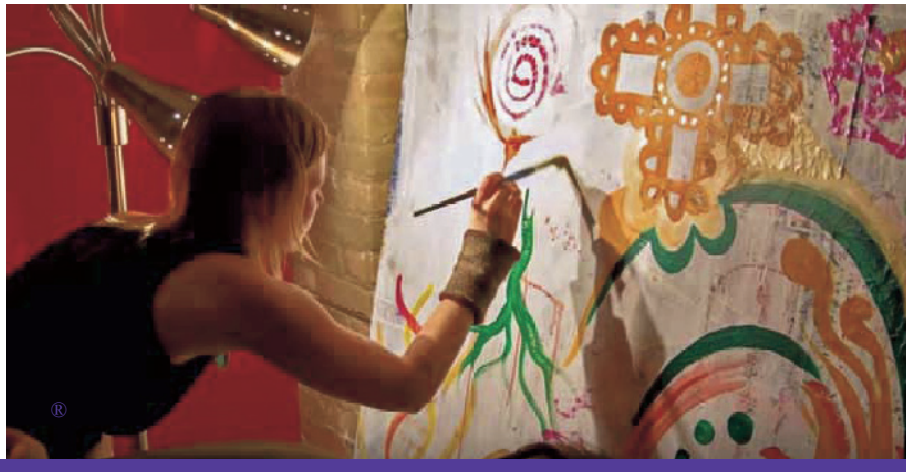
Dr Fiona Kelly is a lecturer, Division of Nursing, School of Health Sciences, Queen Margaret University. She is an experienced academic in the dementia field; having lectured in dementia studies at undergraduate and postgraduate level and been involved in numerous psycho-social research projects since graduating with her Ph.D. in 2007. Her philosophical and research interests include human rights, selfhood in dementia, end of life care, dementia friendly design, assistive technology, service evaluation, exploring cultures of care and hearing the views and opinions of people with dementia and those who support them. Research skills include ethnography, interviews and focus groups with people with dementia, families and care staff, observational tools (Dementia Care Mapping, Piece-dem), design audit tools (Stirling Design Audit Tool, Environmental Audit Tool), video-recording with people with dementia, qualitative data analysis and writing. She has presented her work nationally and internationally and published widely.

Contact: Queen Margaret University, Queen Margaret Drive, Musselburgh, Scotland, EH21 6UU, UK.
E-mail: fkelly1@qmu.ac.uk

Claire Pearson is the research assistant for the Lydia Osteoporosis Project. Prior to her current post she was a senior clinical research nurse in the NHS with responsibility for coordinating commercial and non-commercial academic research and RCTs in the Cardiovascular Research Unit, University of Edinburgh. She is an author on research publications in leading cardiology journals and in publications relating to the Lydia Osteoporosis Project. She completed an MSc epidemiology in 2001, University of Edinburgh, and graduated with joint honours (BSc Econ) in psychology and social anthropology, University of Swansea, in 1989.

Contact: Queen Margaret University, Queen Margaret Drive, Musselburgh, Scotland, EH21 6UU, UK.

E-mail: cpearson@qmu.ac.uk



International Expressive Arts Therapy Association

MISSION

The International Expressive Arts Therapy Association is a non-profit membership organization that recognizes, educates, and inspires artists, therapists, educators, and consultants who use and explore multiple forms of artistic expression—the expressive arts—to foster personal and community transformation.

www.ieata.org

Conferences & Regional Events

ieata.org/conference.html

PROFESSIONAL REGISTRATION

One of IEATA's key missions is to promote professional excellence and standards of practice for practitioners and consumers. To that end, we established the titles of Registered Expressive Arts Therapist (REAT) and Registered Expressive Arts Consultant/Educator (REACE®), and developed screening and registration processes to certify qualified members. All REATs and REACEs agree to abide by a code of ethics, an expression of values and goals that help us define our behavior as a professional community.

Contact

IEATA®

P.O. Box 40707

San Francisco, CA 94140-0707

info@ieata.org