Chapter 22. ProVACAT. Practising or viewing art cognitive ability trial.A collaboration between the Ben Uri Gallery and Museum and Hammerson House Care Home (2015/16)

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Figure 1. Participants enjoying a visit to 'Out of chaos: Ben Uri, 100 Years in London', 2015.

Abstract

Art Engagement to Slow Cognitive Impairment and Improve Wellbeing

As the UK National Health Service strives to support an ageing population with increased life expectancy we see a rise in social prescribing. Our ambition is to conduct a randomised, long-term intervention assessing the potential for arts engagement to slow expected cognitive decline and improve wellbeing.

We identified a residential care home with the appropriate facilities and support for a feasibility study. Our intervention sees Group A receive practical art sessions exploring new materials and techniques. Group B receive seminars responding to replica artworks with open discussion. Participant wellbeing was measured immediately following each session using the UCL Museum Wellbeing Measures Toolkit.

Over twelve weeks, two groups of four participants, each with an average age of 93 attended one hour creative sessions and seminars respectively. The results demonstrate a positive variability of outcomes with different wellbeing responses between the two groups at this early stage. They mark the potential for more ambitious projects, addressing a larger group of participants with greater measurement of cognitive function under a randomised controlled trial. The project seeks to achieve a generalisablity applicable to varying demographics.

Keywords: art engagement, wellbeing, cognitive impairment, creative practice.

Theoretical background

The UK has an ever-increasing ageing population as healthcare improves and life expectancy grows. Between 2002 and 2012 the number of centenarians living in the UK rose by 73% to 13,350 (Age UK, 2017). As the NHS strives to react to this vast social responsibility and to support it, we see an increase in social prescribing. This links primary care patients with sources of support within the community providing GPs with a non-medical referral option that can operate alongside existing treatments to improve health and wellbeing. It should not be seen as an alternative but an addition.

Cognitive impairment is an expected and natural element of ageing. It is noticeable and measurable primarily affecting memory, coordination,

judgment and comprehension of previously ordinary tasks. In correlation to this, the World Health Organization constitution states that 'good health is a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity' (WHO, 2014) It follows that cognitive ability is linked to an individual's sense of wellbeing defined by Mind UK as central to confidence, relationships with others, expressing emotions, managing stress and connecting to the world around you (Mind, 2016).

Whilst there is significant interest in the capacity for arts engagement to both improve wellbeing and positively affect specific medical conditions, such as Dementia and Parkinson's disease, clinical research is lacking. This is particularly true for the visual arts over the broader 'arts' including music, singing, theatre and dance. This study seeks to overcome these barriers.

Method / Description of the experience

Hammerson House Care Home was identified as an appropriate partner with the appropriate facilities to conduct a feasibility study. Ben Uri's Learning and Wellbeing Officer designed a programme of twelve weekly practical sessions and twelve weekly seminars, which were delivered on site at Hammerson House in their activity space. Group A received practical art sessions exploring new materials and techniques. Group B received seminars responding to replica artworks with open discussion. Participant wellbeing was measured immediately following each session using the UCL Museum Wellbeing Measures Toolkit (Thomson & Chatterjee, 2013).

This report addresses Phase I, the feasibility study, simply designed to pilot the project and completed 2015/16. Phase II will consider changes outlined in this report and introduce a baseline measurement with which to collect useful data, working closely with a university partner. Phase III will see the project rolled out on a bigger scale to reflect varying demographics and enable us to consider wider social implications.

Planned intervention:

Group A - Practical art making workshops:

Ben Uri worked with a trained, experienced arts facilitator to deliver sessions of around one hour and fifteen minutes beginning with refreshments and ending with an informal plenary to review everyone's work. A variety of materials and techniques were explored over the twelve week period including drawing materials, clay, printing, paint, mixed media, iPad art and textiles. The sessions are challenging yet adaptable for different abilities also considering common issues with dexterity, fine motor skills, vision and hearing. For this reason high quality, varied, individual outcomes and creative exploration are actively encouraged over a defined final product.

Group B - Art seminar with discussion:

The second session type, received by a separate group of participants is a seminar and discussion featuring replica Ben Uri artworks. Again this session lasted around an hour and fifteen minutes with a break for tea and cake. The chosen artworks span the collection from the Gallery's inception in 1915 to one of the most recent acquisitions, covering key aspects of history as well as different mediums and themes. We use facsimiles of collection works printed to replica size as high quality giclée prints, framed as closely to the current frame as possible and displayed on easels. Participation and accepted sharing of opinions is actively encouraged.



Figure 2: Left – Group A participant enjoying iPad art. Right – Group B engaged in a discussion of Dora Holzhandler's *Mother and Child in Holland Park*, 1997, Ben Uri Collection.

Criteria:

The criteria of the Phase I feasibility study was to work with willing residents of Hammerson House over the age of 75. Participants were allocated randomly or by their care staff. Where the individual was unable to self elect, staff prioritised those they felt would benefit and perhaps flourish in a smaller group over those residents who readily attend existing activities.

As we progress to Phase II we will work specifically with those living with dementia in residential care settings in order to limit our variables. Once allocated participants will not interchange between Group A and Group B.

This is a complex intervention with many confounding variables. It cannot be ignored that the introduction of new people to the home and the socialness of the sessions might have a therapeutic impact so we have designed the trial to consider only one variable. We accept as a starting point that the experience of art is of value so the only change for the

"control" group will be the replacement of the creative, practical workshop with а session of identical duration to view and discuss works of art from the Ben Uri collection. This assesses two key forms of traditional outreach arts engagement; practical art making in creative workshops and talks.

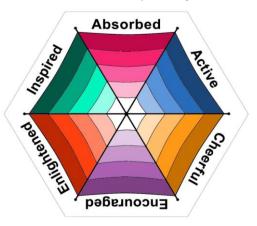


Figure 3: Positive Wellbeing Umbrella

Intended Outcomes and Evaluation Methodology:

Evaluations were conducted throughout the study immediately following each session. These were taken from the UCL Museum Wellbeing Measures Toolkit (Thomson & Chatterjee, 2013) specifically the 'Positive Wellbeing Umbrella' and 'Generic Wellbeing Questionnaire'. The questionnaire acts as a baseline indicator given that it is straightforward and familiar in comparison to the umbrella format. Full details of the UCL Wellbeing toolkit can be found at the following address: www.ucl.ac.uk/museums/research/touch/museumwellbeingmeasures/we llbeing-measures

During the feasibility study at Hammerson House it became clear that the wellbeing umbrella would benefit from clearer colour differentiation rather than a colour wheel transitioning effect. Also, the presence of numbers, colours and a small to large selection area provided too many indicators and caused confusion. Ben Uri consequently made these alterations to achieve *figure 3*.

The primary outcome measure is the change in cognitive function over a period of 12 months. In addition to wellbeing tests conducted following each session, tests will be administered at the start, three months later (at the end of the intervention period), at 6 months and one year comparing Group A (art making) with Group B (seminar).

Secondary outcome measures will include quality of life and health economics. Our academic partners will control the provision and analysis of these outcomes independently.

Phase III studies rely on the continued feasibility of the study. If positive the study will roll out in suitable venues across a broad cross section of society in order to achieve a useful generalisability with which to progress.

Results

Over a total of twenty four sessions, two groups averaging four participants with an average age of 93 attended weekly practical art making sessions and weekly art discussion seminars respectively. As originally stated, intervention with Hammerson House represents the feasibility phase of the project and so it is too early to expect to extract useful quantitative data. Whilst we are able to make some early observations from the collated data, the sample size is too small to draw any numerical conclusions. Table 1 provides a summary of the total data collected across all twenty-four sessions in turn demonstrating a positive variability of outcomes and the potential to gather comparable data on a wider scale.

Group	Total * present	Avg age	Age Range	UmbrellaS core ** Mean	UmbrellaS core ** Range	Quest. Score** Mean	Quest. Score** Range
A(Art making)	24	93	87 - 98	16.75	8 - 29	18.92	13 - 28
B (Seminar)	29	93	87 - 98	17.1	14 - 29	22.86	12 - 30

Table 1. Summary of the total data collected across the sessions

*Total over 12 weeks // ** Score out of 30 marks

From Table 1 we can tell that attendance was better amongst Group B and that they reported a higher mean umbrella score and questionnaire score. This reflects a greater interest in the seminars at Hammerson House, comprised of several external factors: an awareness of the Ben Uri Gallery, the existence of another regular art group and most interestingly, a real interest in learning and the 'intellectual' nature of the activity. This fundamentally challenges the misconception that older people and in particular those living with dementia don't want to or are unable to learn new things. The highest umbrella scores for the seminars were feeling 'absorbed' and 'encouraged'. By contrast for Group A it was feeling 'cheerful' and 'encouraged'.

It is also interesting to note that on several occasions participants from Group B reported that they did *not* feel cheerful following their seminar, which could often be attributed to the subject matter of the painting discussed. This is evidence of the significant importance of qualitative assessments at this stage. Made following each session they consider the overall success of the session plus observations and quotes concerning individuals. In this sense it is possible to more accurately monitor a perceived improvement in wellbeing whilst also gaining useful feedback on content and structure. For Phase II a journaling system will be undertaken and we hope to have the support of an academic research assistant present at every session.

Up to this point we have been solely measuring wellbeing, using the adapted UCL toolkit (*Figure 3*) whilst any indications of a perceived positive effect on cognitive function are supported only by anecdotal evidence. As we look to Phase II and our academic partnerships, we are now in a position to assess cognitive ability.

Three key changes following Phase I (the feasibility study):

- The seminar artworks will not be addressed in chronological order following feedback that the theme of forced escape due to Nazi persecution of the Jews was troubling when addressed week by week. Instead key themes will be addressed.

- Given that the sessions happen on the same day at different times, it can be difficult to make that differentiation clear with participants. This resulted in some residents feeling they hadn't been invited to take part and others staying for both sessions. When collecting valid data it will be important for both groups to remain distinct therefore we will address this vital secondary communication with the partner.

- The evaluation collection process can be lengthy even to a point of inadvertently evoking a negative response. It also does not account for participants leaving before the end despite taking part. For this reason we changed from the 12 question to 6 question generic wellbeing questionnaire (Thomson & Chatterjee, 2013) and will administer questionnaires one to one during the session, rather than on its conclusion. We would also follow up with anyone who leaves early for consistency.

Discussion

The study originally proposed all sessions would take place at Ben Uri Gallery for those living with dementia to attend with their Carer. It then became clear the Gallery space is not suitable for this audience and the project would need to be delivered as outreach. It was also felt that by electing to work solely with those living with dementia at Hammerson House, we would not be reflecting the needs of our partner.

This decision is applicable solely to this stage of the project, enabling us to deliver to a wide range of needs. It is worth noting that an individual with dementia may well have other conditions or diseases whether lifelong or developed over time therefore it is helpful to have tested the programme in this context.

In the longer term ProVACAT seeks to achieve a generalisability applicable to varying demographics. Next, we hope to work with a new partner to collect data for formal evaluation with an academic partner enabling us to assess the comparative impact of art making and art viewing. We will then use this evidence if positive to demonstrate that art has the potential to improve health and wellbeing and to open up avenues for further collaboration with a variety of likeminded organisations.

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