Effects of creative museum outreach sessions on measures of confidence, sociability and wellbeing for mental health and addiction recovery service-users

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Abstract

Background: The study examined the effects of museum outreach sessions on confidence, sociability and wellbeing measures for mental health (n=85) and addiction recovery (n=59) service-users taking an asset-based approach and research design. *Method:* Both groups participated in weekly outreach sessions combining object handling and museum visits with arts and craft activities. Using mixed methods, measures of confidence, sociability and wellbeing were evaluated quantitatively through a 'ladder of change' model of steps towards independence and feedback was analysed qualitatively. *Results:* Comparison of scores from first, mid and last sessions showed increases across all measures. Qualitative analysis revealed additional gains including pride, learning and skills, and creativity. Findings were interpreted in terms of social capital, independence and resilience. *Conclusions:* Creative museum activities showed increases in participant levels of confidence, sociability and wellbeing. The study highlighted the potential of asset-based approaches augmenting research on the value of museum activities to health and wellbeing.

Introduction

In recent years there has been a burgeoning in activity as United Kingdom (UK) museums and galleries have developed new services and programmes targeting audience health and wellbeing (for review see Chatterjee and Noble, 2013). The contribution of museums (including galleries) to wellbeing is now largely recognised by the museum sector and includes the UK Museums Association (2014) vision for improving the social impact of museums. A growing field of research has developed to understand and measure the benefits of museum activities for individual and societal health and wellbeing (e.g. Camic, Tischler, & Pearman 2014; Eeckelaar, Camic, & Springham 2012; Lanceley et al., 2012; Paddon, Thomson, Menon, Lanceley, & Chatterjee, 2014; Thomson, Ander, Menon, Lanceley, & Chatterjee, 2012a; Thomson, Ander, Lanceley, Menon & Chatterjee, 2012b).

Notable themes emerging in reviews of research (e.g. Chatterjee & Noble, 2013: 49) show that museums and their collections:

- provide a positive social experience, reducing social isolation;
- provide opportunities for learning and acquiring new skills;
- are calming and reduce anxiety;
- elicit an emotional response that encourages positive feelings such as optimism, hope and enjoyment;
- promote self-esteem and a sense of identity and community; and
- provide new experience which may be novel, inspiration and meaningful.

Findings draw upon a longer tradition of arts in health research which includes evidence showing how active participation in activities like music-making, creative writing and visual arts can have a measurable impact on physical and mental wellbeing (for reviews see Royal Society for Public Health, 2013; Staricoff, 2004; Stuckey & Nobel, 2010). Paddon et al. (2014: 25) proposed that 'heritage-in-health interventions are similarly broad ranging as art-in-health interventions but involve a heritage element such as museum objects and artworks, historic buildings and heritage sites'. Practice-based studies of heritage-in-health interventions have shown how object handling sessions with hospital patients led to improvements in quality-of-life measures (Chatterjee, Vreeland & Noble, 2009) and psychological wellbeing and happiness (Thomson et al., 2012a; 2012b). The museum work on touch has been extended to develop a generic methodological evaluation tool to enable museums to capture the impact of their activities on participant wellbeing (Thomson and Chatterjee, 2014).

Several studies (e.g. MLA Renaissance North West, 2011; Roberts, Camic & Springham, 2011; Wood, 2007) have demonstrated an impact on mental health and wellbeing, including increased confidence and self-esteem, by providing new experiences. For example, adult

mental health service users in Manchester Museum's 'Health Rocks' used geological specimens as inspiration for creating hand-made books; and the Whitworth Art Gallery working with Manchester Hospitals Schools Service set up 'Creativity and the Curriculum' using the gallery's handling resources as the basis for creative activities with vulnerable young people. (MLA Renaissance North West, 2011). Gallery studies have demonstrated the therapeutic role of viewing art in supporting family carers of people with chronic mental ill-health (Roberts et al., 2011) and community-interventions for people with dementia (Eekelaar, Camic, & Springham, 2012; Rosenberg, 2009).

The current research aimed to contribute to this emerging field in a mixed methods UK study conducted at Tyne and Wear Archives and Museums (TWAM). The study focused on the effects of museum outreach sessions with two participant groups: mental health (MH) and addiction recovery (AR) service-users. The programme also collected data from other groups such as older adults and probation service-users. It was decided, however, to focus on MH and AR participants because of greater numbers in these groups and other intergroup similarities including the notion of recovery being applicable to both and the fact that withdrawal symptoms experienced in addiction recovery often involve mental health issues, such as anxiety and depression, common in mental health service-users.

The intervention involved weekly outreach sessions using heritage activities such as object handling and museum visits as inspiration for creative responses through a variety of media. The research used an 'asset-based approach' (Foot & Hopkins, 2010; Foot, 2012) focused on participant strength and potential, nurtured and enhanced through museum activities. In line with asset-based models, measures of confidence, sociability and wellbeing were chosen to assess intervention effects.

Literature review

The ways in which individuals relate to social networks and communities have important effects on people's health and wellbeing, and social isolation and loneliness can have a

negative impact on physical and mental health (Holt-Lunstad, Smith and Layton, 2010). The asset-based model focuses on connecting communities and people as a way to bolster community and individual health and wellbeing. Asset-based approaches draw upon traditions of community development and health activism (Kretzmann & McKnight, 1993; Mathie & Cunningham, 2003); positive psychology (e.g. Seligman & Csikszentmihalyi, 2000) which emphasises recognition of personal strengths in wellbeing; and 'salutogenesis' (Antonovsky, 1987). Models of salutogenesis are concerned with the relationship between health, stress, and coping, and reject the traditional medical-model dichotomy that separates health and illness.

Drawing on these theoretical bases, asset-based approaches focus on areas for individual and community development including social relationships and networks, known as 'social capital', and the confidence and ability to take control (Foot & Hopkins, 2010; Marmot et al., 2010). In contrast to a 'deficit model ' focusing on community needs and providing services to ameliorate deficiencies, the asset-based approach identifies and values community assets including material, cultural and social assets (e.g. individuals, associations and organisations). Foot and Hopkins proposed assessing and building on community strengths and resources to develop better ways of delivering public health outcomes through non-clinical sources of community support. As Chatterjee and Noble (2013: 111) highlighted 'this is pertinent because the [asset-based] approach puts culture, amongst other assets, at the heart of tackling health and well-being challenges, and offers a way to value the contribution culture makes to improvements in health and well-being'. Asset-based working is an emerging field of practice which is still cultivating methodological approaches and an evidence base. The key challenges of the approach are to develop distinct measures for each asset and establish causal relationships between assets and health.

There are strong parallels between the asset-based model and the 'recovery model' for mental health and addiction recovery (Boardman & Friedli, 2012; Duffy, 2010). Recovery-oriented practice in mental health and addiction services share many common elements such as a person-centred and long-term approach, and like the asset-based model, they

focus on strengthening individual factors (e.g. confidence, wellbeing, motivation) and community support networks (Cloud & Granfield, 1999; Best & Laudet, 2011). In both models, recovery is an individual process with the goal being an ongoing quest for a better life, which is often expressed through ideas of independence and resilience.

There are distinctions between the specific elements of the two recovery models: the mental health recovery model emphasises achieving improved quality of life within the limitations caused by the presence of illness (Anthony, 1993; Slade, 2010), and addiction recovery is based on significant reduction (or, in some interpretations, total abstinence from) substance use (Best, 2012). The current research focused on a non-clinical intervention through museum outreach as one element of MH and AR participant recovery programmes.

In the context of arts and health, Holt and Kaiser (2009) showed how viewing and discussing art can motivate patients with addiction issues to change. There is a gap in terms of studies focused on the effect of museum activities for this group. In terms of mental health, studies have discussed how participating in creative programmes could promote mental health recovery (Colbert, Cooke, Camic & Springham, 2013; Lloyd, Wong & Petchkovsky, 2007; Spandler, Secker, Kent, Hacking & Shenton, 2012). In a qualitative study, Reynolds (2000) showed how engaging in creative needlecraft built a sense of achievement, self-esteem and confidence which helped participants with depression to manage low moods although conclusions need to be interpreted with caution as diagnosis was ascertained via self-report. In a grounded theory study, Griffiths (2008) found that creative activities contributed to skills development and confidence for mental health service-users. It should be noted that the mental health recovery literature derives primarily from studies with adults with chronic and enduring issues, such as psychosis. For the current study, 'mental health' was used as a generic term as MH service-users were not asked to disclose the natures of their illness.

Current study

The current study aimed to provide opportunities for MH and AR service-users to engage in museum-related creative activities led by the outreach team of TWAM, a major local authority museum, art gallery and archives service in North East England. The outreach programme included opportunities to engage with TWAM collections in archaeology, art, fashion, natural sciences, science and technology, and social history. The central aims were to facilitate positive opportunities for participants and develop new museum audiences. The asset-based model provided the conceptual approach to the current study and measures of confidence, sociability and wellbeing were chosen for a preliminary investigation of the effects of museum outreach sessions for MH and AR participants. These measures were identified because of their association with the ongoing goals of independence, resilience and increased social capital which feature centrally in recovery models.

The study focused on programmes involving AR and MH groups in partnership with local organisations: North East Council on Addictions (NECA), a drugs and alcohol misuse service for clients accessing programmes either voluntarily or as part of an agreed court sentence[1]; and Moving Forward and Washington Mind mental health charities. The partner organisations employed recovery-oriented approaches with the goal of increasing service-user resilience and independence by supporting integration into community programmes and developing social networks and support systems, thereby increasing social capital. Social capital is defined 'as a list of components such as social networks, social participation, trust and reciprocity'; factors considered to influence health (Abbot & Freeth, 2008: 874). A mixed methods approach involving quantitative and qualitative analyses was used to examine the effects of museum activities on participants. The quantitative methodology employed measures of confidence, sociability and wellbeing that were individually assessed using a ladder of change model of steps towards participant independence with eight levels. The primary aims of the study were to examine whether measures would change over the course of sessions, and how many sessions participants would need to attend before improvements

[1] Community sentences known as Drug Rehabilitation Requirement (DRR) are a way for offenders to address problem drug use and identify ways to change their lives for the better.

in the measures would become evident. The qualitative methodology used thematic analysis to examine participant feedback for evidence of improvement in these measures after museum outreach interventions and to explore additional effects.

The study hypothesized that the quantitative measures of confidence, sociability and wellbeing would improve significantly between the first and final sessions and that qualitative analysis of participant feedback would provide evidence for improvement and stabilisation of these measures at the end of the programme. The findings were interpreted in terms of the association of these measures with proposed outcomes of increased individual social capital, independence and resilience.

Method

Overview

AR and MH service-users participated in weekly sessions of museum-related creative activities. Two staff members from museum and partner organisations completed a ladder of change for each participant at the end of each session based upon joint observation of participant behaviour. Participant feedback collated at the end of the project was collected through questionnaires and anecdotal reporting of session feedback. For this preliminary study, direct observation collated at the end of each session was chosen as the data collection method over self-report to avoid intruding on the museum activities. Museum staff and social workers were trained in observation skills and in the operationalization of the ladder, including discussion of potential bias. To further avoid potential bias, no specific hypothesis of improvement was shared with the observers. At the end of each session, observers discussed and agreed on observations to ensure inter-rater reliability.

Design

Quantitative analysis: In a mixed design, the between participants factor was group (AR or MH) and the repeated measures factor was time-point (first, mid and last session attended). As participants attended different numbers of sessions and projects were of varying lengths

(3-21 weeks), scores were analysed from the first and last sessions attended, and at a mid-point (mid- session score for odd numbers of attendances and average of the two mid-session scores for even numbers of attendances). The dependent variables were scores for three measures (confidence; sociability; wellbeing) on an eight point scale (0.5-4.0) recorded using 'ladders of change' (Prochaska & DiClemente, 1982) with four stages (stuck, learning with others, believing in yourself, and self-reliance) and two levels of each stage. Each stage had descriptors of behaviour and attitude that defined the three measures (Figure 1). The ladder of change was based upon an explicit model of the steps that service users take on their journey towards independence developed from the Outcomes Star™ (Burns, Graham, & MacKeith, 2006) and adapted by museum staff in consultation with an occupational therapist. The first quantitative analysis of data compared the measures taken at the three time-points (first, mid and last) and the second analysis examined the number of sessions required to show improvement and stability by plotting mean weekly scores.

Qualitative analysis: Qualitative analysis was based on participant feedback through an end of project group questionnaire which asked a number of non-directive questions based on enjoyment, inspiration and progression; and anecdotal verbal feedback recorded in the museum workers' reports. The thematic analysis used a hybrid, deductive and inductive approach (Fereday & Muir-Cochrane, 2008) to examine reported improvement across the measures and identify other themes indicating additional effects. For the deductive (data-driven 'top-down') approach, verbal material from the questionnaires and anecdotal feedback, in the form of quotes, was coded in terms of the three measures by looking for particular words, expressions and reactions related to the measures. For the inductive (concept-driven 'bottom-up') approach, new open codes were generated to account for other responses. Codes were aggregated into themes and analysed independently by one researcher (NM) and reviewed by another researcher (LT) to ensure validity of interpretations.

Participants

Participants were recruited through the partner organisations so the sample in this study is the total sample that took part. Participants comprised mixed age, gender, ethnicity and social background adults (n=144) from AR (n=59) and MH (n=85) groups attending projects for different numbers of weeks (AR range=17, mean=10.91, median=10; MH range=18, mean=10.31, median=10) from three locations (Newcastle, South Tyneside and Sunderland). Group sizes varied (3-11 per group: AR range=8, mean=6.56, median=5; MH range=6, mean= 6.54, median=7). Within MH, all participants were self-referred to support services, while in AR, a proportion of participants were on court-ordered programmes (although the identities of these participants remained undisclosed). Participants attended different numbers of sessions out of choice or due to other commitments and life circumstances. Participants with fewer than three attendances (n=6) were excluded from the analysis and if participants took part in subsequent projects (n=4), only scores from the first were included.

Materials

Pre-printed forms were used for the ladders of change and group questionnaires. Art materials, digital cameras and laptops were provided by the museum. Handling collection boxes for early sessions contained objects and pictures. ‘Handling’ collections refer to objects which have not been formally accepted into the museum collection and may be less valuable in terms of loss or damage.

Procedure

Early sessions designed as ‘ice-breakers’ were facilitated by museum workers using handling boxes to elicit conversations and personal responses, and included visits to museum venues. ‘Taster sessions’ introduced a number of different arts activities to give the participants a ‘taste’ of those available, from which participants then chose the main group activity for the remaining project duration. Ladder of change data for each participant were

collected at the end of each session. Anecdotal feedback was recorded by museum workers in internal evaluation reports. Group questionnaires were handed out by the museum worker at the end of the project.

Sessions were conducted across Tyne and Wear over four years in TWAM venues and partner organisations. AR programmes administered by NECA took place in South Tyneside and Sunderland (2011-12) and MH programmes administered by Moving Forward or Washington Mind took place in Newcastle (2011-14). Sessions of a half or whole day were facilitated by a museum outreach worker with a social worker (AR or MH) present; freelance artists were funded by the museum to support specific activities where needed. The main activities (e.g. book-binding, digital storytelling, mosaics, music reminiscence, mural painting, photography, portrait painting, stained glass and textiles) were collections-inspired creative responses. Activities were 'hands on' and participants produced group and individual outcomes (e.g. sketches of collections related to local bridges used to create stained glass panels; collections inspired self-portraits). All projects ended with a celebration where friends and family were invited to see finished work displayed in museum and partner venues.

Figure 1. Participant groups and course duration

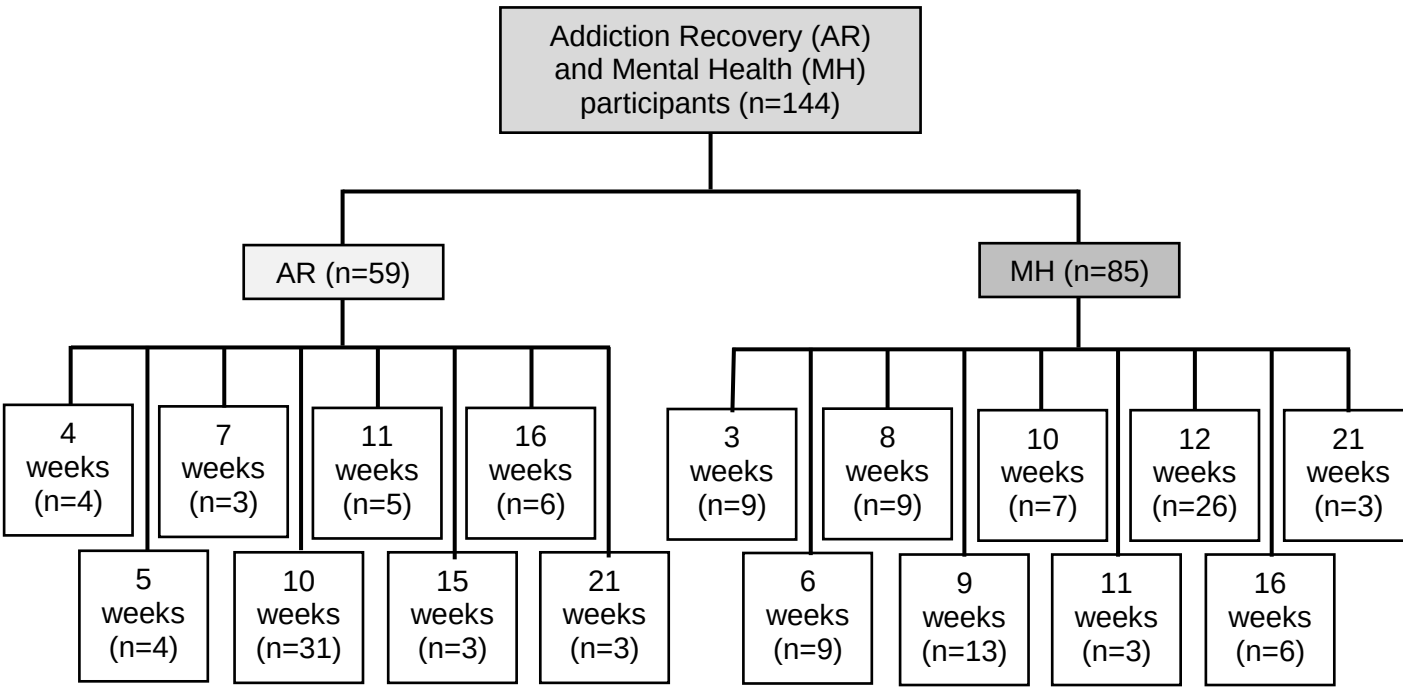


Table 1. Arts and health projects offered in different areas

Group	Location	Year	Course
Addiction Recovery	Sunderland	2011	North East Council on Addictions (NECA) arts project 1: photography, watercolours, pottery.
			NECA arts project 2: Digital storytelling
		2012	NECA Dig for Victory: planting and museum display
			NECA project 1: Book binding
			NECA project 2: Photography
			NECA project 3: Still lives, photography
	South Tyneside	2011	NECA women's group: Ghost and folk tales
			NECA allotment group: Roman stone motifs
		2012	NECA Dig for Victory: museum display
			NECA Halloween disco: music reminiscence
			NECA fashion show: textiles
Mental Health	Newcastle	2011	Moving Forward, Curtains and cameras: photography
		2012	Stonham Foyer, Home and away: digital storytelling
			Moving Forward, Media literacy through digital storytelling
	Sunderland	2012	Washington Mind: photography
			Washington Mind, Castle Green: photography
			Washington Mind: Home and away
			Washington Mind/YMCA Herrington Burn: mural painting
	South Tyneside	2011	Moving Forward, Crossing the Tyne: stained glass making and photography
		2012	Moving Forward South Shields: Stained glass
			Moving Forward South Shields: Family history and textiles
			Moving Forward South Shields: Portraits
			Moving Forward South Shields: Mosaics
		2013	Moving Forward: Local photography
			Moving Forward, Signs for Sounds: object handling
			Moving Forward, Fossils: drawing
		2014	Moving Forward, Boldon book: book binding

Results

Quantitative: Descriptive statistics (Table 1) were carried out on the first, mid and last data sets from all projects, and mean scores for confidence, sociability and wellbeing measured on three ladders of change were compared. Multivariate analyses of variance (MANOVAs) were conducted on the first, mid and last scores for the three measures. The main effects of time-point were highly significant and effect sizes estimated using Cohen's *d* (Cohen 1969) were large; for confidence, $F(2,141)=124.71$, $p<.001$, effect size=0.68; for sociability, $F(2,141)=147.26$, $p<.001$, effect size=0.64; and for wellbeing, $F(2,141)=136.24$, $p<.001$, effect size=0.66. There was one highly significant interaction of time-point with group for sociability, $F(2,141)=5.07$, $p<.008$ where the AR group showed more improvement than MH group. The other interactions of time-point with group were non-significant, for confidence $F(2,141)=2.30$, $p<.10$; and for wellbeing, $F(2,141)=1.65$, $p<.20$. Post hoc Bonferroni t-tests were used to examine simple effects and showed that all differences were significant; comparison of first and mid scores for confidence, $t(143)=-9.63$, $p<.001$; for sociability, $t(143)=-11.11$, $p<.001$; and for wellbeing, $t(143)=-11.02$, $p<.001$; comparison of mid and last scores, for confidence, $t(143)=-7.42$, $p<.001$; for sociability, $t(143)=-7.54$, $p<.001$; and for wellbeing, $t(143)=-6.36$, $p<.001$. The reliability of the measures was tested statistically using Cronbach's alpha; for confidence, alpha= 0.78; for sociability, alpha=0.81; and for wellbeing, alpha=0.80 (where minimum alpha value for reliability of a scale is 0.70).

Mean scores from weekly sessions were plotted for the three time-points for all projects from three to 21 weeks duration. Projects up to and including 16 weeks duration were attended by 95 per cent of participants from AR (Figure 2) and MH (Figure 3). The 21-week courses were only attended by three participants in each group. Examination of the weekly scores plotted separately showed that for both groups, gains were made around weeks six and seven, with further gains during weeks 10-13 and a peak at around week 15, though this may reflect reduced participant numbers at this point with 20 per cent of the original AR group and 10 per cent of the original MH group remaining.

Table 2. Confidence, sociability and wellbeing measures: Descriptive statistics

Group		Confidence scores			Sociability scores			Wellbeing scores		
		First	Mid	Last	First	Mid	Last	First	Mid	Last
AR	Mean	2.52	3.30	3.64	2.51	3.31	3.64	2.50	3.26	3.67
	Median	2.50	3.25	3.50	2.50	3.25	3.50	2.50	3.25	4.00
	Range	3.00	2.50	2.50	3.00	2.00	1.50	3.00	2.50	1.50
	SD	0.58	0.50	0.45	0.59	0.55	0.41	0.65	0.56	0.43
	Var.	0.35	0.35	0.21	0.35	0.31	0.17	0.43	0.32	0.17
MH	Mean	2.51	3.09	3.44	2.49	2.95	3.37	2.54	3.07	3.43
	Median	2.00	3.00	4.00	2.00	3.00	3.50	2.50	3.00	3.50
	Range	3.50	3.00	2.50	3.50	3.00	3.00	3.00	3.00	3.00
	SD	1.08	0.81	0.68	0.96	0.77	0.72	1.10	0.79	0.68
	Var.	0.83	0.54	0.37	0.68	0.50	0.39	0.89	0.51	0.36

Figure 2. Confidence measure: Mean scores

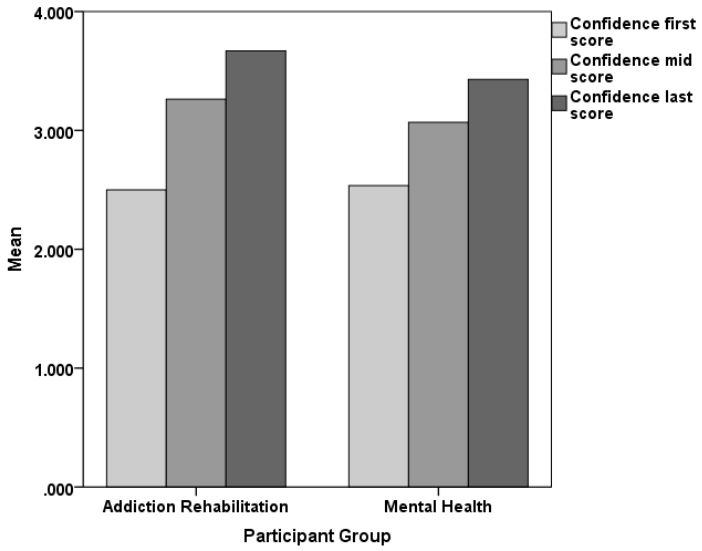


Figure 3. Sociability measure: Mean scores

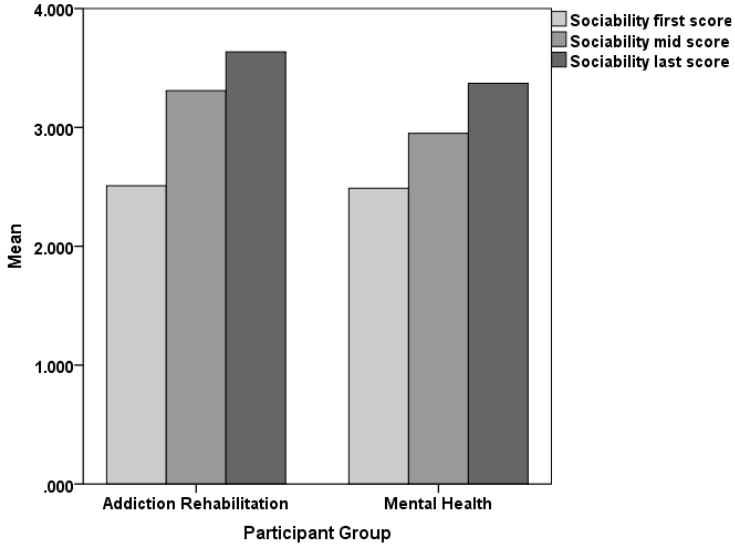


Figure 4. Wellbeing measure: Mean scores

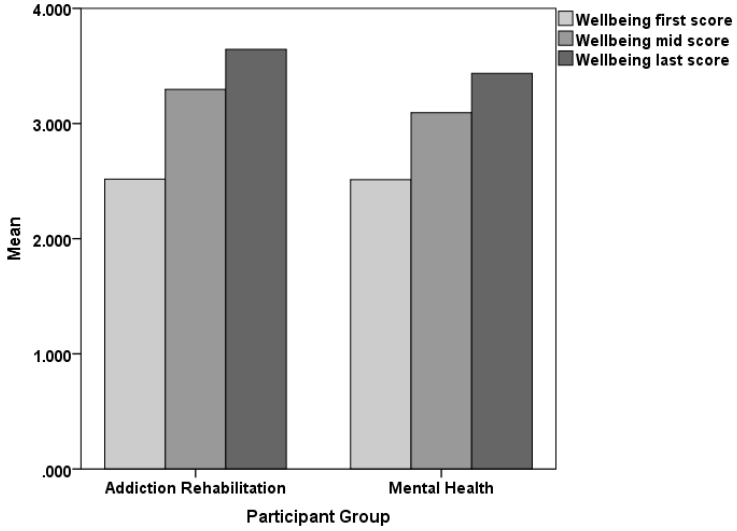


Figure 5. Addiction Recovery: Mean confidence scores

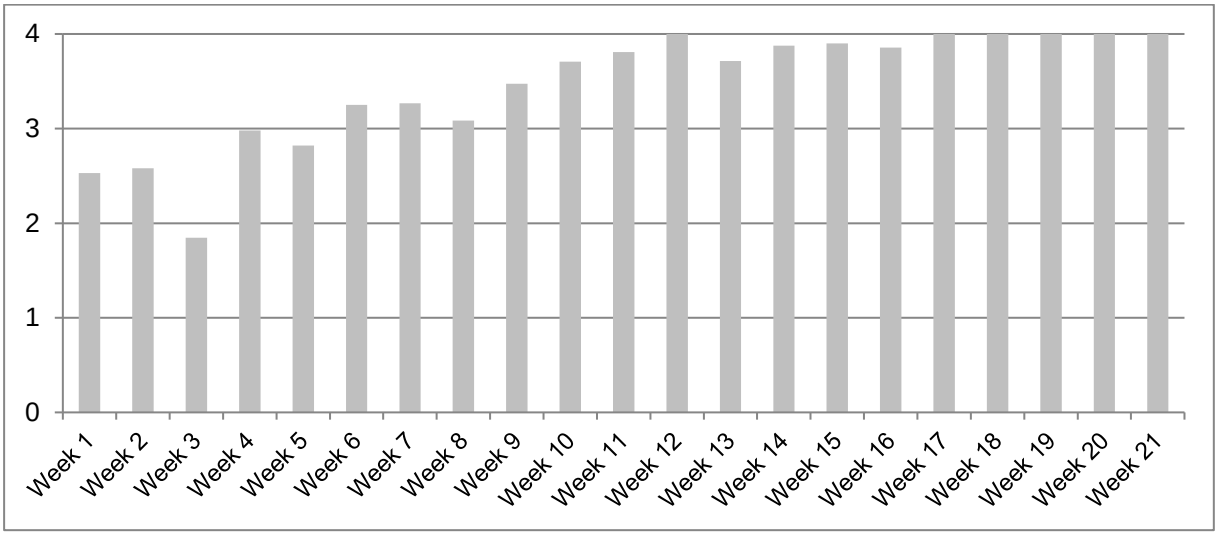


Figure 6. Addiction Recovery: Mean sociability scores

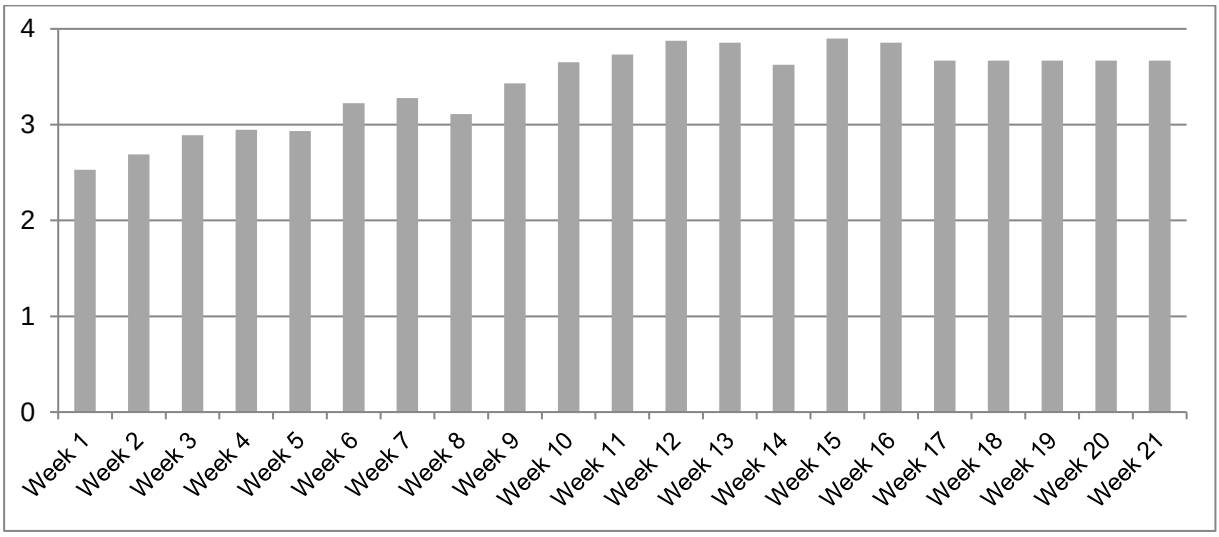


Figure 7. Addiction Recovery: Mean wellbeing scores

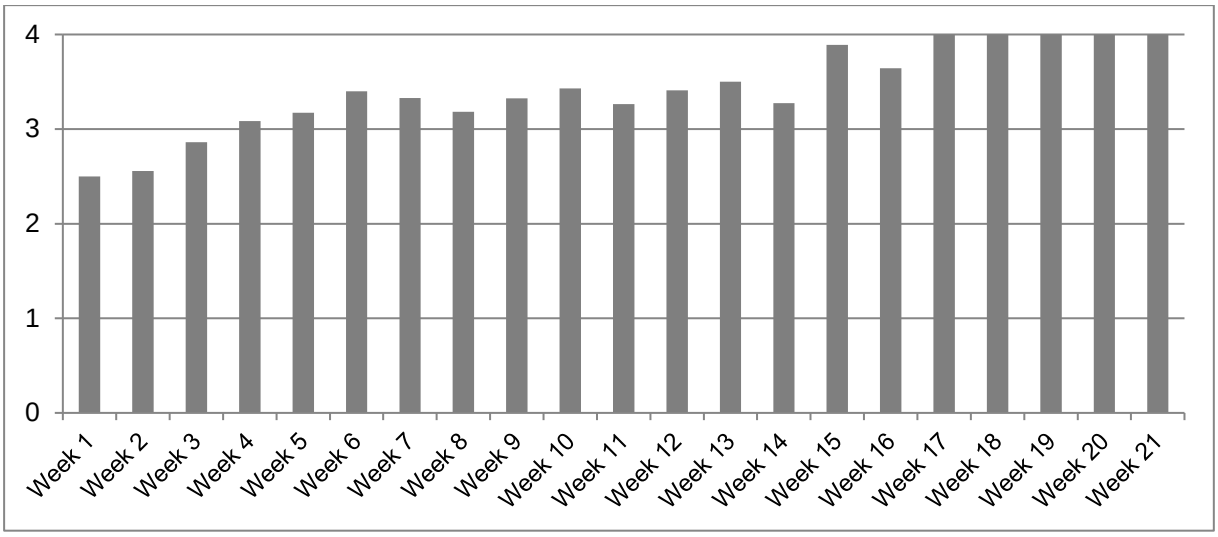


Figure 8. Mental Health: Mean confidence scores

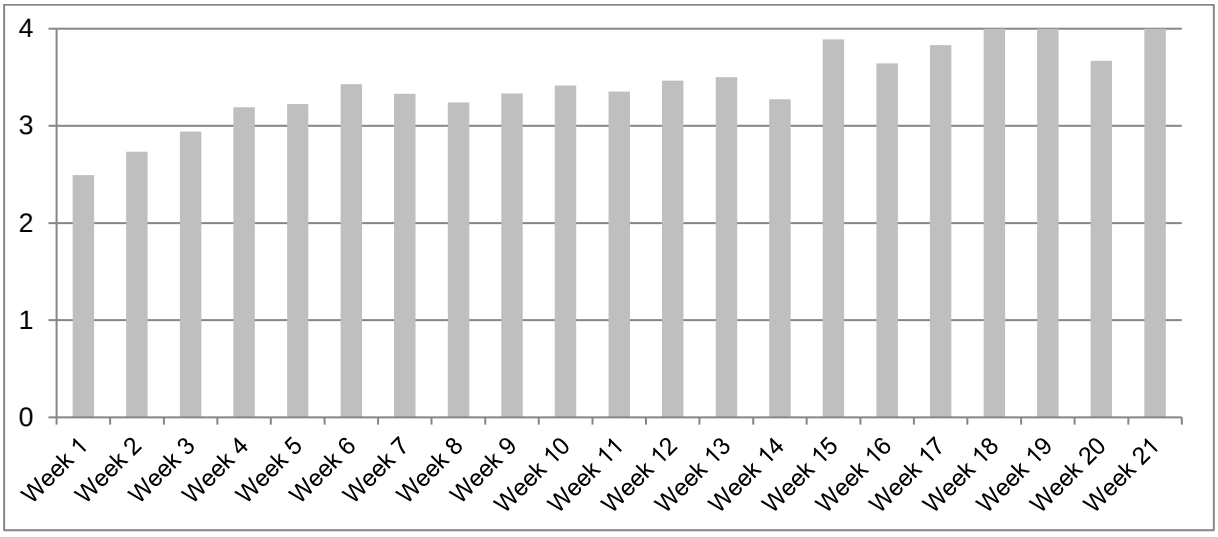


Figure 9. Mental Health: Mean sociability scores

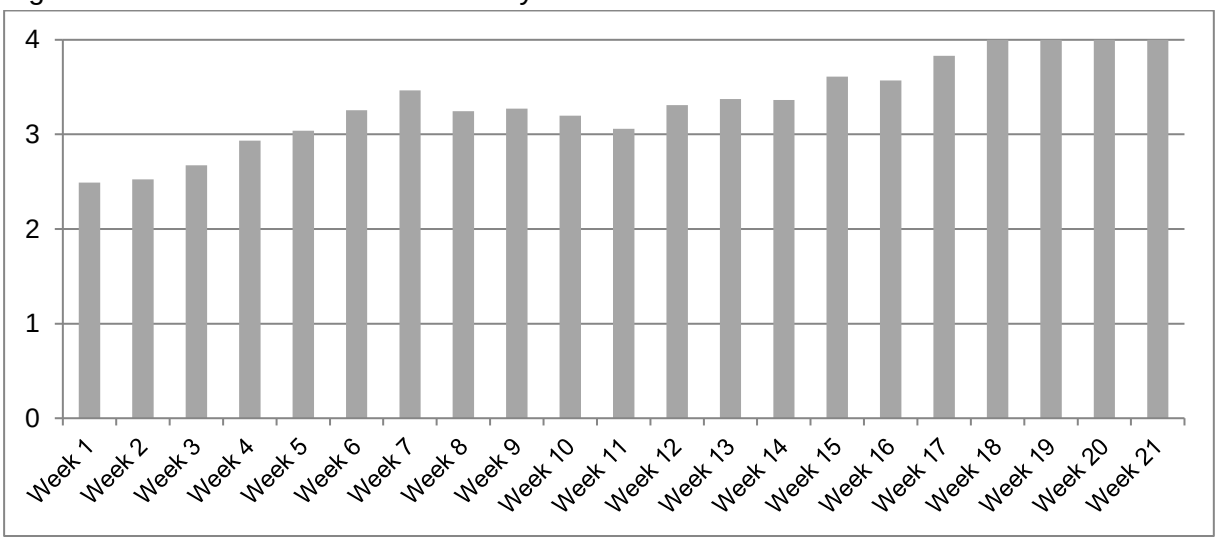
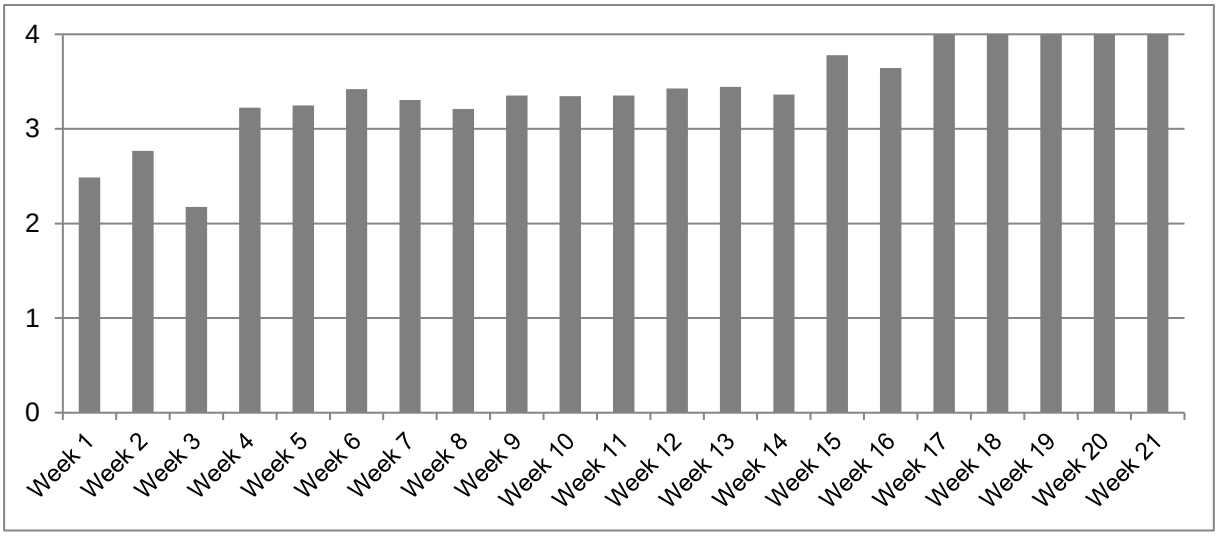


Figure 10. Mental Health: Mean wellbeing scores



Qualitative: Feedback was recorded for 12 AR and 9 MH projects but because this was group feedback, exact numbers of participants could not be disaggregated. Deductive analysis found evidence of confidence, sociability and wellbeing (in terms of per cent frequency of total open-ended responses coded: AR: 12%, 26%, 32%; and MH: 13%, 17%, 16%, respectively) and inductive analysis revealed five new themes: pride and achievement; learning and new skills; creativity; experiences of visiting new places; and sense of identity (AR: 16%, 5%, 4%, 2%, 4%; MH: 14%, 16%, 14%, 8%, 1%, respectively).

Table 3: Qualitative categories for participant feedback

	Addiction recovery		**Mental health**	
Feedback (n)	57		76	
Qualitative category	n	%	n	%
Confidence	7	12%	10	13%
Sociability	15	26%	13	17%
Wellbeing	18	32%	12	16%
Pride	9	16%	11	14%
Learning and Skills	3	5%	12	16%
Creativity	2	4%	11	14%
Visiting new places	1	2%	6	8%
Identity work	2	4%	1	1%

Deductive analysis

Confidence and trying something new: Participants often experienced low self-esteem, initially feeling apprehensive about entering novel environments and trying new experiences. Sessions improved participant confidence which was a strong theme within both groups:

> I do things here I wouldn't do at home because I'd feel too embarrassed. (AR)
>
> At the start of the project I didn't have the confidence to achieve what I have done now (MH)
>
> My confidence has definitely increased working on this project (AR)

Participants identified their confidence as deriving from having tried 'something new' and that museum outreach sessions provided an environment where participants could try a new activity without fear of embarrassment. These creative spaces enabled participant confidence to grow over the weeks.

Sociability: Museum sessions encouraged interaction between service-users many of whom did not know each other beforehand. Several participants spoke of 'laughter', 'having a chat'

and enjoying the company of others as their favourite part of the sessions Both AR and MH p were encouraged to choose together what activity to undertake and this process of consensus-building developed peer socialising skills simultaneously with their sense of self-efficacy within group situations. The sociability dimension was particularly strong in the AR group:

> The group all had different ideas on how to approach things and we all listened to each other. (AR)
>
> My social skills have increased working on this project. I have enjoyed working as a team – everyone putting ideas forward and having a go. (AR)

In some projects friendly bonds were created; these social interactions were important for service-users towards building social networks and strengthening independence:

> I was frightened of new people but eventually I made friends. I wouldn't be worried about working with anybody else now. (MH)

Wellbeing: Wellbeing was the strongest theme in the questionnaire feedback. Many participants looked forward to sessions as a weekly activity they enjoyed that provided distraction from daily life or illness and provided a purpose or activity to focus on:

> That is the first time in a very long time that I have not felt really anxious, or worried how I look due to my anxiety, because I have been too busy trying to capture the [photographic] image that I want, I can't believe I have been in a group for two hours. (MH)
>
> I didn't notice the pain, because I've had such a lovely day! (AR)

The sessions enabled participants to relax as they were not pressured into activities, partly explaining the difference between project lengths as groups took different numbers of weeks to complete creative endeavours.

Inductive analysis

Pride and achievement:

Taking an active part in the creative element of the project was depicted as an achievement in both groups. For participants new to creative activities, the senses of pride and achievement were even greater:

> I really struggled at the start with this [proggy mat: tapestry rug made with recycled materials], I thought I wouldn't be able to do it, but now I'm getting on well (AR)
>
> I felt proud to learn to use a mac book and make a film and have my story in the exhibition. I never thought that that would happen. (MH)

The sense of pride was felt as a collective sense of achievement, linking back to the sociability measure:

> I have enjoyed the whole project from the initial ideas to the finished result and feeling really proud of all of us and what we have achieved. (AR)

Pride was derived from seeing work displayed in the museum and was further reinforced and validated at project end when families, friends and carers were invited to see the outcomes:

> Mum was proud of me and shocked by my artwork. It made me feel good inside. (MH)
>
> My carers said it was really good. It made me feel weird (nice weird) 'cos they've never said that about my work before. (MH)

Learning new things and gaining new skills: Learning was a theme that emerged especially in the MH group. Participants identified new things about specific museum objects and local history. Participants were enabled to learn new skills and crafts to take back to other parts of their lives:

> Learning a new interest - I'm going to make [a proggy mat] at home! (MH)

Creativity: Creativity was a theme to emerge, particularly from the MH group. Activities were designed to actively engage participants in a deep and meaningful way: based on the asset model which focuses on capacities, participants were introduced to technical aspects of arts and crafts.. Feedback referred to techniques which participants enjoyed and touched upon their sense of creativity:

> Using things we had seen as the inspiration for the mosaics. The challenge [was] capturing a big scene on a small mosaic tile. (MH)

Visiting new places: Nearly all the projects included visits to TWAM venues and some to other local cultural and heritage sites. Participants in the MH groups especially spoke about this as one of their favourite aspects:

> It was fun and enjoyable visiting new place, and the museums, [it was] a good experience (MH)

Identity work: Most projects did not focus directly on reflecting on personal identity, as museum projects tend to do (Falk, 2009). They aimed instead to provide creative opportunities for participants.. Interestingly, activities brought back childhood memories for three participants, bringing creativity and a sense of play back into their adult lives:

> Remembering creating mats when I was young and using them as blankets (MH)
>
> It's like being a kid again. It's exciting doing it (AR)

Discussion

Quantitative analyses showed highly significant effects of all measures taken after the first, middle and last attendance, supporting the hypothesis that confidence, sociability and wellbeing would improve significantly over the courses of sessions for AR and MH groups. All groups started with approximately the same first score (c. 2.50) but MH groups appeared to show less improvement than AR groups although this difference was only significant for the sociability measure. Differences between first, mid and end time-points were highly significant suggesting that, on average, participants benefited over the duration of the projects

Since more than half of the participants attended projects of at least 10 weeks duration it was good to see that progress could be made over this time span; a finding that suggests future arts and health interventions should be conducted over a 10-week minimum. Notwithstanding this finding, it could be that participant gains over the three time-points may have been compounded by participant attrition, i.e. those participants who felt they were not benefitting from the project (e.g. not improving in confidence), may have dropped out earlier. Although it would have been useful to have analysed all of the data for 21 weeks, the

disparities in course length, participant absence and attrition produced too much missing data for statistically reliable analysis.

Qualitative data derived from project end feedback complemented the quantitative results, supporting the hypothesis of improvement of the three measures at the end of the programme. Findings supported previous research (Griffiths, 2008; Reynolds, 2000; Roberts et al., 2011; Wood, 2007) in that creative and museum activities helped to develop participant confidence, although previous research was not carried out specifically with MH and AR groups. The qualitative feedback around wellbeing recorded positive emotional responses, a finding that supported other research. In a qualitative study of museum object handling in hospitals with mental health service-users, Ander et al. (2012) showed how these sessions provided a source of distraction from distressing symptoms (see also Colbert et al., 2013). Since confidence and wellbeing are closely associated with recovery goals of independence and resilience, the findings of this preliminary study suggest that museum activities can contribute to these proposed positive outcomes for MH and AR group. The improvements for AR were stronger in the qualitative feedback, which lent support to the quantitative analysis, and highlighted a potential important role for museums working with this group.

The strong theme of sociability was reflected in the qualitative analysis. The activities provided spaces of conviviality, conversation and friendship, and the focus on group decision-making enabled further interaction and forms of non-medical peer-support. Peer-support is an important element of recovery-oriented practice (White, 2009). The findings suggested that museum activities that are developed within an asset-based model (like the current study) can contribute to increasing individual social capital for MH and AR service-users.

Although it has been suggested that within therapeutic intervention it is the social interaction that is key (Simmons, 2006), museum object handling research showed that the presence of objects and the act of touching were central in enhancing intervention benefits (Paddon et al., 2014; Thomson et al., 2012a; 2012b). The role of museum objects in the

current study is not clear; however, the qualitative analysis highlighted participants' sense of achievement in relation to taking part in creative activities inspired by objects and pride in the final artwork/craftwork created. This sense of achievement was described in a study of art-gallery based activities with people with psychosis (Colbert et al., 2013). The sense of pride in the current study can be linked to increased confidence and self-esteem derived from 'trying something new'. Developing new interests is a central element of recovery (Slade, 2010) and at the heart of the asset-based model that values capacities and potential even in projects that might at first seem technically challenging. Support over several weeks allowed creativity to flourish. Learning and gaining new skills was highlighted in qualitative feedback in heritage-in-health interventions (Ander et al., 2013; Paddon et al., 2014) and learning has been linked to wellbeing (NEF, 2008).

Participant achievement was validated by external recognition from families and carers, and through displays of work, further illustrating ways in which museum programmes can contribute to confidence, and, by extension, may contribute to the goals of resilience. Several participants made return visits to the museums on their own which suggested their strengthening independence. Another theme identified in the research, 'visiting new places', showed how programmes might contribute to positioning museums within broadening social networks and, following Chatterjee and Noble (2013), establishing museums as part of a wider sense of social capital. Overall, this preliminary study contributes to understanding how museum activities can make a positive contribution to recovery for MH and AR service-users by evidencing the effects of museum sessions on confidence, sociability and wellbeing.

Some participants noted disappointment at project end indicating the need for a long-term approach to developing an asset-based model of working. O'Neill (2010) offered a model whereby museums might become 'reference-ready' by having programmes in place for service-users referred by a GP or primary care service, such as the 'Museums on Prescription' model in development at University College London (see http://www.ucl.ac.uk/museums/research/museumsonprescription). TWAM is currently looking towards rolling out a

sustainable model in this vein (see http://www.twmuseums.org.uk/about-us/spotlight/a-new-vision-for-outreach.html).

Limitations

This preliminary research had some shortcomings in that there was no control group; the study was not longitudinal in design; projects were of different durations and there was some missing quantitative and qualitative data. The focus on two naturally occurring groups and the lack of a suitable control group threatened interpretation of the findings due to the absence of a baseline measure. The variation in project duration of between 3 and 21 weeks could theoretically be analysed however there were insufficient and unequal participant numbers which would have rendered analysis unreliable. Furthermore, beginning, mid and end points were compared irrespective of duration as this was considered to be a suitable means of addressing the issues of varying project duration and rates of participant attendance and attrition. The current study was premised on a conceptual model of inference based in a literature review, it did not directly test the proposition that social capital, resilience and independence would be enhanced as a results of the three measures.

With regard to the scale used to record the three measures, the ladder of change was adapted from the Outcomes Star™ by museum staff in consultation with an occupational therapist, so the scales had not been used by other researchers and consequently, had not previously been validated. The choice of direct observation for the ladder was justified in this case, however it had potential errors. Future research may need to use reliable and validated scales for each measure of interest and include an independent self-report ladder so that inter-rater reliability between participants and facilitators can be calculated.

Further mixed methods research is warranted, particularly in relation to addiction recovery where there are fewer previous studies. As group sizes and numbers of sessions for different projects varied, so did the different group processes, such as cohesion and decision-making, that might have impacted on the measures. Future studies should attempt to hold constant participant numbers. It would also improve practice if demographic data on

participants were to be collected in future studies. The current study focused on new participants only, and it would be instructive for future research to undertake a longitudinal study to consider the effects on repeat project involvement to examine the ongoing benefits of such programmes in comparison with a waiting list control group.

Conclusions

The mixed-method data showed that participant levels of confidence, sociability and wellbeing improved over the course of the museum sessions though it is not clear to what extent the nature of the museum-focused activities or participation in a collaborative creative process produced gains above that of being part of a group. The study showed that progress could be made over 10 weeks and suggests that future interventions should be conducted with this period of time as a minimum requirement. As a non-clinical intervention, the programme showed that museum outreach sessions developed within an asset-based model have the potential to contribute to positive outcomes linked to the recovery service-users in mental health and addiction services.

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Appendix I. Outreach outcomes evaluation template

Ladder of change stage	**Increased confidence**	**Increased cellbeing**	**Positive socialising / peer support**
4 Self-reliance	Offering to help others. Engaging. Doing things for themselves and others. Being proactive. Leading and initiating. Positive facial expressions (happy and uplifted). Communicating and being talkative.	Relaxed in themselves. Motivated Self-actualising. Valuing themselves. Positive body language. Eye contact. Enjoyment.	Offering to help others. Interacting with others. Motivating others. Praising others. Valuing others. Telling others about joining the group. Helping others to enjoy.
3 Believing in yourself	Positive body language. Increased eye contact. Acknowledging own contribution to workshop.	Engaging with activity. Sharing. Offering ideas. Deciding with others. Accepting praise. Enjoying with others.	Acknowledging others contribution. Sharing. Discussing with others. Decision making with others. Accepting praise. Enjoying with others. Third party support helping.
2 Learning with others	Asking to come back to another session. Asking what's happening in	Want to enjoy. Elements of joining in. Being more motivated.	Want to be with people. Basic communicating. Chatter with others.

	the next session. Want to feel more confident.	Coming out of themselves. Happy to come to session. Starting to be more positive. Asking questions about what's happening.	Acknowledging others. Person telling their third party support about the session. Getting third party support.
1 Stuck	Isolated. No interest. No interaction. Blank expression on face.	Isolated themselves from others. Head down. Not wanting/being able to communicate with others. Could be emotional (tearful, angry) Uncomfortable. Not joining in. Distressed.	Not wanting to engage. Not being able to engage. Distancing others from themselves. No third party support.

Brown, Z, Hentley, J, Lowe, S (2012) adapted from the Outcomes Star ™ (Burns et al, 2006)