

A mixed-methods evaluation of the longitudinal impact of arts on prescription

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Introduction

Art on prescription is one pathway in social prescribing schemes that involves referral by health workers to visual arts programmes, for individuals experiencing social isolation and low to moderate levels of stress, anxiety and depression, with the hope that attendance will improve psychosocial wellbeing. Previous research supports the efficacy of arts on prescription. Pre-post designs have shown that wellbeing scores are significantly higher at the end of programme than at baseline (Crone et al. 2018; Holt, 2020). However, there is a lack of understanding of the longer-term benefits of participation. Only one qualitative study has examined this (Stickley & Eades, 2013), interviewing people two years after participating in an art on prescription programme, and suggested that the social support received had acted as a catalyst for longer-term change. The current study applied a mixed-method framework to further examine the factors influencing participants' health outcomes following the intervention. Understanding whether improvements to mental wellbeing are maintained on completion of the programmes is important because analyses of qualitative datasets have identified themes relating to 'fear of relapse' at the end of programmes (Hughes et al., 2019), which may indicate a subsequent reduction in wellbeing when the support of an arts on prescription group is no longer available. Hence, the present study asked: 'do participants of arts on prescription courses experience long-term changes to their mental wellbeing?' A secondary aim of the study was to examine the factors that impact engagement, since participants appear to differentially benefit from the arts on prescription (Holt, 2020; Sumner et al., 2020). Hence, a second research question was 'what factors influence engagement in arts on prescription programmes?'

Methodology

The present study adopted a mixed method, explanatory design (Creswell & Clark, 2007), working with participants who attended arts on prescription workshops, run at three community hubs through Bristol Arts on Referral Alliance in 2018. Participants contacted were those who had agreed to be contacted in the future on their consent form when taking part in an initial pre-post evaluation (Holt, 2020). Twenty participants completed an online survey up to two years after their first workshop, which included the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) (Tennant et al., 2006). All participants were invited to an interview and nine in-depth, semi-structured interviews took place. Due to the covid-19 pandemic, it was not possible to meet participants face-to-face and consequently

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participants were offered interviews by telephone ($n = 6$) or email ($n = 3$) as an alternative method (Braun & Clarke, 2013). The quantitative data were analysed first, the findings for which helped to develop the interview schedule, in order to further explore and understand the quantitative data. The explanatory design utilised a sequential method of data integration whereby quantitative data, then qualitative data, were analysed separately before being interpreted together. Following transcription, interview data were analysed using Braun and Clarke's (2006) step-by-step guide to thematic analysis and an inductive analytic approach.

Findings and discussion

Multi-level modelling was used to explore changes in wellbeing over time. Statistically significant differences over time were found for the WEMWBS scores (mean at baseline: 37.69; mean at mid-point = 43.35; mean at end of programme: 42.22; mean at follow-up: 43.45; $F_{(4,80)} = 5.83$, $p = <.001$). Post hoc analyses showed that follow-up scores were significantly different from baseline scores only ($t = 4.01$, $p <.001$). At follow-up, then, participants had higher overall mental wellbeing than at baseline, and wellbeing appeared to be maintained longitudinally. The qualitative theme '*broadening recovery*' explored this further, highlighting the wider social impact that the programme had had on some, but not all, participants, for example, "*being more confident I can do more things*". Cognitive and emotional changes were widely reported across interviews and this may also explain why changes in general wellbeing were observed, for example, through feeling valued and connected to others, consistent with previous research (Jenson, 2019; Williams et al., 2019). Further, participants described how the relaxed environment during the workshops reduced their anxiety and allowed the development of positive coping mechanisms and self-care in everyday life.

The main barrier to engagement was '*vulnerability*' due to ill-health and although this negatively impacted attendance, participants felt that the flexible approach, which allowed them to be ill without negative repercussions, was invaluable for their mental wellbeing and recovery. Many described how artmaking had become a coping strategy for self-managing health, helping to reduce the perception of symptoms relating to physical conditions (e.g., chronic pain and fatigue) in addition to mental health. The subtheme '*escaping ill-health*' captured how artmaking could provide a means of escape and this was interpreted by the researcher as the ability to enter 'flow state' (Czikszentmihalyi, 2013).

Crucially, move-on groups were described as invaluable across interviews. The qualitative theme '*staying well*' identified how limited access to support after the arts on prescription programme was a barrier to continued recovery and maintenance of wellbeing. Participants who were able to attend move-on groups largely reflected on how this enabled them to continue making friendships and engaging in art, and participants expressed deep gratitude for having this time to continue growing, because "*otherwise, it finished and there's nothing*". Hence, it is important to note that in some cases, long-term wellbeing may have been supported by the continued access to both community-based and informal, self-created art groups.

Strengths and limitations of the study

A strength of the present study is the use of a mixed-methods research design to enhance understanding of a gap in the research on art on prescription. The convergent design meant that

interviews could explore specific topics and probe certain areas to further understand the quantitative data. Personal involvement in co-facilitating arts on prescription groups throughout the project provided a critical perspective of therapeutic interventions in the community, allowing relevant questions and prompts to promote rich data collection. The main weakness of this study relates to difficulties recruiting participants, resulting in a small sample size for the quantitative analyses, and potential selection biases, where people who had positive experiences of the programme may have been more likely to take part and share their perspectives.

Conclusions and recommendations for further research

The results of the present study suggest that arts on prescription programmes can be effective in the long-term, when follow-on support, such as move-on groups, are available. However, the results must be interpreted with caution due to the small sample size and potential selection bias. Future work could seek to replicate and extend this finding, seeking to encourage participants with a range of perspectives to participate. It would also be useful to clarify and further explore the importance and impact of follow-on support and move-on' art groups in the maintenance of wellbeing longitudinally.

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