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Mental health and resilience: Arts on Prescription for children and young people in a school setting

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ABSTRACT

Objectives: Arts on Prescription (AoP) programmes were among the first forms of social prescribing in the UK. Most of the studies of AoP programmes focus on adults and currently there is no published research on the impact of AoP on children and young people. This study investigates the impact of 10 weekly AoP workshops delivered in a school setting on the mental well-being and resilience of adolescents aged 13–16 years at risk of emotional or behavioural problems.

Study design: The study design used is a longitudinal cohort study of an AoP programme implemented in 10 schools in the East of England.

Methods: Changes in mental well-being and resilience of school children were assessed using the Warwick-Edinburgh Mental Well-being Scale (WEMWBS), and the True Resilience Scale applied pre- and post-intervention, with follow-up at 3 months. In total, 91 young people participated in the programme and 65 completed pre- and post-intervention measures.

Results: Data from the WEMWBS and True Resilience Scale indicated that the AoP Programme had a positive impact on both well-being and resilience of participants with a statistically significant increase recorded immediately post-intervention. However, these improvements were not sustained upon observation at 3-month follow-up.

Conclusion: This article presents the first indication of the effectiveness of a programme of AoP workshops on the mental well-being and resilience of children and young people. It suggests the potential of AoP as a means of support the mental health and well-being of secondary school aged children.

Introduction

Adolescence and early adulthood are recognised as critical periods for the onset of mental health problems which may continue into and throughout adulthood if left untreated.[1] The most recent data on the prevalence of mental illness estimated that in the UK, 1 in 8 children between the ages of 5 and 19 years had at least one mental health disorder (for example, anxiety, self-harming, or eating problems).[2] What is more, the prevalence of mental health disorders increased in children aged 5 and 19 years by approximately 1%, between 2004 and 2017, and the rates of mental health disorder also increase with age, so 16.9% of 17- to 19-year-olds have a diagnosable disorder compared with 5.5% of 2–4-year-olds.[2] Current levels of mental health problems in children and young people place a considerable burden on the individual, the family, community, and the National Health Service. According to the Children's Commissioner in 2017, fewer than a third of children referred to Children Adolescent Mental Health Services (CAMHSs) received treatment within a year; another 37% were not accepted for treatment or were discharged after assessment and 32% were still on a waiting list.[3] In 2017, The Care Quality Commission Report stated that long delays for treatment were damaging the health of young people with anxiety, depression and other conditions.[4]

It has been recommended that public health approaches should consider the protective factors for mental health and adopt strategies to enhance resilience and help individuals cope with the normal adversities of life.[5] Over the past decade, reviews have looked at the use of participatory arts to promote the health and well-being of children and young people.[6–8] A rapid review explored the role of arts activities in enhancing mental well-being and resilience in children and young people and concluded that

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although the research evidence is limited, there is some support for providing structured group arts activities to help build resilience and contribute to positive mental well-being of children and young people.[9] More recently, a report for the Department of Culture, Media and Sport in the UK reported that the evidence base on the effectiveness of the arts on aspects of well-being for children and young people was excellent, consistent and relatively generalisable.[10]

Globally, there is increasing recognition that participating in arts activities can support and enhance health and well-being.[10–13] One recognised form of structured group arts activities used to support health and well-being is Arts on Prescription (AoP). AoP programmes were first established in the North West of England in 1994 and offered a range of arts and cultural activities for people experiencing mild to moderate depression.[14] AoP programmes are one way in which participatory arts activities may be provided for people experiencing health or well-being issues but other art interventions also exist.[6–10] There are a variety of approaches, settings and 'arts' offered by AoP programmes but access to these generally follow a referral process. Whilst art therapy has a long history in mental healthcare provision, AoP is distinctive from art therapy, and although similar programmes under different names and formats may exist in other countries, for the purpose of this study AoP is defined as group art activities with a referral process, facilitated by community artists or musicians rather than by therapists trained in the expressive therapies (art, dance, drama, or music).[15] Whilst the AoP sessions may have a therapeutic element, groups are not established with the aim of addressing the specific issues facing individual participants.

In the UK, AoP fits under the umbrella term social prescribing, which is a mechanism for linking patients with non-medical sources of support in the community.[15] The most common model of social prescribing in the UK involves referral by a healthcare professional to a link worker who then in collaboration with the patient co-designs a non-medical community prescription.[16] Models of AoP and social prescribing are also found in Australia,[11] the Scandinavian countries,[12] North America[17] and more recently Malta[13] but may be known as alternative names in other countries. In the UK, a prescription may be for arts activities but may also include exercise, volunteering opportunities, or support with housing benefit or referral to organisations such as the Citizens Advice Bureau.[18] There are currently 'AoP or Arts on Referral programmes throughout the UK, which may now be part of local social prescribing schemes. However, a recent on-line search of existing AoP programmes failed to identify any which specifically provided AoP for children or young people. There is a growing evidence base supporting the use of AOP for adults with anxiety and depression, and it has been found that participants experience improvements in well-being[11,19,20] and mood.[21] This present study aimed to investigate whether participating in a school-based AoP programme had a positive impact on the mental well-being and resilience of children and young people, who had been identified by school staff as requiring support with their mental well-being.

Methods

Intervention

The AoP intervention for children and young people was based on the longstanding AoP programme for adults with moderate to mild anxiety and depression. The adults programme had been delivered across Cambridgeshire by a third sector organisation Arts and Minds since 2008. The children and young people's AoP programme was commissioned from Arts and Minds by the Cambridgeshire County Council, following a successful pilot of the intervention. The children and young people's AoP programme consisted of ten weekly 2-h visual art workshops delivered in schools, during the working school day. The workshops were facilitated by an artist and used the visual arts. Each week there was a new artistic activity and students were encouraged to explore and engage with new materials. The media used included wire sculpting, clay, painting and collage and the students could work individually or in groups. There was a specific topic each week for example 'Journeys', and the sessions would start with a short discussion, followed by the main arts activity, and closed with a reflection on the arts works. The focus was on the creative process rather than the artistic output produced. The sessions took place in an arts classroom in the school building and were also attended by the AoP counsellor and a member of school staff. The counsellor was present to support the children in the event of any distress, the school staff attending the sessions engaged with the children and the arts activities. The programme was delivered across 10 schools between April 2017 and March 2018 and targeted young people aged between 13 and 16 years of age. The schools were in areas of social deprivation across Cambridgeshire and were selected by the programme funders. As part of the project funding, an independent research consultant LE was commissioned by Arts and Minds to undertake an evaluation of the programme. The evaluation was designed to investigate the impact of the AoP workshops on the mental well-being and resilience of the participants.

Study design

Using a longitudinal cohort design pre- and post-intervention measures with a three-month follow-up were employed. Demographic data, including age, year group, gender and ethnicity were also collected. The data were supplemented with information gathered from the schools regarding the inclusion criteria used by each school to identify participants, and qualitative feedback from students and staff, only the quantitative data is presented here. The study received ethical approval from the (details to be inserted).

Pre- and post-levels of subjective well-being and resilience were collected using the Warwick-Edinburgh Mental Well-being Scale (WEMWBS)[22] and The True Resilience Scale.[23] Both scales have been validated for use in this age group and the WEMWBS has been deemed suitable for use in evaluations of interventions in school settings.[24,25] The scales were also completed by the participants three months after the end of each programme. Three schools did not return third-round questionnaires.

Participants

Staff members in each school identified students who they thought would benefit from the programme. The decisions to refer were taken either by an individual staff member or a team of professionals including the pastoral team or staff members who had a role in mental health, special education, or well-being. Inclusion criteria included lack of self-esteem, being vulnerable, self-harm or poor attendance, bullying or difficulty in integration, the student's family situation such as parents' separation, being young carers, poverty and abuse. Finally, students were referred who were already in receipt of other support services or on a waiting list for other services such as CAMHS.

Sample characteristics

Ninety-one students consented to take part in the evaluation. Across the 10 schools, between 2 and 15 students completed the pre-intervention questionnaires. The age range of participants was 13–16 years, with n = 29 (32.2%) aged 13 years, n = 40 (44.4%) aged

14 years and n = 20 (22.2%) aged 15 years. One student preferred not to give their age, and one gave no response. Twenty-six (29.2%) of the sample identified as male, and 60 (67.4%) identified as female, and one person identified as transgender (1%), two students preferred not to specify their gender, and two students gave no response. The workshops were open to students from year groups 9 to 11 (ages 13–16). The numbers in each year group were as follows: 39 (46.4%) were year 9 (age 13–14) students, 43 (51.2%) were year 10 (age 14–15) and 2 (2.4%) were in year 11 (age 15–16); seven students did not respond to this question. It is not surprising that fewer students were from year 11 as this is a year group facing important national exams and there would be additional pressures on this age group because of this.

Results

Well-being

As shown in Table 1 pre-intervention (T1), the mean score for subjective well-being using WEMWBS was 38.6 (SD: 9.01), range: 15–65, (n = 91). The scale can range from 14 to 70 with higher scores indicating higher levels of mental well-being; a score of below 40 is considered to indicate below average well-being.[19] In the sample pre-intervention, 67% (61/91) scored less than 40, with 19.8% (18/91) achieving a score indicating very low levels of well-being (that is below 32).

Post-intervention (T2), the mean score was 42.8 (SD: 11.2), with a range of 21–69 (n = 65). This represented a positive change in the mean score of 4.9. A change of three or more on the WEMWBS between pre- and post-interventions is considered to represent a meaningful clinical change.[22] Using the Wilcoxin Signed-rank test, the change in well-being was assessed and the effect size of significant differences was calculated using Cohen's d; the change was found to be statistically significant ($z = -3.774$, $P < 0.001$ with a moderate effect size of 0.3).

At three-month follow-up (T3), only 33 student questionnaires were returned by the schools, and the data were analysed to explore whether there was significant change in well-being from T2 to T3 for those 33 students. At T2, the mean score was 41.4 (n = 33, range: 21–68, SD: 11.5) and at T3 the mean score was 39.7 (n = 33, range: 15–63, SD: 12.8). This was higher than the mean score pre-intervention but demonstrates a reduction in well-being of 1.78 between T2 and T3. This change was not statistically significant and indicates that the improvement in well-being found immediately post-intervention was not sustained to a significant level at three-month follow-up.

Resilience

On the True Resilience Scale the mean score at T1 (n = 91) was 77.9 (SD: 20.4, range = 42–132). Scores below 125 indicate a low level of resilience, and scores between 125 and 145 indicate moderately low-to-moderate levels of resilience.[20] Post-intervention (T2), 64 students completed the True Resilience Scale, and the mean score was 84.8 (SD: 21.8, range: 48–140). The change in scores represents an overall improvement in the mean resilience score of 6.86, although the level of resilience remains low and indicated low levels of resilience. The data were investigated to determine whether the change was statistically significant. The Wilcoxin signed-rank test revealed a statistically significant increase in the Resilience Scale following the AoP programme ($z = -2.602$, $P < 0.009$ with a small effect size of 0.23).

At three months, follow-up only 30 True Resilience Scale questionnaires were returned, and the mean score was 85.2 (SD: 25.6, range: 36–134). This indicated a slight increase in resilience for these 30 students between T2 and T3; however, the change was found to be non-significant. A Friedman's test was carried out to determine whether the change in scores across pre-intervention, post-intervention, and follow-up were significant but this also failed to demonstrate statistical significance.

The results for the 64 students who completed the questionnaire at T2 indicated that resilience did significantly improve following the intervention albeit with a small effect size.

Discussion

As stated previously, there is some evidence that participating in AoP programmes has a positive impact on the mental well-being of adult participants. This study found that AoP in a school setting had a positive impact on the mental well-being and resilience of adolescents participating in the programme. There was a marked increase in the mean post-intervention score on WEMWEBS for well-being; although the mean well-being score had almost returned to base-line levels at three months follow-up, there was still a positive difference on the scale at this point indicating a subtle improvement in mental well-being remained. There was also a significant improvement in the resilience score post-intervention.

There is published research which reports on different forms of participatory art programmes used to promote health and well-being of children and young people.[6–9] A strength of this study is that it appears to be the first published study that reports on the effectiveness of an AoP programmes for children and young people, and furthermore it followed up outcomes at three months after intervention. However, there are limitations to be considered, for example, the programme was delivered in a school setting, and therefore, the degree to which the delivery of the workshops was supported by school staff may have affected its success and implementation, for example, some school staff were reported by the artist to engage more with the students than others. In addition, this as a relatively small sample, and there was no control group in the study, and as a result, it is difficult to assert the extent to which the improvements in well-being and resilience can be attributed to

Table 1
Well-being and resilience scores at T1, T2 and T3.

Scale	Mean score	SD	Range	Significance (Wilcoxon signed-rank test)
WEMWBS (T1) n = 65	38.6	9.01	15–65	$P < 0.001$ for T1 – T2:
WEMWBS (T2) n = 65	42.8	11.2	21–69	significant improvement in well-being
WEMWBS (T2) n = 33	41.4	11.5	21–68	N.S. for T2 - T3
WEMWBS (T3) n = 33	39.7	12.8	15–63	
TRS (T1) n = 64	77.9	20.4	42–132	$P < 0.009$ for T1 – T2: significant improvement in resilience
TRS (T2) n = 64	84.8	21.8	48–140	
TRS (T2) n = 30	82.5	21.2	48–123	N.S. for T2 - T3
TRS (T3) n = 30	85.2	25.7	36–134	

WEMWBS, Warwick-Edinburgh Mental Well-being Scale.

the art activities or to other factors. It is possible that the presence of staff and a counsellor in the sessions or the dynamics of the group as they established relationships with their peers could also have had an impact on well-being and resilience. Future research such as a controlled trial would be useful to explore this further. Moreover, in the inclusion criteria for selecting participants, some schools mentioned that they had considered whether the students selected were known to enjoy art. This could have had an impact on engagement and the impact on the students and potentially introduce an element of bias into the findings. It is also important to report that when the participants were completing the questionnaires there were times when the staff present were asked to explain the meaning of some words, for example 'optimistic'. This has implications for all research because, although tools are said to be validated for certain age groups, literacy and reading age also need to be taken in account.

In summary, this is the first study which specifically reports data from an AoP programme for children and young people and suggests that AoP can have a significant impact on the mental well-being and resilience of adolescents aged 13–16 years old. A recent review by Fancourt et al.[10] reported that the evidence base for arts and well-being in young people is strong and can be trusted to guide policy developments in most situations. They also identified that there are currently in the United Kingdom social prescribing schemes, which are introducing social prescribing interventions for children and young people. Whilst this study adds to the existing literature for use of the arts to enhance the mental well-being and resilience of children and young people, further research including qualitative studies is required to support the wider implementation of arts interventions as part of the social prescribing offer for children and young people.

Author statements

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Ethical approval

The evaluation was approved by the ARU Faculty Research Ethics Panel.

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Competing interests

At the time of the evaluation HB was a Trustee of the charity Arts and Minds but had no involvement in recruitment or data collection for the study.

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