



# EVALUATION REPORT

## Art on Referral: Remote delivery in primary and secondary care during the coronavirus pandemic

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July 2022

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# PROJECT SUMMARY

Between July 2020 and February 2021 Fresh Arts at Southmead Hospital and CreativeShift delivered remote arts on referral programmes to over 100 participants during the coronavirus pandemic. A referral pathway was developed with cultural organisations in Bristol, which began in secondary care, where people at Southmead Hospital could be referred to specific Art on Referral groups (for people experiencing chronic pain, chronic breathlessness or cancer). The pathway then continued into primary care and Art on Referral groups at community hubs, and then to 'move on' groups and art for wellbeing workshops at museums and galleries, such as the Arnolfini and MShed, Bristol.

The current report describes the impact of engaging with remote Art on Referral interventions which were funded by the Arts Council's Emergency Response Fund in the early stages of the pandemic. 65 people participated with the quantitative evaluation, 56 of whom took part in weekly online art workshops delivered through Zoom, and nine of whom participated in a postal art intervention due to lack of digital access.

Participants reported having significantly higher levels of wellbeing and feeling lonely less often after participating in the online workshops, but their satisfaction with friendships and relationships did not improve. Further, after making art in the interventions, they reported feeling more content, less anxious, more alert and energetic, and less lonely. Additionally, it was found that people who had the greater improvements in wellbeing across the course of Art on Referral programmes reported that while making art, they felt: connected with the group; had a reduction in anxiety and increased relaxation; and entered an absorbed, concentrated attentional state, focusing on the art making.

These results support the use of remote Art on Referral for supporting people's wellbeing in primary and secondary care, and suggest this occurs through multiple mechanisms: social bonding; anxiety reduction and 'the flow state', attentional absorption. It would be useful to collect more data with specific groups and specific health outcomes in future work (e.g., chronic pain) to examine how Art on Referral meets specific needs in these programmes.

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# BACKGROUND

## Fresh Arts at Southmead Hospital

Fresh Arts is the art programme for North Bristol NHS Trust (NBT), based at Southmead Hospital and runs a broad range of arts for health activities, exhibitions and programmes, including arts on referral. Established in 2007, Fresh Arts provides free access to a world-class art and design hospital programme. Fresh Arts receives strong support from the NBT's Board, which has helped to embed the arts and creativity within the culture of NBT. Fresh Arts works with Southmead Hospital Charity (SHC) to provide an enhanced hospital experience through an innovative art and design programme, putting creativity, health and wellbeing at the centre of care. Annually, Fresh Arts works with more than 20 local artists to deliver over 650 hours of performances, workshops and bedside activities to more than 20,000 patients, visitors, and staff.

Fresh Arts on Referral (FAoR) is provided to patients in Southmead Hospital. Through creative writing, print making, visual art and poetry, FAoR aims to support patients with chronic long-term illness to better self-manage their condition. FAoR aims to alleviate symptoms and promote self-care through improving symptoms of stress, social isolation and loneliness, boredom, pain, anxiety, and depression.

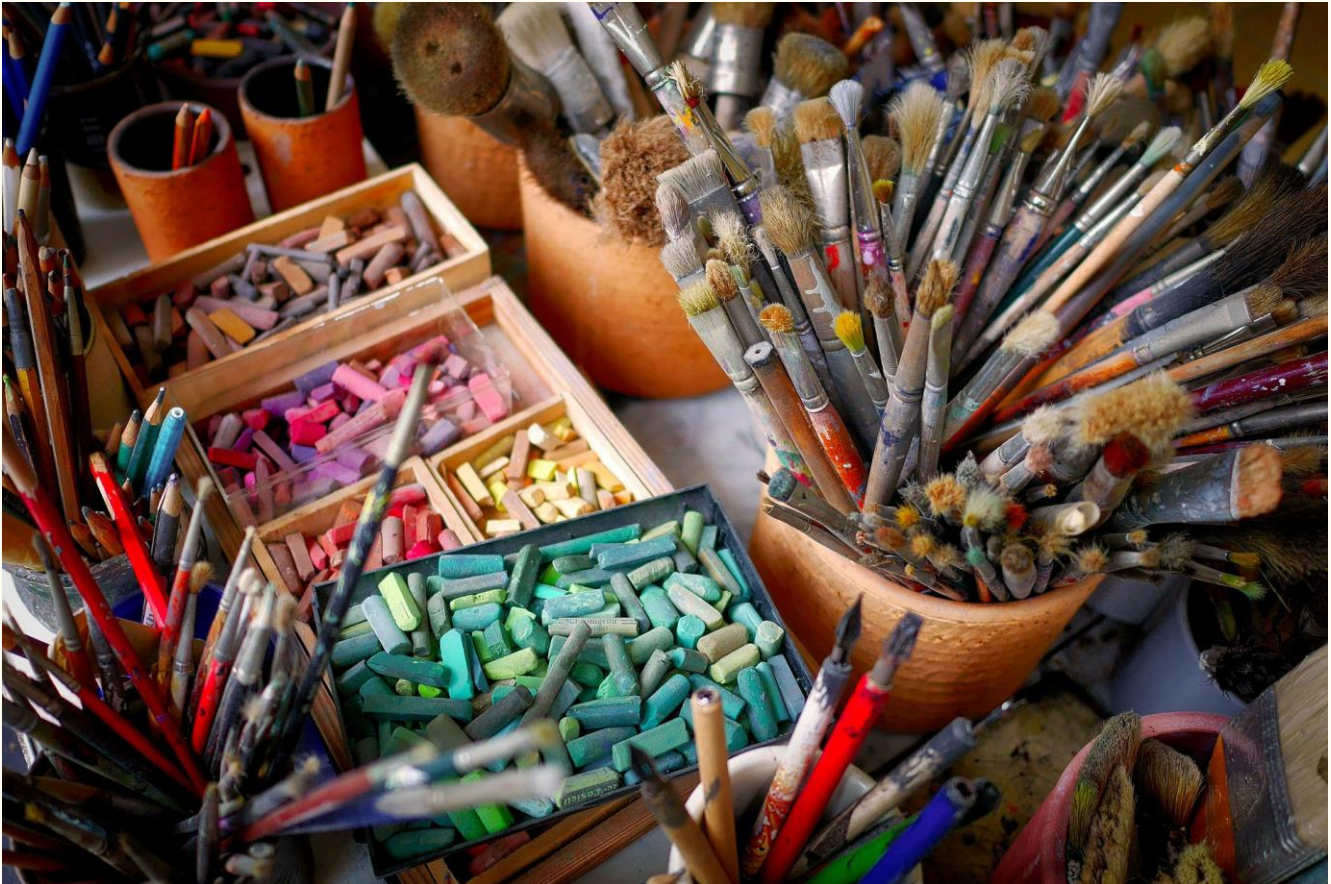
For patients to continue to experience and practice the arts as part of their lives, after involvement with arts on referral programmes, FAoR relies on community partners to provide a full arts-on-referral (AoR) pathway, working with CreativeShift.

## CreativeShift

CreativeShift is a leading provider of AoR in Bristol for adults who are experiencing isolation and mental health challenges (in particular low to moderate anxiety and depression). CreativeShift works with over 500 direct and indirect beneficiaries annually. As well as referrals from Fresh Arts, participants are also referred to CreativeShift by organisations who work with adults with mental health issues (including Social Prescribers and General Practitioners), who wish to have additional support through engaging with creative activities (Holt, 2020). CreativeShift has important



partnerships with cultural organisations in Bristol, including Bristol Museum Service (where a community ‘move-on’ group is hosted), and the Arnolfini (where community art for wellbeing workshops are hosted); which enables Fresh Arts and CreativeShift to collectively extend the cultural pathway for participants on their programmes.



## Aims of the interventions

The project was funded by the Arts Council, through their Emergency Response Fund (Project Code: ORGR-00252711). The funding enabled Fresh Arts and CreativeShift to offer six months of regular creative activities to isolated people with long term chronic health conditions. These were offered remotely, at a time when participants had been advised to socially isolate. People could take part from their own home, using virtual platforms such as Zoom and WhatsApp. Activities were planned to be delivered in accordance with the participants’ ability to access to new technologies with help, support and training provided to access the sessions.

Our patients had reported feeling increased anxiety and stress as a result of social distancing in April 2020. Their lives have been structured around medical appointments/routines; they may experience

periods of hospitalisation, treatment, poor mental health, addiction, domestic violence, stress or depression. All of our patients were advised to self-isolate and as a result, had described feelings of loneliness, boredom and for some, depression. We hoped that a virtual AoR programme would give them structure, the chance to express themselves creatively, to see things differently through arts activities, motivation, enjoyment and some social connection, which could help to improve their wellbeing.

Through FAoR patients were referred to art workshops in three groups, those who were: experiencing cancer; living with chronic pain; and living with chronic breathlessness. Programmes of creative arts workshops ran for two hours a week for six weeks (using visual arts or creative writing), run by experienced professional art for health facilitators. Referrals were further made to community Art on Referral programmes, through CreativeShift, for patients who have previously undertaken these programmes but were now isolated because of their condition. It was further hoped that this pathway would help them to access an ongoing programme of extension activities, through partnerships with cultural venues, leading back into activities in the community when lockdown restrictions eased. At the end of programmes, participants were given the opportunities to exhibit their work at high profile local venues, such as the Arnolfini, Bristol Museum and in the dedicated art gallery spaces at Southmead Hospital.

In summary, the interventions aimed to help people cope with their health conditions, improve their wellbeing and strengthen their social support networks and build pathways to increase their cultural capital and engagement with cultural venues in Bristol.

## **Background to Art on Referral**

Art on Referral is a form of social prescribing, involving referrals to visual arts programmes (rather than to broader activities such as nature walks or cookery classes) (Crone et al., 2018; Holt et al., 2022; van der Venter & Buller, 2015). Social prescribing occurs when health professionals signpost people to community resources and groups with the hope that engagement with these will improve their psychosocial wellbeing. Social prescribing is offered for various reasons: psychosocial (e.g., social isolation); mental health (e.g., low to moderate levels of stress, anxiety or depression); and





*Figure 1: 'Crumpled paper' activity from Art on Referral groups*

physical health (e.g., chronic pain or illness). It recognizes the social cultural determinants of health, for instance, the role of social isolation in stress, anxiety and depression (Fixsen & Polley, 2020).

NHS England aim to extend the provision of social prescribing in their Long-Term Plan (NHS England, 2019), not only to improve patient wellbeing but also to reduce the burden on primary care. It is estimated that one fifth of patient visits in primary care are due to psychosocial factors (Fixsen & Polley, 2020). However, it is also possible that social prescribing could reduce the burden in secondary care. It is hoped that social prescribing can reduce surgery visits and even medication use (Drinkwater et al., 2019) and that it will help to reduce *future* burden on the NHS, it being predicted that health care costs associated with stress, anxiety and depression will have risen exponentially by 2026 (Fleischer & Grehan, 2016).

The research on Art on Referral (or Art on Referral) consists of several observational studies of Art on Referral programmes in primary care (e.g., Crone et al., 2018; reviewed in Holt, Matthews & Elliot, 2022). Most of this research has used pre-post evaluation designs, where the wellbeing of participants has been measured at the start and end of Art on Referral programmes (using the Warwick-Edinburgh Mental Wellbeing scale; Tennant et al., 2020). Overall, this suggests that Art on Referral can help to improve the wellbeing of participants, with significant increases of wellbeing being reported (Crone et al., 2018, 2018; Holt, 2020; van der Venter & Buller, 2015) (with mean starting levels of 38, rising to 44 to 46). Further work has also reported a significant decrease in symptoms of anxiety and depression across the referral period (Sumner et al., 2021). Tracking the mood of participants while art making has indicated that participants who relax most in the art workshops have the greatest improvement in wellbeing across Art on Referral programmes. However, qualitative work gives further insight into the participants' own experiences of these interventions.

Qualitative research on Art on Referral suggests that participants find that programmes have meaningful impacts on their health and wellbeing (e.g., Stickley & Hui, 2012; Redmond et al., 2019). Participants have described the importance of the 'safe space' that arts on referral groups provide, where there is a supportive and non-judgemental attitude by the artist facilitator and group members, which enables creativity, play and exploration. They report benefitting from the social connection made with others in the group, developing friendships and a sense of connection to



others (Daykin et al., 2020), as well as increased confidence, self-esteem and identities of ‘being an artist’ (rather than ‘being a patient’). Overall, this body of research supports the benefits of engaging with arts on referral for health and wellbeing, although further research is required to understand its impact for specific groups and health conditions (e.g., for managing pain or chronic breathlessness).

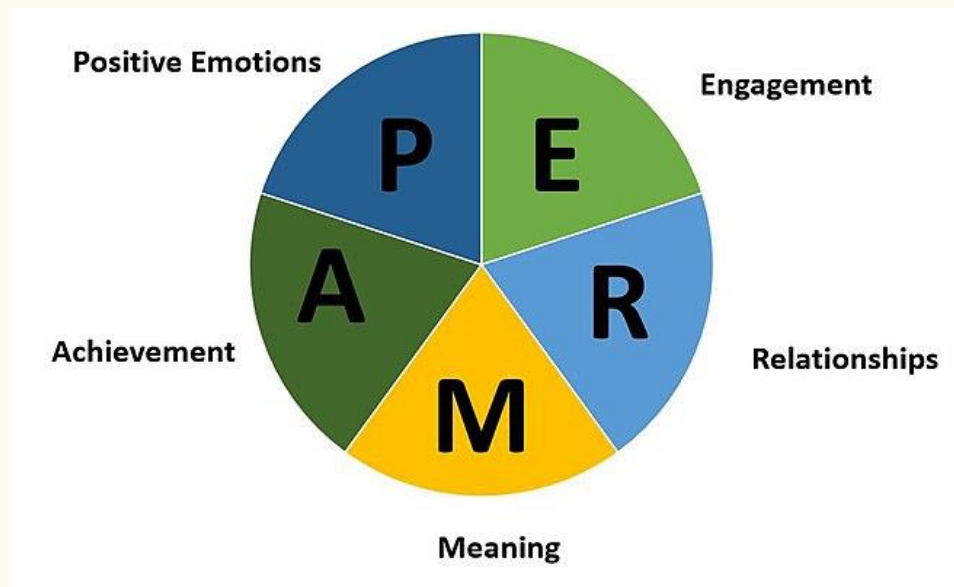
## Background to the evaluation

This quantitative evaluation aimed to explore the impact of the arts interventions on the wellbeing and social connection of participants, focusing on changes in subjective wellbeing and loneliness over time, using established psychometric measures (such as the Warwick Edinburgh Mental Wellbeing Scale and the Direct Measure of Loneliness).

Psychological wellbeing is a generic term indicating satisfaction with one’s life, happiness, and resilience in relation to life events, that is assessed through self-report questionnaires that ask about satisfaction with various aspects of one’s life. Various models of the core components of subjective wellbeing exist. For example, Seligman’s (2011) PERMA model includes: 1) experiencing positive emotional states in everyday life, such as hope, joy, love and gratitude; 2) engagement in activities, involving getting deeply involved and absorbed in meaningful activities in everyday life (getting into states of ‘flow’); 3) positive relationships and interactions with others (e.g., partners, friends, family and colleagues); 4) A sense of purpose and meaning in life, of value and worth (whether political, spiritual or occupational); and 5) a sense of accomplishment, of self-efficacy, working towards and reaching goals in everyday life.

Previous research on Art on Referral has used the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS), a global measure of subjective wellbeing that includes questions about positive moods in daily life, positive relationships with others, feeling useful, and being able to think clearly and solve everyday problems (e.g., Crone et al., 2018; van der Venter & Buller, 2014; Holt, 2020). As we have seen, this research has consistently reported that the wellbeing of participants has significantly increased from the start to the end of arts on referral programmes. To build on this previous research, the current evaluation assessed the subjective wellbeing of participants at the beginning and end of the art-on-referral programmes, using the same measure of wellbeing (WEMWBS). However, further measures were included, assessing both specific outcomes relating to experiences

of health symptoms (pain and breathlessness) and loneliness, and measures to gain more understanding of processes of change (through changes in mood, attention and social connection in the workshops).



Although participants are often referred to Art on Referral programmes for specific health conditions, there is little research examining whether programmes help participants to manage their health symptoms. Evaluation reports for pilot programmes have reported a meaningful increase in WEMWBS scores for cancer and chronic pain groups (Crone et al., 2018b; Willis Newson, 2019). For example, the Flourish Art on Referral programme for adults experiencing or recovering from cancer reported that participants had significantly higher wellbeing scores and lower depression and anxiety scores at the end of the programme (Crone et al., 2018b). However, no work has examined the impact of programmes on health symptoms specifically and further work on the efficacy of Art on Referral for specific referrals is required. In the current evaluation, for the chronic pain and breathlessness groups additional measures were included, which measured both the severity of symptoms and self-efficacy in relation to these (e.g., the extent to which participants felt that they could manage their pain symptoms in everyday life). It was hoped that this would provide further understanding of how Art on Referral could help with these key aspects of their experience.



Loneliness refers to a subjective appraisal of being unsatisfied with one's relationships with others and is associated with adverse health outcomes (Park et al., 2020). The impact of art-on-prescription on loneliness has not been previously assessed. Research on loneliness and social prescribing more widely has reported mixed outcomes, suggesting that more research is required (Pescheny et al., 2020). This focus is especially lacking, especially since social bonding has been hypothesized to be a mechanism for the efficacy of participatory arts programmes (Daykin et al., 2020) and since social prescribing has been described as a 'social cure' (Wakefield et al., 2022). The impact of the intervention on loneliness and social isolation was especially pressing at a time when participants were self-isolating during the coronavirus pandemic. For these reasons, the current evaluation included measures of loneliness at the start and end of the programmes, to assess both how often people felt lonely in their everyday lives (using the Direct Measure of Loneliness, recommended by the Office for National Statistics) and how satisfied they felt with their relationships and friendships (using a measure co-produced with service users with the Campaign to End Loneliness).

In addition to investigating changes across the programme with a pre-post design (subjective wellbeing, loneliness and severity of pain and breathlessness), the evaluation explored the immediate



impact of the programme activities on mood, attention and loneliness. It aimed to provide more understanding of processes of change by examining:

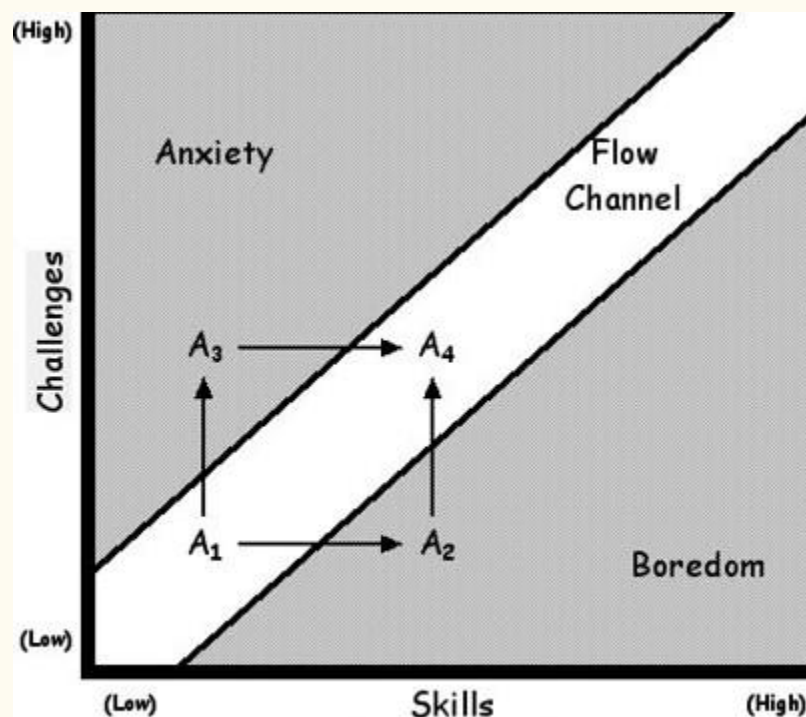
- 1) the role of absorbed attention and engagement (the flow state) in the art activities as a mechanism for improved wellbeing;
- 2) the role of positive moods when making art as a mechanism for improved wellbeing (building on Holt, 2020);
- 3) the role of social connection (reduced loneliness) as a mechanism for improved wellbeing.

This was done by tracking momentary feelings and experiences at the weekly art workshops. Participants completed a brief self-report scale, which was co-produced with participants at an Art on Referral move-on group at Bristol's MShed (Art Shed), at the beginning and at the end of each art workshop. This short scale assessed theoretically distinct aspects of mood and feelings of current loneliness at the start and end of the workshops, and in addition, asked participants how engaged they were in the activities at the end of the sessions (measuring the 'flow state'). Assessing immediate experience in this way is important because we often forget how we feel and how different experiences have affected us in the moment, especially after several weeks (Ben-Zeev, Young & Madsen, 2009). Asking about immediate experience (how you feel right now) can help avoid and reduce such biases with our recall (Dolan, Kudrna & Stone, 2017). Tracking repeated experiences also allows changes over time to be examined (e.g., across each week of an intervention).

While there have been debates about the structure of mood (sporadic emotional states that can last for minutes or hours) one system discriminates between three dimensions of mood: hedonic tone (e.g., happiness), tense arousal (e.g., anxiety) and energetic arousal (Matthews, Jones & Chamberlain, 1990). It is proposed that all three dimensions are different from each other and can interact with each other to lead to different moods (e.g., feeling happy and calm versus happy and excited). Hedonic tone assesses the extent to which people currently feel happy, joyous and content, rather than sad, unhappy and depressed. Tense arousal assesses whether people currently feel agitated, anxious or distressed rather than calm relaxed and serene. Energetic arousal assesses whether people currently feel alert, awake and full of energy compared with tired, sluggish and bored. All three dimensions of mood were assessed before and after art-making in the current study, using a

measurement tool designed for quick and repeated measurement of mood in everyday life (Wilhelm & Schoebi, 2007).

The final in the moment state to be measured was that of attentional absorption and engagement while art making, known as the 'flow state'. The flow state is a state of being highly absorbed in a task, so that one's attention is entirely focused on it, time passes quickly, and there is less awareness of self and reflective and critical thoughts about oneself (Csikszentmihalyi, 1996). It is a state of intrinsic motivation, characterized by enjoyment and immediate positive feedback from one's actions, where an activity is enjoyable and rewarding in and of itself. The flow state is thought to occur when there is a balance between challenges and skills, so that a person has the skills and confidence to engage in a task, without becoming too stressed (if the task is too challenging) or too bored (if the task is not challenging enough). The flow state is important to wellbeing, because engaging in tasks in which one enjoys can build skills and competencies, is enjoyable and increases momentary subjective wellbeing, leads to a sense of having a meaningful life, through engaging with meaningful activities (Holt, 2018). It can also be used to help distract one from and manage health conditions, such as anxiety and chronic pain, by temporarily focusing entirely on something else (whether that is knitting, painting, playing golf or music) (e.g., Reynolds & Prior, 2006).



From *Flow: The Psychology of Optimal Experience*  
by Mihaly Csikszentmihalyi (page 74)



## Aims of the evaluation

In summary, the evaluation aimed to assess whether involvement in arts on referral programmes improved general feelings of wellbeing in everyday life, feeling lonely less often and feeling more satisfied with relationships. It was also assessed whether people referred due to experiences of chronic pain and breathlessness found that attendance helped them to manage their health conditions. In order to develop understanding of processes of change, people's experiences during the art activities was tracked over time in order to evaluate whether: 1) art workshops helped to improve mood, social connection and absorption in the moment; and 2) whether people who had more positive experiences during art workshops (reduced anxiety, reduced loneliness and improved attention) were also people who had greater improvements in wellbeing across the time-frame of the interventions.



# INTERVENTION DELIVERY AND EVALUATION METHODS

## Groups

- **Fresh Arts on Referral for Chronic Pain**
  - A six-week-long intervention consisting of two hours per week (led by Ali Brown)
  - A fortnightly follow-on group (led by Julie Matthews)
- **Fresh Arts on Referral Chronic Breathlessness**
  - A 6-week-long intervention consisting of two hours per week (led by Rachel Davis):
  - Follow-on group, run fortnightly from November 2020 (led by Rachel Davis and Julie Matthews)
- **Fresh Arts on Referral Cancer patients**
  - A 6-week-long intervention consisting of 2 hours per week (led by Claire Williamson)
  - A fortnightly follow-on group (led by Claire Wiliamson)

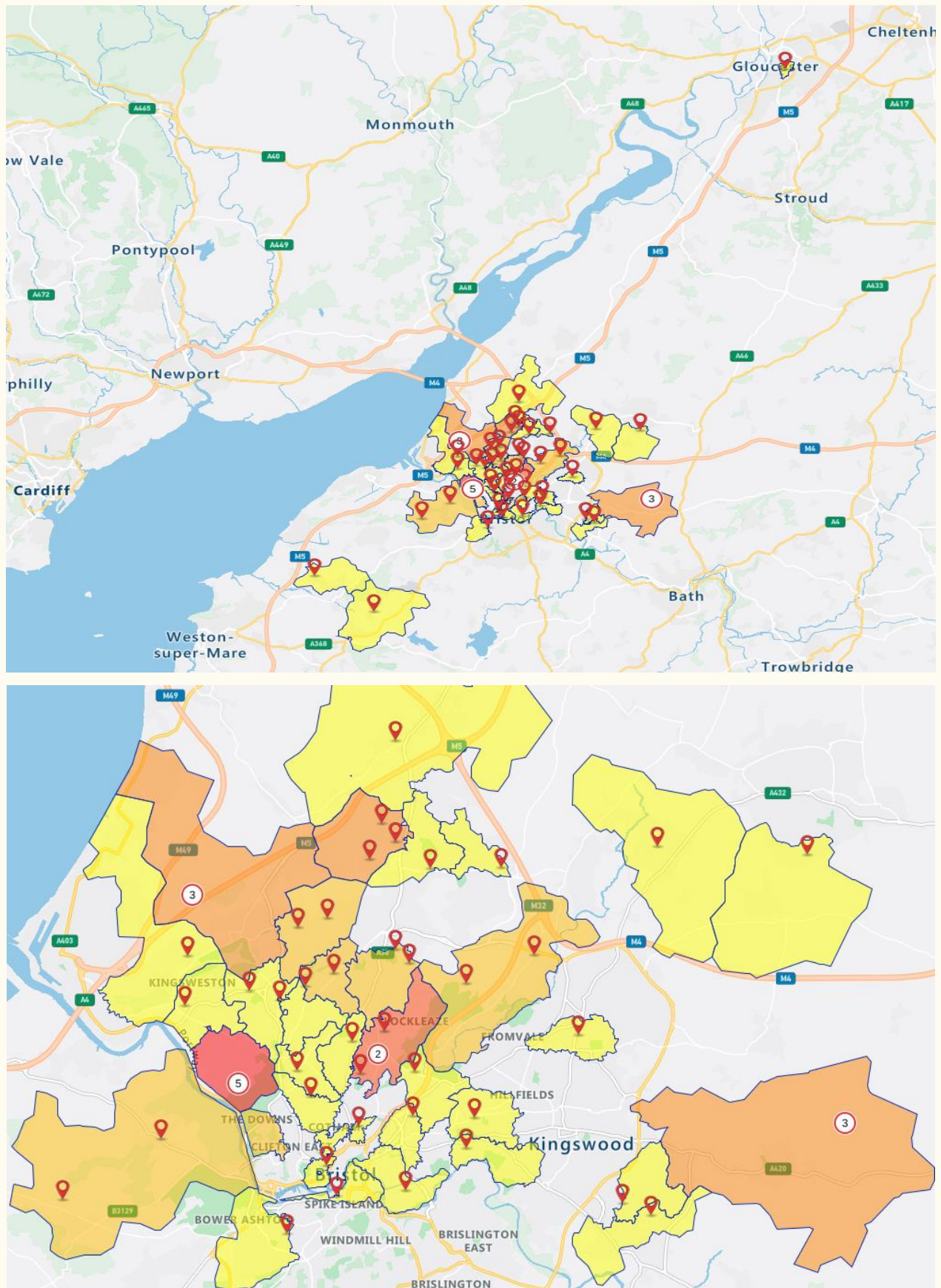
As part of the referral pathway, some participants continued with Art on Referral in community groups following their initial referral through Fresh Arts.

- **Community groups led by CreativeShift**
  - Knowle West Health Park (led by Rebecca Lines)
    - This group had both an online group and a postal group.
  - Southmead Greenway Centre (Zoom) (led by Julie Matthews)
  - Central Bristol Children's Centre (led by Barbara Disney)

## Participant demographics

### Online programmes

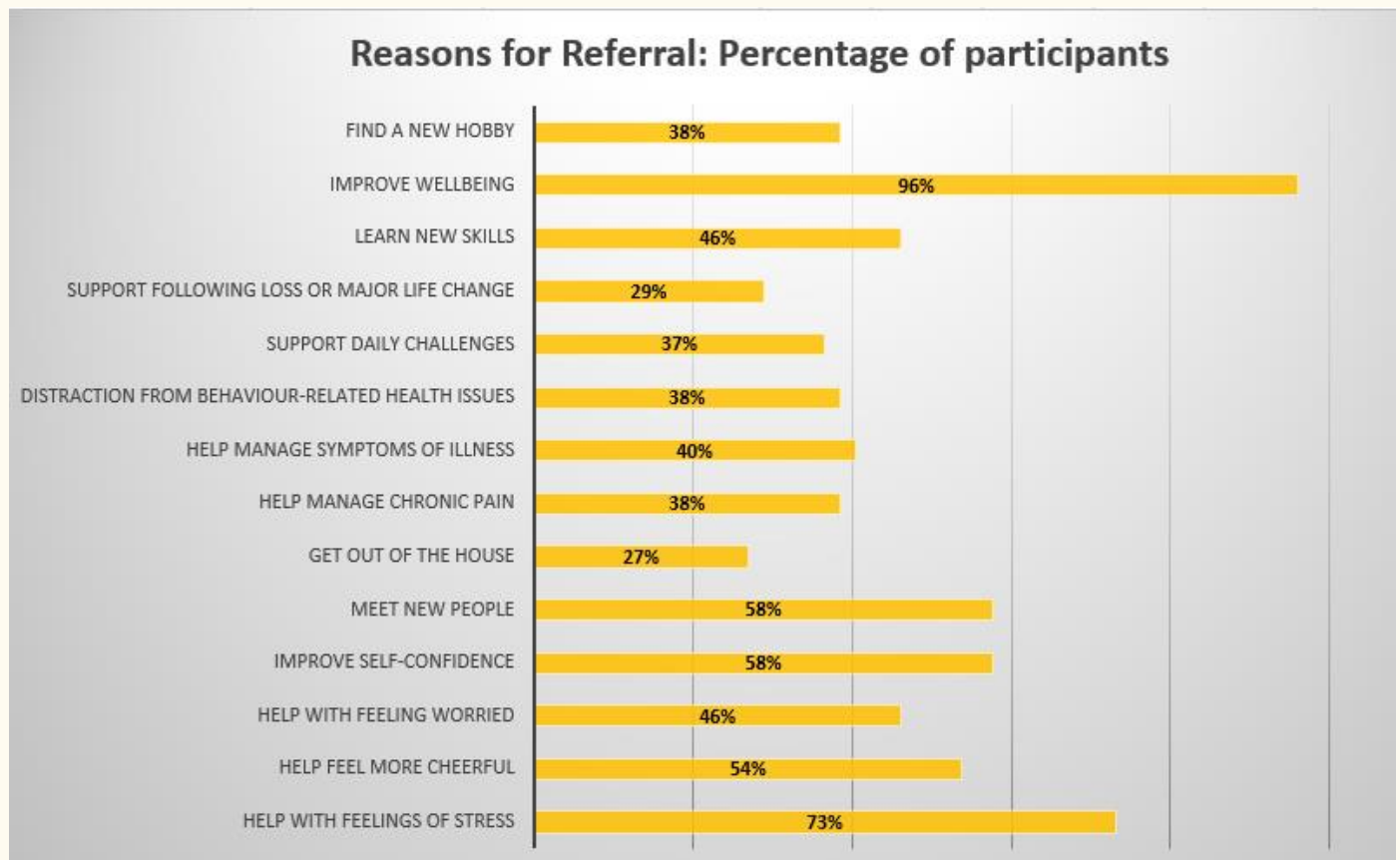
56 participants completed baseline measures, including questions collecting demographic data. The mean age of participants was 48.84 (standard deviation = 13.1; with a range of ages between 19 and 69). Fifty participants identified as female and 4 as male (2 preferred not to say). Thirty-four participants identified as heterosexual, 7 as bisexual, 3 as lesbian or gay (11 preferred not to say). 38 participants considered themselves to have a disability, which included: mental distress ( $n = 40$ );



**Figure 2: Heatmap of participants' postcodes for the online interventions**

using a walking-stick or wheelchair ( $n = 23$ ); learning difficulties ( $n = 7$ ); auditory impairment ( $n = 7$ ); and visual impairment ( $n = 3$ ). Forty-three participants identified as White British, 2 as Asian British, 2 as Black British, 1 as Iranian (6 preferred not to say). Twenty-one participants reported having a Christian faith, 17 having no religion, 1 Buddhist, 1 Muslim, 1 unsure, and 5 reported having another faith (8 preferred not to say). In terms of employment, 28 reported being unable to work, 9 retired, 5 working part-time, 4 unemployed, 2 stay-at-home parent, 1 working full-time (3 preferred not to say). In addition, 8 participants reported being a carer, 11 reported having dependent children and 9 cared for an adult with a disability or long-term condition.

Analysis of Post Codes showed that participants lived in a range of locations across the South West, ranging from Gloucester to Somerset, but were predominantly from the Bristol area, especially Southmead and Lockleaze (as illustrated in Figure 2, a 'heatmap', where 'hotter' colours indicate more people from that postcode area).



**Figure 3: Participants' self-reported reasons for referral to Art on Referral programmes**



## Postal programme

Nine people took part in the postal intervention (5 females and 4 males, aged between 18 and 71, with an average age of 44). Participants were predominantly from postcodes in the South East of Bristol: BS4, Knowle and Brislington ( $n = 5$ ); BS14, Whitchurch ( $n = 2$ ); and BS34, Filton ( $n = 1$ ).

## Reasons for Referral

Participants reported numerous reasons for referral to the arts programmes, the most common being to improve wellbeing (96%) and to reduce stress (73%), but further reasons included help to manage chronic pain (38%) and to provide support following loss or a major life change (29%). Most participants reported multiple reasons for referral, the average number being 7 (ranging from 2 to 13, out of a possible 14 reasons provided), as illustrated in Figure 3.

## Delivery of interventions and evaluation

Participants were referred to the art interventions by GPs, health professionals in primary and secondary care, link workers and other community partners. Firstly, the Fresh Arts Manager, then the artist facilitators made contact with participants and invited them to the art programme and spent time throughout the programme checking in on them and inviting them to weekly workshops.

## Online interventions

All workshops were run through Zoom due to coronavirus restrictions. The transition to Zoom was facilitated through various methods to support participants with different needs, including phone calls, texts, emails and WhatsApp groups. Fresh Arts ran Zoom taster sessions and one-to-one support, where necessary, to support patients to use the technology and get used to meeting as an 'online' group, including discussions of boundaries and housekeeping. Participants were emailed activity sheets to help facilitate the sessions (e.g., one activity, the crumpled paper activity, was shared with the community more widely, on the Arnolfini website:

<https://arnolfini.org.uk/app/uploads/2020/05/Arnolfini-activity-sheet-cS-crumpled-paper-activity-Your-art-on-prescription-for-today-is-%C5%A0.pdf>). Participants took part in the art making activity

together through Zoom, led by the artist facilitator and working in small groups, of 4 to 8 people. At the start of workshops participants had a 'creative check in'. They completed the state mood scales at the start and end of the session through being sent links to them on an online survey tool (Qualtrics).



Participants from Fresh Arts were sent art boxes of materials so that they had all of the equipment that they required to take part in the activities each week from home.

## Postal programme

The postal intervention took place across five months, in which participants drew part of a shared image, in four stages, following the 'exquisite corpse' model (for example, in week one, all participants completed a head of a figure only). Participants spoke regularly with the artist facilitator and were sent letters at the outset and letters with hand drawn instructions and the next piece of artwork to continue, by the artist facilitator. Partially completed artwork was posted between participants (via the artist). This programme was designed for people who had no internet access and/or barriers to attending Zoom groups (such as high levels of anxiety). At the end of the programme participants were given a printed copy of the final pieces of artwork and invited to an exhibition of the art at the Arnolfini art gallery (<https://arnolfini.org.uk/whatson/exquisite-corpse/>).

## Evaluation method

All participants were invited to take part in the evaluation by artist facilitators, and were given a participant information form to read and keep, which informed them about the evaluation, ethical considerations and data protection, and explained how the data would be used and how they could withdraw it if they wished to. All participants in the evaluation gave informed consent for their data to be used for evaluation purposes. All data was collected anonymously and was cross-referenced across time points with a unique code, which participants answered on each form by responding to two questions with memorable answers. The evaluation was given ethical approval by the University of the West of England's Ethics Committee (Reference Number: HAS.17.07.197).

For the online intervention, the evaluation was also conducted online. Participants completed wellbeing and loneliness measures (and measures about health symptoms where appropriate) at the start and end of the Art on Referral programme. Participants were sent links to these forms by the artist facilitators. Participants also were invited to complete state questionnaires before and after each art workshop. Links to these state questionnaires were sent to participants as text links before and after the online sessions.





**Figure 4: Examples of participants' artwork from the 'exquisite corpse' postal intervention**

For the postal intervention, each participant had a paper evaluation booklet, in which they completed baseline and post-programme wellbeing measures, as well as the state measures for each art activity. They completed the mood measure before and after engaging with art, assessing immediate feelings of mood (anxiety, contentment, and alertness), and completed the flow state scale after making art.



The booklet also had space to engage in a ‘colour swatch’ activity to draw and write about how they felt before and after art making (designed by Rebecca Lines).

## Psychometric measures

### Wellbeing

**Warwick Edinburgh Mental Wellbeing Scale, WEMWBS** (Tennant, Hiller, Fishwick, et al., 2007). A 14-item scale enquiring about psychological wellbeing over the previous two weeks, including feeling connected to others, self-esteem, experiencing positive affect and clarity of cognition. The scale has excellent psychometric properties and is responsive to change (a minimum ‘meaningful change’ being one of 3 points across measurement points) (Maheswaran et al., 2012; Putz et al., 2012). A score of 40 or below has been interpreted as indicative of probable depression, and 44 or below of possible depression (Bianca, 2012; Trousselard et al., 2016).

### Social isolation

**Campaign to End Loneliness Measurement Tool, CtELMT** (2019). This scale has been co-designed with a range of groups with the aim of producing a scale that uses appropriate and positive language to reduce distress or embarrassment when responding to items. It is a three-item scale with a 5-point response scale from strongly agree to strongly disagree that asks about satisfaction with social connection and relationships: 1) “I am content with my friendships and relationships”; 2) “I have enough people I feel comfortable asking for help at any time”; and 3) My relationships are as satisfying as I would want them to be”. Possible scores range from 5 to 15, where people with scores of 5 to 8 are thought to unlikely to be experiencing loneliness, and people with scores of 12 to 15 to be experiencing intense loneliness.

**Direct Measure of Loneliness, DMoL** (Office for National Statistics, 2018). A single item measure of loneliness with a five-point response scale, ranging from “often/always” to “never”: “How often do you feel lonely?”.

## Chronic pain

**Pain Self Efficacy Questionnaire (PSEQ-2)** (Briet et al., 2014). A two-item measure of one's confidence that one can achieve one's goals in life despite pain. The items are: "I can still accomplish most of my goals in life, despite the pain" and "I can live a normal lifestyle, despite the pain". It has a six-point scale from "Not at all confident" to "completely confident".

**PEG Scale Assessing Pain Intensity and Interference** (Pain, Enjoyment, General Activity) (Krebs et al., 2009). A three-item measure that measures people's experience of the intensity of pain in the last week, as well as its interference with one's enjoyment of life and general activity. For example, "What number best describes your pain on average in the past week?" It has a ten-point response scale (e.g., from 'no pain' to 'pain as bad as you can imagine').

## Chronic breathlessness

**Breathlessness Self Efficacy Questionnaire.** This was based on the Pain Self-Efficacy Questionnaire (Briet et al., 2014). A two-item measure of one's confidence that one can achieve one's goals in life despite experiences of breathlessness. The items are: "I can still accomplish most of my goals in life, despite the shortness of breath" and "I can live a normal lifestyle, despite the shortness of breath". It has a six-point scale from "Not at all confident" to "completely confident".

**Breathlessness Scale Assessing Intensity and Interference.** This was based on the PEG scale (Krebs et al., 2009) and the Visual Analogue dyspnea scale (Gift & Narsavage, 1998; Johnson et al., 2010) to assess the intensity of breathlessness in the last week, as well as its interference with one's enjoyment of life and general activity. For example, "Indicate how much shortness of breath you are having now?" It has a ten-point response scale (e.g., from 'no shortness of breath' to 'shortness of breath as bad as you can imagine').

## Mood

**Short Mood Scale** (Wilhelm & Schoebi, 2007). A six-item scale, based on a three-factor model of the structure of mood, and longer versions of the scale, that include: hedonic tone (feeling happy and cheerful rather than sad or depressed); tense arousal (feeling anxious, tense and stressed rather than relaxed or calm); and energetic arousal (feeling active and energetic rather than sleepy and sluggish).

Each item was presented with a line between two 'opposites' (content versus discontent; unwell versus well; agitated versus calm; relaxed versus tense; tired versus awake; and full of energy versus without energy). This scale was designed to repeatedly sample individuals' mood and has been found to be reliable and sensitive to individual change.

### Flow state (absorption in art activity)

**The Flow Short Scale (FSS; Engeser & Rheinberg, 2008)** is a 10-item scale designed to measure phenomenological features of the flow state, including absorption in the moment, concentration, not being preoccupied with thoughts from the past or about the future, losing one's sense of self-consciousness and of time passing, and feeling a balance between the challenges of a task and one's own skills in relation to it. Items are responded to on a 7-point Likert scale and include "I am totally absorbed in what I am doing." The scale has excellent psychometric properties.

### State loneliness

A single item that has been used to measure loneliness in the moment: "How lonely do you feel at the moment?" with a visual analogue scale, where a slider can be moved from "not at all" to "very much", which has been used in previous arts for health research (Reissman et al., 2018).

The image shows two examples of visual analogue scales (VAS) used for mood assessment. Each scale consists of a horizontal line with a cross marker in the middle, and two colored markers at the ends representing opposite states. The left scale is for the start of a session, and the right scale is for the end of a session. Both scales include a date field, a personal number field, and instructions for how to use the scale.

**Start of session At this moment, I feel...**  
(Put a cross somewhere on each the line)

**End of session At this moment, I feel...**  
(Put a cross somewhere on each the line)

**Personal No:** [ ] [ ] [ ] [ ]

**Date:** [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

**Write the first 2 letters of your mother's first name. (e.g. Carol = CA)**

**Write your birth date (e.g. write '31' for 31 = May)**

**Start of session scales:**

- Tired (red square) ————— Awake (red square)
- Agitated (yellow triangle) ————— Calm (yellow triangle)
- Unwell (blue circle) ————— Well (blue circle)
- Content (red square) ————— Discontent (red square)
- Full of energy (yellow triangle) ————— Without energy (yellow triangle)
- Relaxed (blue circle) ————— Tense (blue circle)

**End of session scales:**

- Tired (red square) ————— Awake (red square)
- Agitated (yellow triangle) ————— Calm (yellow triangle)
- Unwell (blue circle) ————— Well (blue circle)
- Content (red square) ————— Discontent (red square)
- Full of energy (yellow triangle) ————— Without energy (yellow triangle)
- Relaxed (blue circle) ————— Tense (blue circle)



## EVALUATION OUTCOMES

### **Online programmes: Wellbeing and loneliness (*longer-term impact*)**

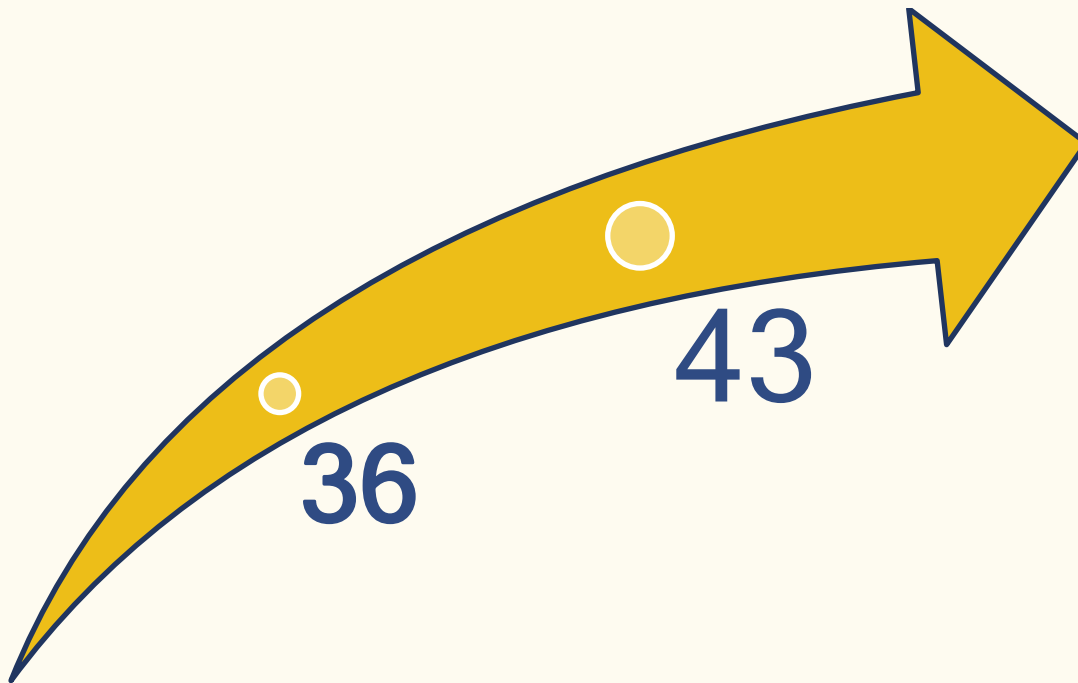
For the entire cohort, across the referral pathways, wellbeing and loneliness scores were compared from the start to the end of the art programmes. This provided a larger sample size for a more statistically powerful analysis. Multi-level modelling was used for this analysis since this is useful when participants make responses on repeated occasions, and for 'nested data' (in this case with repeated snapshots of wellbeing, mood, loneliness and the flow state 'nested' within the data for each participant).

The average (mean) WEMWBS score at the start of the programmes was 36. This average score is below threshold of 40, which is thought to be indicative of possible depression (Bianca, 2012;



Trousselard et al., 2016). At the end of the programmes the average (mean) wellbeing score of participants was 43. This average increase of 7 points is seen as a meaningful increase for a psychosocial intervention (above the minimum change of 3) (Maheswaran et al., 2012; Putz et al., 2012), and was statistically significant ( $F_{(1, 143)} = 26.05, p < .001$ ). This increase in wellbeing is commensurate with previous research on pre-post change in wellbeing across Art on Referral programmes, with increases reported between 5 and 8 points (Crone et al., 2013; Holt, 2020; van der Venter & Buller, 2015). However, it is worth noting that the average wellbeing score at the end of the programme is still relatively low and in the range of *possible* depression (the threshold for which is below 44) (Bianca, 2012; Trousselard et al., 2016).

**Figure 5: Wellbeing scores at the start and end of the programme**



Scores on the two measures of loneliness (CtELMT and DMoL) were also compared at the beginning and end of the arts programmes. Average scores (mean) on the Campaign to End Loneliness Measurement Tool (CtELMT), which assesses how satisfied people are with their relationships, were 8.55 (SD = 2.73) at the start and 8.08 (SD = 2.51) at the end, of the programmes. This difference in scores at the two time points was not statistically significant ( $F_{(1, 65)} = 1.44, p = .24$ ), but did indicate a slight shift towards increased satisfaction with relationships in daily life over the course of the programmes. Possible scores on the CtELMT ranged from 5 (completely satisfied with relationships) to 15 (indicative of intense loneliness). Hence, the scores of participants who were referred to art

groups suggest that, on average, they were experiencing moderate loneliness and a lack of social connection.

Scores were also compared at the start and end of the programme on the Direct Measure of Loneliness (DMoL), which asks how often people feel lonely (from 'always' (a score of 1) to 'never' (a score of 5)). The average (mean) DMoL scores at the start of programmes was 2.03, compared with 2.44 at the end of the programmes. This indicated a small reduction in experiences of loneliness across the course of the programmes, a small change that was statistically significant ( $F_{(1, 97)} = 3.91, p = .05$ ). However, these average scores still indicate the presence of loneliness in the participants' daily experience (even at the end of the programme).

*Significant improvement in psychosocial wellbeing and reduced feelings of loneliness were reported at the end of online art on referral programmes.*

In summary, engagement with the arts on referral programmes was associated with significant improvement in subjective wellbeing and with feeling lonely less often. However, satisfaction with relationships and social connections in daily life was not significantly different before to after the programme.

## Experiences of chronic pain and chronic breathlessness

For the chronic pain and chronic breathlessness groups only, additional measures were included at the start and end of programmes in order to evaluate whether attendance impacted upon lived experience of pain and breathlessness, both intensity (PEG), and feelings of self-efficacy at being able to manage daily activities alongside these experiences (PSEQ-2).

Fifteen participants from the pain groups completed measures, 5 completing measures both at the start and end of the programmes. Mean scores on the PEG were slightly higher at the start of the programme (22.01) than at the end (21.07), suggesting that, on average, people experienced slightly less intense pain, that interfered less with their enjoyment of life, in the final week. However, this

difference was not statistically significant ( $F_{(1,3)} = .28, p = .63$ ). There was a greater improvement for those in the chronic pain group on the measure of pain self-efficacy (PSEQ-2), suggesting improved confidence in achieving goals in daily life, despite pain, at the end of the art programme. The mean score on pain self-efficacy at the start of programmes was 3.68, increasing to 4.47 at the end of programmes ( $F_{(1,4)} = 3.21, p = .15$ ). Due to such as small sample size (of 5 participants) in this analysis, there is a lack of statistical power, and hence a need to repeat this analysis with further participants to see if this improvement in experiences of chronic pain is reliable.

Five participants from the chronic breathlessness completed measures, however, none completed measures both at the start and end of programmes, hence data on intensity and self-efficacy in relation to experiences of chronic breathlessness was not analysed.

## Online programmes: Mood, attention and social bonding (immediate impact)

Multi-level modelling was used to track individual's changes in mood and feelings of loneliness before and after each online art workshop, across the six-week-long programmes.

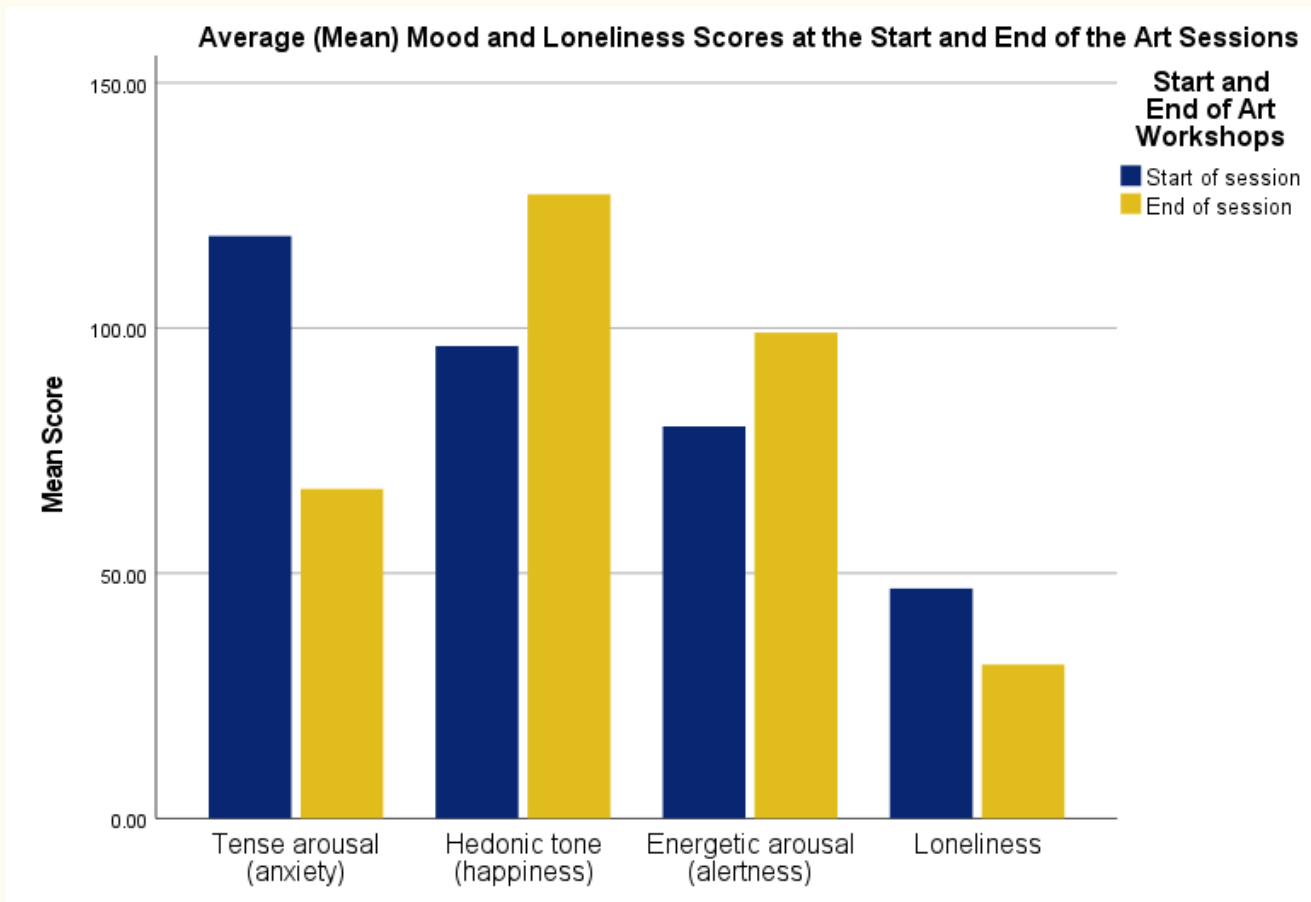
### Loneliness

People reported feeling less lonely at the end of the workshops than at the start. The average (mean) score at start of art workshops was 51.72 (on a sliding scale from 0 [no loneliness] to 100 [very lonely]). The average (mean) loneliness score at the end of art workshops was 35.89. This difference was statistically significant  $F_{(350,1)} = 91.81, p < .001$  (which means that there is 92 times more change in loneliness scores before and after workshops, than change attributable to 'error' or naturally occurring differences between people at both time points), and that this change in scores was highly statistically significant (given the number of data points), so that the chance of this being a fluke is below .1%). Hence, attending the online art workshops appeared to reduce immediate subjective feelings of loneliness.

## Mood

Participants reported feeling more content at the end of the workshops than at the start. The average (mean) score at the start of workshops was 93.6, compared with 125.9 at the end of the art workshops (scores ranged from 0 to 200, where 200 indicated completely happy and content). This was a highly statistically significant shift towards feeling happier;  $F_{(538,1)} = 159.74, p < .001$ .

Participants reported feeling less anxious at the end of the workshops. The average (mean) anxiety score at the start of the art workshops was 121.61, compared with an average score of 70.41 (where scores ranged from 0 to 200, where 0 indicated feeling extremely relaxed and calm, and 200 indicated feeling extremely tense and agitated). Again, this change in mood was statistically significant  $F_{(527,1)} = 289.91, p < .001$ , suggesting that the art workshops, on average, resulted in participants feeling calmer.



**Figure 6: Average (mean) mood (anxiety, happiness, alertness) and loneliness scores before and after making art in the workshops**



Finally, participants reported feeling more energetic at the end of the workshops. The average (mean) score at the start of art workshops was 82.37, compared with 107.45 at the end (scores ranged from 0 to 200, where 0 indicated feeling very sluggish and tired and 200 feeling very awake and energetic). Again, this change in mood was statistically significant ( $F_{(543, 1)} = 72.70, p < .001$ ).

Overall, these findings suggest that the art workshops significantly improved subjective experiences of positive mood. The largest improvement was for anxiety reduction, followed by improved contentment, and increased energy, but all aspects of mood were significantly improved after engagement with the online art workshops.

*Significant improvements in happiness and alertness and reductions in anxiety and loneliness were reported after the art workshops.*

## Flow

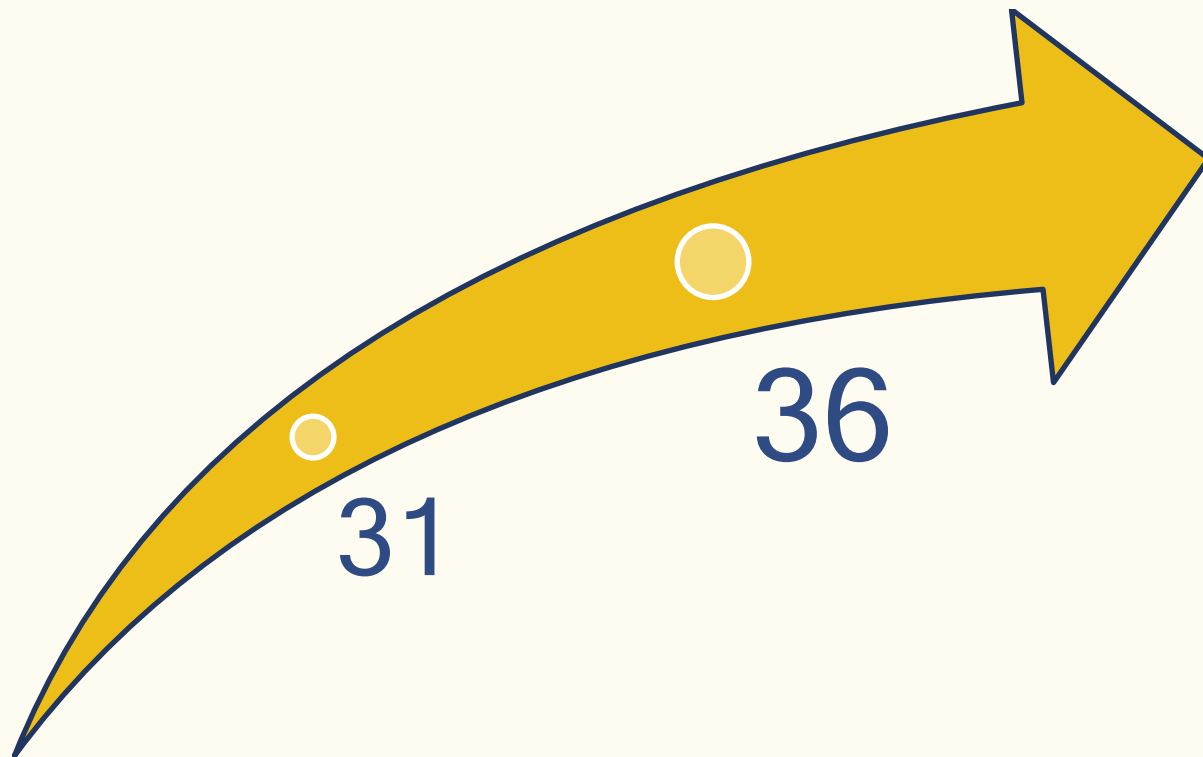
Participants reported at the end of the workshops on whether they had entered an absorbed state of attention in the session – the ‘flow state’. Average (mean) score at the end of the art workshop was 55.41 (SD = 8.70) (ranging from 30 to 70). The possible range of flow scores was between 0 and 70, hence we can see that, on average, people were mostly in an absorbed state at the end of the art workshops (above the mid-point of 35), agreeing with most items of the flow scale (e.g., being absorbed in the activity and losing track of time spent on it).

The ten-item flow scale was only completed by participants at the end of the art workshops, and hence its main use was to examine whether being in the flow state during the art workshops predicted longer-term changes in subjective wellbeing, and lived experiences of chronic pain and breathlessness, across the art programmes, which will be explored in a subsequent section.

## Postal programme: Wellbeing and loneliness (longer-term impact)

The average (mean) WEMWBS score at the start of the programmes was lower for the postal group, at 31.28 (with a standard deviation of 2.68, scores ranging from 18 to 43). Again, this average score is below threshold of 40, thought to be indicative of depression. At the end of the programme the average (mean) wellbeing score of participants was 35.94 (with a greater standard deviation, indicating a wider range of scores, of 11.83, scores, which ranged from 14 to 53). This average increase of 4.66 points represents a meaningful increase (above the minimum change of 3), but, due to the small sample size ( $N = 9$ ) this was not statistically significant ( $F_{(1, 8)} = 1.21, p = .303$ ). This final average score is still in the range of probable depression.

**Figure 7: Wellbeing scores at the start and end of the programme**



Average scores (mean) on the Campaign to End Loneliness Measurement Tool (CtELMT), which assesses how satisfied people are with their relationships, were 8.44 (SD = 1.74) at the start of the programme and 8.00 (SD = 1.41) at the end, of the programmes. This suggests that people in the

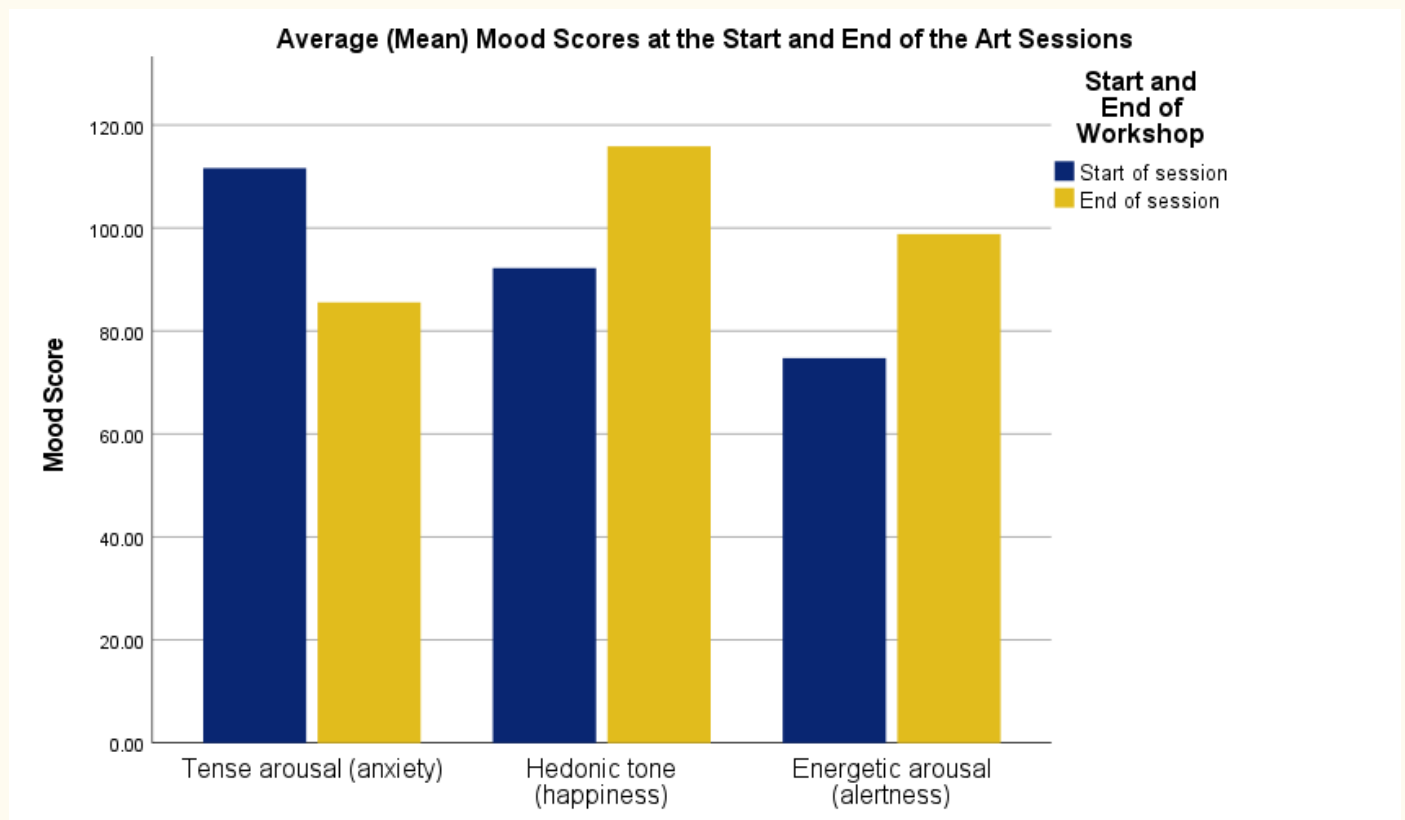
postal group felt slightly more satisfied with their relationships at the end of the programme. However, this change was not statistically significant, and with a small sample size, this analysis lacked statistical power ( $F_{(1, 8)} = .471, p = .512$ ).

## Postal programme: Mood and attention (*immediate impact*)

### Mood

The average (mean) score for contentment at the start of the art session was 92.23, compared with 115.86 at the end. This was a statistically significant shift towards feeling happier after making art ( $F_{(62,1)} = 14.76, p < .001$ ).

Participants reported feeling less anxious after making art. The average (mean) anxiety score at the start of the exquisite corpse exercise was 111.64, compared with an average score of 85.57 after making art. This reduction in anxiety, and increased reports of feeling more relaxed, was statistically significant ( $F_{(62,1)} = 12.06, p < .001$ ).



**Figure 8: Average (mean) mood (anxiety, happiness, alertness) and loneliness scores before and after making art in the workshops**

# Start of the art making

Week One	Week Two	Week Three	Week Four



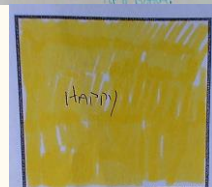
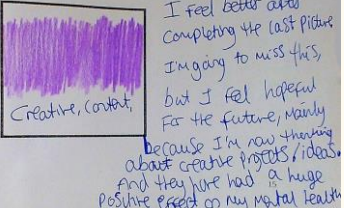
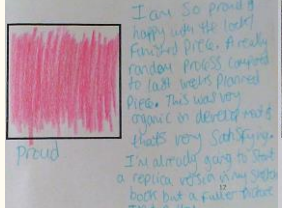
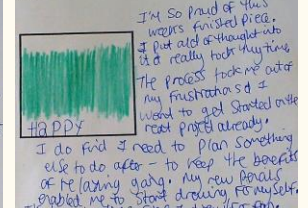
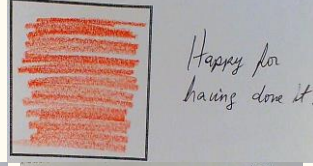
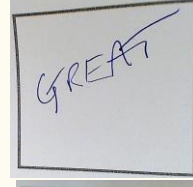
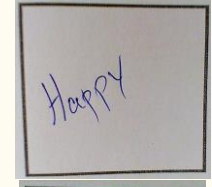
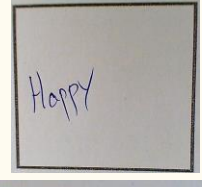
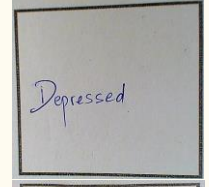
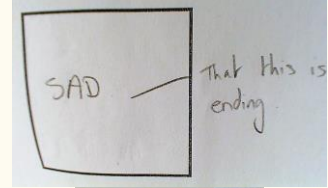
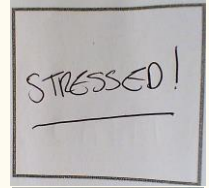
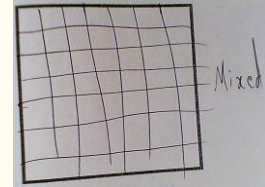
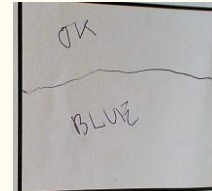
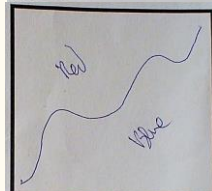
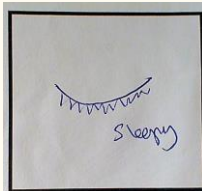
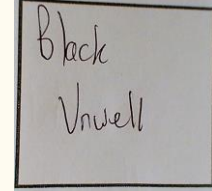
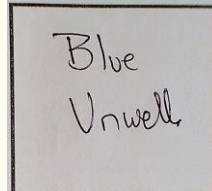
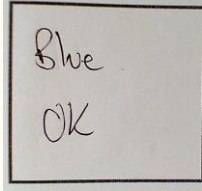
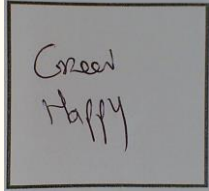
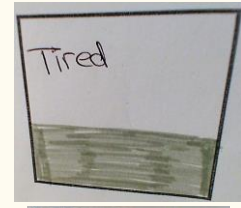
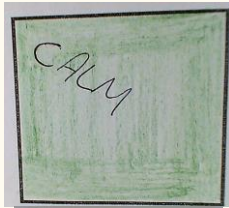
End of art making

Week One

Week Two

Week Three

Week 4



Finally, participants reported feeling more energetic after making art, with the average (mean) score increasing from 74.75 to 98.86. This increase in alertness was statistically significant ( $F_{(62, 1)} = 12.07, p < .001$ ).

### Flow

The average (mean) flow score at the end of the art workshop was 39.96 (SD = 12.23) (ranging from 15 to 60), which is above the mid-point of 35, suggesting that most people agreed with most items of the flow scale (e.g., endorsing being able to concentrate on, and be absorbed in the art activity).

### Colour swatch

Participants completed a 'colour swatch' before and after making art, describing how they felt and colouring in the box with a colour or pattern to describe this, if wished. These colour swatches are printed on the previous pages, with each participants' swatches in a row for each week at the start and end of art making. It can be observed that participants did not always report feeling better after making art, but, that more 'positive' words are used afterwards, for example the word 'happy' is used once at the start of art making and seven times after art making.

## Impact of mood, flow and loneliness during the art workshops on longer-term wellbeing

Thus far the evaluation of the arts on referral programmes has indicated that participants felt less lonely and reported higher levels of subjective wellbeing after participation in the programme, and that there were immediate improvements in subjective wellbeing after each art workshop (feeling calmer, happier, more alert and less lonely). However, an important aspect of the evaluation was to examine whether the immediate impact of participation in the art workshops impacted upon subjective wellbeing at the end the art programmes. Therefore, interactions were conducted with multi-level modelling, to assess whether differences in mood, flow and loneliness after art-making could predict who benefitted most from the Art on Referral programmes in terms of wellbeing being change.

The aim of this analysis was to explore processes of change that may lead to improved wellbeing through art interventions. The three main mechanisms to be explored were:

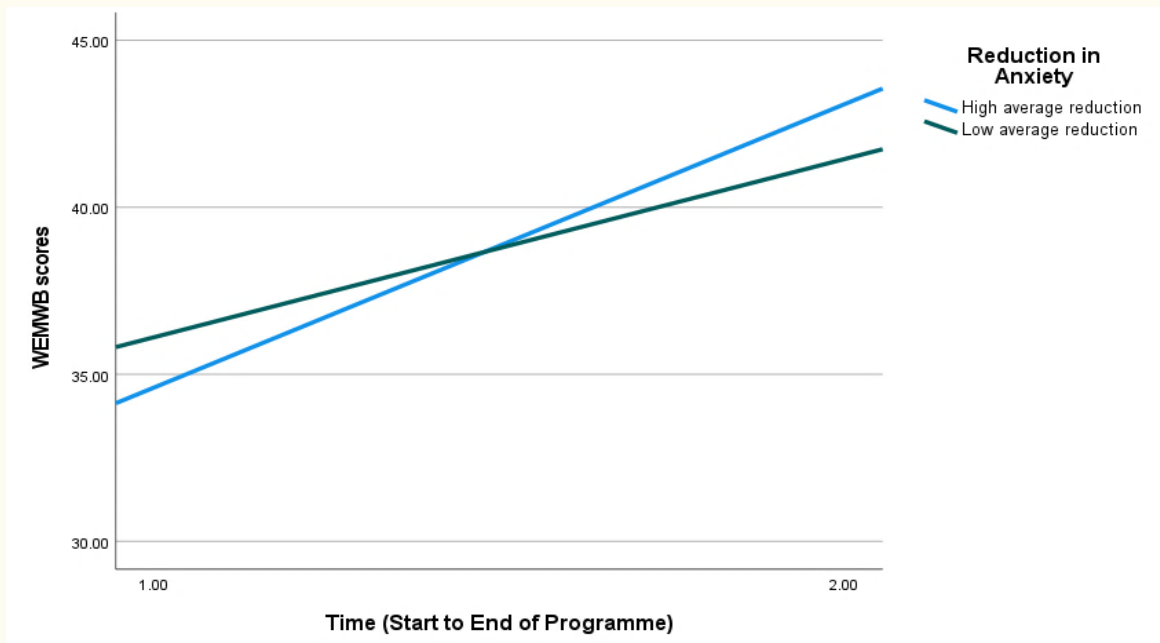
- **Attentional** (that entering an absorbed state of concentration in the process of art making improves wellbeing, increasing engagement and enabling distraction from health concerns)
- **Affective** (that engaging with art making can reduce anxiety and increase moments of subjective happiness)
- **Social** (that, for the online groups only, engaging with others, through Zoom sessions, while making art, can give moments of meaningful interaction with others that may improve wellbeing and a sense of social connectedness)

Data from both the online and postal interventions were examined collectively to examine whether changes in mood attention and feelings of loneliness (for the online intervention only) predicted wellbeing change. Multi-level modelling was used for this analysis, with wellbeing scores as the dependent variable and time across the programme (pre and post), change in anxiety, contentment, alertness, flow and loneliness across the workshops as dependent variables. Predictor variables were centered, following recommendations (Heck & Thomas, 2020).

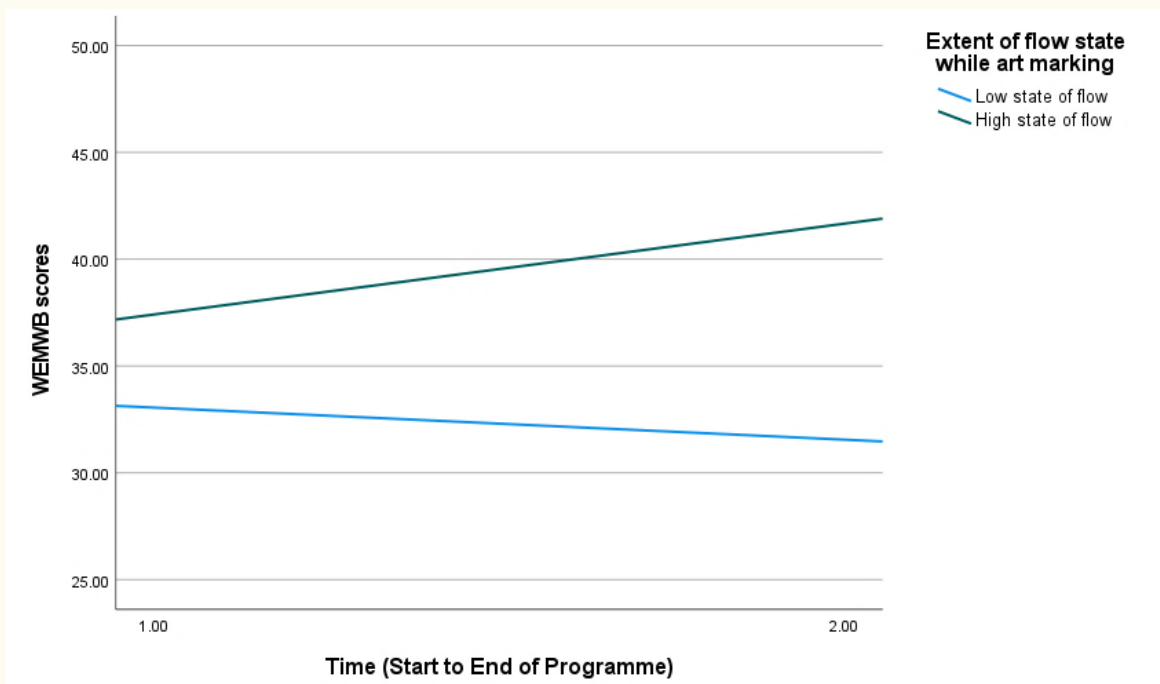
Attentional, mood and social aspects of immediate experience all were significant predictions of wellbeing change across the programme. This is important because it suggests repeated changes in experience brought about by engagement with the art making are linked with longer term wellbeing change (rather than wellbeing just changing over time). It also suggests that there are multiple mechanisms by which wellbeing change through Art on Referral groups occurs. Greater wellbeing improvement was predicted by: feeling less anxious after the art workshops ( $F_{(94,1)} = 4.26, p = .04$ ); feeling less lonely after the art workshops ( $F_{(65,1)} = 6.51, p = .01$ ) and being in the flow state whilst art making ( $F_{(80,1)} = 5.69, p = .02$ ). Wellbeing change was not significantly predicted by either feeling more alert or happy after artmaking (alert:  $F_{(90,1)} = .002, p = .97$ ; happy:  $F_{(90,1)} = 3.24, p = .08$ ).

Figures 7 and 8 illustrate these changes in wellbeing according to mood and attentional factors during the art workshops. In *Figure 9* it can be seen that participants who reported feeling more relaxed and less anxious after the art workshops have a steeper line (blue), indicating greater levels of improvement in wellbeing across the programme. In *Figure 10* it can be seen that participants who entered the flow state during art workshops (the green line) had an increase in wellbeing across the

**Figure 9:** Interaction plot showing the change in wellbeing across the programmes for individuals who had high (above 1SD) and low (below 1 SD) reductions in anxiety during art workshops (start to end)



**Figure 10:** Interaction plot showing the change in wellbeing across the programmes for individuals who had high (above 1SD) and low (below 1 SD) attentional 'flow' during art workshops (start to end)

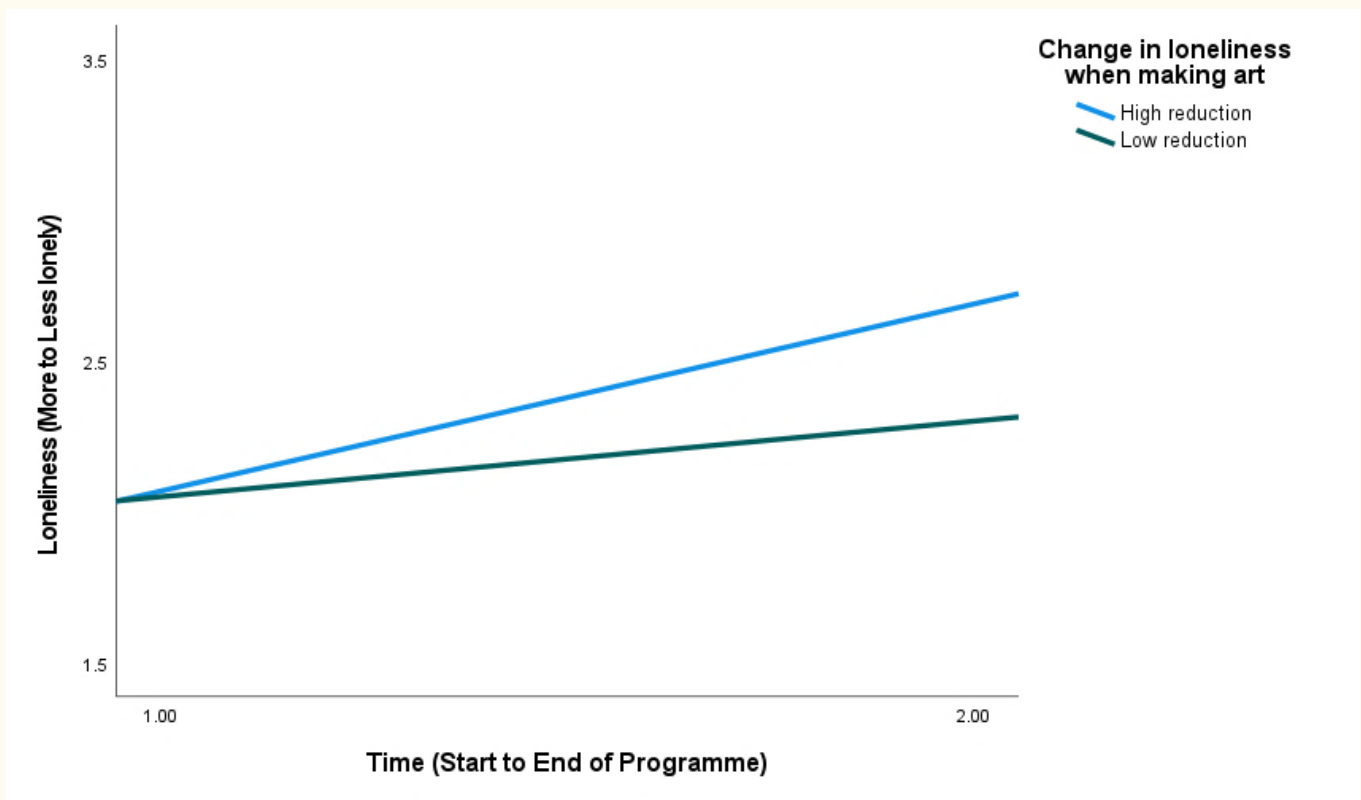




programme, while those who did not enter flow, or did so to a lesser degree, did not have an increase in wellbeing.

In addition, it was examined whether feeling less lonely (using the DMoL) after the art programme, was predicted by immediate feelings of feeling less lonely after engaging with the group art activities (for the Online groups only). There was a statistically significant effect, where state reductions in loneliness did predict a reduction in longer-term loneliness ( $F_{(47,1)} = 3.97, p = .05$ ). This is illustrated in *Figure 11*, where participants who had a high reduction in loneliness during art workshops have a steeper line (blue) indicating greater improvement in wellbeing across the programme.

**Figure 11: Interaction plot showing the change in loneliness across the programmes for individuals who had high (above 1SD) and low (below 1 SD) reductions in loneliness during art workshops (start to end)**



# SUMMARY OF FINDINGS

Overall, the quantitative analysis suggests that:

- Wellbeing increased across the online Art on Referral programmes, to a meaningful and statistically significant degree (rising from a mean score of 36 to 43)
- Wellbeing increased across the postal Art on Referral programme, to a meaningful degree (from a mean score of 31 to 36)
- Feelings of loneliness decreased to a statistically significant degree across online programmes
- Satisfaction with relationships improved across online programmes, but to a small degree that was not statistically significant
- For the pain group, participants reported feeling better able to manage their experiences of pain at the end of the programme (but the sample size was too small for meaningful statistical analysis)
- After taking part in online art workshops participants reported feeling less lonely (to a statistically significant degree)
- After taking part in remotely delivered art activities participants reported feeling more content, more relaxed and more alert and energetic (to a statistically significant degree)
- Wellbeing change across programmes was greater for participants who relaxed and felt less anxious during the art activities
- Wellbeing change across programmes was greater for participants who entered a state of absorbed concentration (flow) during the art activities
- Wellbeing change (and social isolation) across the online programme was greater for participants who felt less lonely after taking part in the workshops



# DISCUSSION OF THE OUTCOMES

## Wellbeing

Despite the challenging context and the remote delivery of Art on Referral, the wellbeing scores of participants in the online group increased significantly and more than three points (above which is considered a meaningful increase for an intervention) (Tennant et al., 2020). The mean scores before and after the online intervention (rising from 36 to 43) are similar to those of previous, in-person, Art on Referral programmes, which have reported mean increased from 38 to 44-46 (Crone et al., 2018, 2018; Holt, 2020; van der Venter & Buller, 2015). However, it is important to note that the final average score of 43 is still considered to be relatively low, a score of 44 or below being indicative of 'possible depression' (Bianca, 2012; Trousselard et al., 2016), and hence it is possible that participants on these courses still require further support or re-referral at the end of the programmes. It is notable, that the participants who took part in the postal intervention had lower wellbeing scores at both time points, and that, although, on average there was a meaningful increase in wellbeing scores (of five points) across the programme participants had scores in the range of 'probable depression' throughout, and this group, in particular appeared to need support, and may have found the postal intervention (if unable to attend online groups due to social anxiety, for example) a less invasive and accessible starting point onto the referral pathway. Despite wellbeing levels still being generally low in both groups, the wellbeing results support the efficacy of Art on Referral as an intervention to improve wellbeing. However, the long-term impact of the intervention is not known.

## Social bonding

An important aim of the Art on Referral programmes was to help participants who were socially isolating during the pandemic to connect with others and reduce feelings of loneliness. The average scores assessing the frequency of feeling lonely, and the extent to which people felt satisfied with their friendships and relationships, was quite low, with moderate levels of loneliness and a lack of social connection. Participants in the online groups, however, reported feeling lonely less often at the end of the programmes. The intervention did not significantly impact their satisfaction with friendships and relationships, which suggests that the weekly sessions fostered a sense of connection with others, but perhaps did not lead to new social connections beyond the sessions. This might be a

limitation of the remote sessions and perhaps the time frame, and relationships might have developed following the intervention or further along the referral pathway.



In support of the finding that participants felt less lonely after the programmes of online Art on Referral, they reported feeling significantly less lonely after each online workshop, compared with the start. This suggests that meeting with the group and taking part with the art activities did help people to develop feelings of connections with others. Importantly, this social connection made with others in the workshops was a significant predictor of wellbeing change across the programme – people who had the greatest improvement in wellbeing (and those who felt generally less lonely in their lives) were those who reported feeling less lonely after taking part in the workshops. This suggests that social bonding is a mechanism for wellbeing change in arts on referral.

This finding supports previous qualitative research with participants of Art on Referral programmes, where the importance of the group is discussed, both in terms of the support found from peers and the care and understanding of the arts for health facilitator (Stickley & Eades, 2012; Holt et al., 2021; Hughes et al., 2019). This is provided both by the creation of a ‘safe space’ by the arts facilitator, where play and exploration are enabled and stigma and judgement are withheld (e.g., Stickley & Hui,



2012), and through social bonding, where people make meaningful, supportive connections with each other (Daykin et al., 2020). As such, social bonding is one potential mechanism by which Art on Referral improves wellbeing, as part of a 'social cure approach' (Daykin et al., 2020; Williams et al., 2022). Based on a thematic analysis of responses to a qualitative questionnaire, Hughe's et al. (2019) proposed a process of change model, where social bonding enables subsequent psychological benefits, since feeling socially safe, rather than socially anxious, enables individuals to relax, reduce their stress and anxiety levels, and go into a state of 'flow' while making art, unlocking further mechanisms for improved eudaimonic wellbeing (Holt, 2018).

However, given the importance of social bonding as one mechanism for the efficacy of arts on referral, thought needs to be given to the converse: what happens when social bonding does not occur; and how can this be dealt with in practice? What was the experience of those people who did not feel less lonely after taking part and who may not have had such a steep increase in wellbeing across the programme (or no increase at all)? The voices of those who may not have bonded socially with a group are not captured in qualitative research. In their qualitative review Daykin et al. (2020) note that social bonding in art for health interventions does not always lead to positive outcomes, drawing on recent work exploring the 'dark side of social capital' or the 'social curse', where group involvement can be detrimental to health (Villalonga-Olives & Kawachi, 2017; Wakefield et al., 2022). For instance, Daykin et al. (2020) note the potential negative implications of being in an 'out-group' in community arts programmes, where people can feel excluded, increasing feelings of isolation and negatively impacting self-worth (Wakefield et al., 2019). They also note the fragile structure of the Art on Referral group, where, maintaining group identity after the end of programmes may be pivotal to long-term wellbeing, but challenging to provide (Baker et al., 2017). It has been reported that people sometimes have a sense of 'falling into a void' when the programmes end (Daykin et al., 2020).

Wellbeing interventions that seek to develop social bonding should be aware of the 'dark side' of social capital, seeking to reduce the risk of adverse outcomes (Daykin et al., 2020; Villalonga-Olives & Kawachi, 2017). For example, being aware that some individuals may find engaging in shared practices difficult (e.g., experiencing distress or embarrassment), some communities may need longer to build trust, some practices might reinforce social divisions (based on class, ethnicity of gender), some individuals might find the emotional labour of supporting others burdensome, some group



norms may be 'unhealthy' (e.g., identifying as depressed) (Wakefield et al., 2019). These concerns can feed into practice, for example, considering the implications of letting new members join half-way through a programme, which might increase the chance of exclusion. Practices to foster group identification could be identified, considering optimal group sizes, whether to embed socialising opportunities into the programme, working out how to best identify those who appear to feel excluded and how to manage this and extend in-group support to all members (e.g., by reinforcing inter-group commonalities, such as a shared identity of artist). The role of the artist facilitator is key in this process, and also key in managing the ending for the groups facilitating closure and transition in a safe way. The current project has developed a pathway so that people do not feel that their art journey has come to an abrupt end, and it would be useful to explore the impact of this on participants wellbeing longitudinally, and whether this enables group connections to continue and relational support to deepen.

## Mood

After making art participants reported feeling better on all three dimensions of mood. They reported feeling more content and happy (hedonic tone), more alert and enthused (energetic arousal) and more relaxed and calm (reduced tense arousal). This is important because, as we saw in the

introduction, positive subjective moods in everyday life is one aspect of wellbeing (e.g., being part of Seligman's [2011] PERMA model). The art workshops gave people the opportunity to experience positive moods each week. Importantly, the art workshops also helped to reduce negative moods (e.g., tense arousal, feeling agitated, tense, anxious or stressed). The finding that making art can reduce stress and anxiety supports previous work showing that art activities can both repair mood after a stressful event, and reduce physiological indices of stress (the fight and flight response'), such as cortisol levels and heart rate (e.g., Drake et al., 2016; Holt et al., 2019; Kaimal et al., 2016; Sandmire et al., 2016). Importantly, in this study, this reduction in tense arousal was the most important factor of mood for longer-term wellbeing. As also found with in-person Art on Referral workshops run by CreativeShift in Bristol (Holt, 2020), participants who found the art workshops to be the most relaxing (having bigger decreases in stress, anxiety, agitation, tension) also had bigger increases in wellbeing across the programme. This suggests, that not only feeling connected to others, but also finding workshops and activities relaxing, are important active ingredients of Art on Referral. The current evaluation shows that this effect can also be achieved through working remotely with participants.

## Engagement and flow

An additional aspect of wellbeing in Seligman's (2011) PERMA model is engagement – becoming attentionally absorbed in activity through the flow state. This occurs when one's focus is fully on the activity being undertaken without distraction by anything else, including one's own worries, health symptoms, or preoccupations with the past or future. The flow state has been found to predict wellbeing and having a sense of meaning in one's life (Engeser & Rheinberg, 2008; Holt, 2018). The current evaluation supported this previous work, since people who entered a deeper state of attentional absorption were more likely to have improved wellbeing across the programme – indeed *Figure 10* illustrated that participants who did not experience the flow state while art making had a slight decrease in wellbeing across the Art on Referral programme. Attentional absorption may be an important factor by which the arts can help to manage experiences of pain in everyday life, through entering the flow state while art making, temporarily allowing pain to become less salient as attention is focused on the art making (Robinson, et al., 2012). As such, it would be useful to build on this work and focus on the role of flow and attentional absorption in art making within arts on referral for people experiencing chronic pain and breathlessness in future work.



Understanding of the flow state and the conditions that foster it could be important to apply in practice, and artist facilitators will be sensitive to their participants and able to help scaffold art activities to enable individuals to become absorbed in them. As discussed in the introduction, the flow state is thought to occur when an activity is not perceived to be either too challenging (which may increase stress) or too easy (which might lead to boredom). A balance between a person's perceived skills (in this case art skills) and the challenges of a task (art activity) is thought to enable flow. As people's skills develop, the tasks also need to be scaffolded, with more complexity or novelty added, to maintain flow.

## **Experiences of chronic pain**

For the chronic pain group it was important to include specific measures as important markers for their wellbeing, and so measures of pain intensity (over the past week) and pain self-efficacy (feeling that one can accomplish goals in life despite the pain) were included at the start and end of the pain group programmes. There was a small sample size here, which prevented detailed analysis, but there was an increase in people's pain self-efficacy across the programme, which supports the view that Art on Referral could help people to manage their symptoms of pain in everyday life. It would be



beneficial to collect more data to test this fully, and to explore whether entering the flow state while art making is a mechanism for this.

## Limitations

While the study has generated useful data supporting the efficacy of the remote delivery of Art on Referral for improving wellbeing and loneliness, there was missing data in all groups, and in some groups more than others, which meant that there was insufficient data to look at groups individually. It would be useful to reflect on why this might be, for example, for some artist facilitators the evaluation method was new, and more training may have been required. In some groups the mood tracking and questionnaires may have felt repetitive or invasive. Finally, since the evaluation was done online it may have reduced compliance, and may have been more difficult for participants to access. For example, being sent a link to complete a survey following an online workshop is easy to forget to do, whereas, being given a colourful slip of paper to mark on as a session reaches its end is easier to do, with fewer steps involved to complete, and is also done in a social context which might increase compliance. In future work it would also be useful to conduct interviews or focus groups with participants of specific groups (e.g., the chronic pain and breathlessness groups) to learn more about their experiences first-hand to help inform and guide future research and practice.

## Future directions

In terms of evaluation and research, it would be useful to focus on the specific arts on referral groups at Fresh Arts and collect more data on these and their individual efficacy, as well as to collect qualitative data on the participants experiences. It would also be useful to track participants longitudinally along the referral pathway that has been created in order to examine whether this helps to sustain wellbeing and engagement with the arts through cultural institutions. Since most (if not all) research on Art on Referral has occurred within primary care it would be useful to establish whether the FAoR helps to reduce the burden of other departments at Southmead, for example, clinician time or even medication, in order to build econometric support for the efficacy of arts on referral in addition to quantitative and qualitative evidence.

The current work highlights how training for Art on Referral facilitators is important and how the creation of a 'safe space' that enables active ingredients to flourish, such as social connection, flow and relaxation, is crucial. However, the practices and skills required to obtain optimal benefits and to assist patients on their health journey have not been fully articulated and explored, despite work describing the importance of the relationship of the artist facilitator in the process. For example, Holt et al.'s (2021) qualitative research on participants' perceived processes of change during CreativeShift's Art on Referral programme found the main theme to be 'responsive facilitation' – the way in which the artist facilitator created a 'therapeutic alliance' in which participants felt cared, for, understood, and safe to play, create and explore. Future work is required to develop best practice guidelines that can feed into training for the Art on Referral facilitator role as a highly skilled role, with guidance on how to work with groups and scaffold artistic experience.



# CONCLUSION

The current evaluation reported on the wellbeing outcomes of 65 participants of remote Art on Referral programmes delivered during the pandemic (April 2022 to February 2021), funded by the Art Council's Emergency Response Fund. The outcomes support the use of remote delivery of art workshops, using Zoom, WhatsApp, and postal methods for people without digital access. Participants' wellbeing significantly increased across programmes, in line with previous research. People's loneliness also significantly decreased across participation in online programmes (although satisfaction with relationships did not increase significantly). Overall, the programme was able to meet its aims of supporting the wellbeing of people who were socially isolating during the pandemic and helping them to connect with others.

The evaluation was able to increase understanding of the mechanisms by which Art on Referral programmes may improve wellbeing. Analysis of experiences of participants during art activities showed that three processes led to wellbeing change: 1) tense arousal being reduced (feeling calm and relaxed rather than agitated, stress or anxious); 2) attention being absorbed in the art activities – entering the 'flow state'; and 3) feelings of loneliness decreasing through connecting with others in the online art workshops. These three mechanisms may be interconnected, since being feeling socially safe with others may enable people to relax and enter an absorbed state while art making. Awareness of these active ingredients can feed into best practice and practitioner training for future delivery.

In future work it would be useful to collect more data on groups with specific health needs (e.g., chronic pain and breathlessness) and build on the finding that pain self-efficacy (feeling able to cope with pain in everyday life) increased in the pain group in this study. It would be helpful to build the econometric (as well as quantitative and qualitative) evidence base to support the use of Art on Referral in secondary care. Finally, more longitudinal research to track experiences of people along referral pathways (from secondary care to the community and arts in cultural venues) would develop understanding of how arts on referral can support and build health in the long-term.



# ACKNOWLEDGMENTS

- We would like to thank the Arts Council for funding this work, which enabled us to reach out to and support participants on our referral pathways.
- We would like to thank the Arnolfini and Bristol City Council for offering further pathways to participants on the arts on referral pathways, enabling them to continue their practice through further workshops and move-on groups in Bristol.
- We would like to thank the amazing artist facilitators who delivered art workshops on this programme and supported people with kindness and expertise throughout the pandemic, learning new digital skills and reaching out to participants under difficult conditions.
- We would like to thank the participants who took part in the evaluation for completing forms and sharing their experiences with us, so that we can continue to learn about what works best, why, and for whom.



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# ART ON REFERRAL

Remote delivery in 2020-2021



## WHO TOOK PART?

65 adults (55 females, average age of 49) were referred to help with wellbeing (98%), stress (73%), social isolation (58%), and/or chronic pain (38%).



## WHAT DID THEY DO?

Participate in a remote programme of art workshops, delivered through Zoom (for 56 people) or post and telephone (for 9 people).



## HOW DID IT HELP?

- Wellbeing increased
- Loneliness decreased
- People with the greatest benefits felt relaxed, absorbed, and socially connected when making art.



## WHAT DID WE LEARN?

- Remotely delivered art on referral can promote wellbeing and reduce loneliness
- Social bonding and absorption in art-making are active ingredients



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- Art on referral delivered by Fresh Arts at Southmead Hospital and creativeShift in Bristol
- Programmes managed by Donna Baber, Julie Mathevs, Rebeca Lines and Barbara Disney
- Evaluation led by Nicola Holt (UWE)