

Original Article

Art as a therapeutic medium: the SuperART project

A arte como meio terapêutico: o projeto SuperART

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How to cite: Alves, I., Simões de Almeida, R., Simó Algado, S., & Marques, A. (2024). Art as a therapeutic medium: the SuperART project. *Cadernos Brasileiros de Terapia Ocupacional*, 32, e3734. <https://doi.org/10.1590/2526-8910.ctoAO287437342>

Abstract

Introduction: Evidence of the role of the arts in mental health is growing, but artistic approaches are still developing in rehabilitation services. The SuperART project is based on the therapeutic potential of art, proposing an innovative intervention, combining arts, nature and virtual reality to promote well-being in individuals with mental illness.

Objective: This mixed study evaluated the effectiveness of an artistic intervention on the well-being of people with mental illness. **Methods:** Eight participants took part in activities such as art exhibitions, creating outdoor art and using virtual reality. The Non-pharmacological Therapy Experience Scale (NPT-ES) assessed participants' experiences during sessions, and the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) measured well-being before and after the intervention. At the end, a focus group was conducted. **Results:** Most of the study participants were male, aged between 35 and 56, with a predominant diagnosis of Schizophrenia. Significant changes were observed in the well-being reported by the participants (p -value = .011). There were no differences in engagement and participation across sessions, but overall interest in the intervention increased. Qualitative feedback was promising and participants were satisfied with the project. **Conclusion:** The study highlights the potential of museums as therapeutic contexts for the use of art to promote well-being in individuals with mental illness. The intervention demonstrated encouraging results, including greater well-being and evoked memories. More research with more representative samples is needed to develop effective strategies to promote well-being and provide individuals with genuine opportunities to contribute to the community.

Keywords: Mental Health, Quality of Life, Virtual Reality, Nature, Museum.

Resumo

Introdução: A evidência do papel das artes na saúde mental está crescendo, mas as abordagens artísticas ainda estão em desenvolvimento nos serviços de reabilitação. O projeto SuperART baseia-se no potencial terapêutico da arte, propondo uma

Received on Jan. 2, 2024; 1st Revision on Jan. 12, 2024; 2nd Revision on May 7, 2024; Accepted on July 4, 2024.



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intervenção inovadora, combinando artes, natureza e realidade virtual para promover o bem-estar em indivíduos com doença mental. **Objetivo:** Este estudo misto avaliou a eficácia de uma intervenção artística no bem-estar de pessoas com doença mental. **Métodos:** Oito participantes participaram de atividades como exposições de arte, criação de arte ao ar livre e uso de realidade virtual. A *Non-pharmacological Therapy Experience Scale (NPT-ES)* avaliou as experiências dos participantes durante as sessões, e a escala *Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)* mediu o bem-estar antes e após a intervenção. No final foi conduzido um grupo focal. **Resultados:** A maioria dos participantes eram homens, entre 35 e 56 anos, com diagnóstico predominante de Esquizofrenia. Observaram-se mudanças significativas no bem-estar relatado pelos participantes ($p\text{-value} = .011$). Não houve diferenças no envolvimento e na participação ao longo das sessões, mas o interesse geral pela intervenção aumentou. O feedback qualitativo foi promissor e os participantes mostraram-se satisfeitos com o projeto. **Conclusão:** O estudo realça o potencial dos museus como contextos terapêuticos para a utilização da arte na promoção do bem-estar em indivíduos com doença mental. A intervenção demonstrou resultados encorajadores, incluindo um maior bem-estar e memórias evocadas. É necessária mais investigação com amostras mais representativas para desenvolver estratégias eficazes de promoção do bem-estar e proporcionar aos indivíduos oportunidades genuínas de contribuição na comunidade.

Palavras-chave: Saúde Mental, Qualidade de Vida, Realidade Virtual, Natureza, Museu.

Introduction

The focus of Occupational Therapy (OT) intervention is on a person's strengths and capacity to overcome a challenge in the face of life's transitions (Fisher & Bray Jones, 2017; Gomes et al., 2021). The values that underpin the promotion of good mental health have always been intrinsic to Occupational Therapy and understanding the value of activity is fundamental to individual self-realization (Kirsh et al., 2019). Individuals are presented with the opportunity to take charge of their lives through action, and in this way, their convictions and sense of self-worth are strengthened (Creek & Lougher, 2011).

The use of art as an intervention in the field of OT is a topic that has been present since the early years of the profession (Thompson, 1998). Art has always played an important role in OT and it was believed that artistic creation could promote expression, stimulate creativity and enhance various skills, while also providing a sense of purpose (Levine, 1987). To this day, art remains an essential part of the practice of OT as occupational therapists use artistic and creative techniques to help individuals of all ages develop functional skills, cope with stress, and promote well-being (Johnson et al., 2022). The relationship between art and OT is complex and its history continues to evolve as new approaches and practices are developed (Hansen, 2020). Artistic expression has grown with human cultural development, playing a crucial role in how we understand and communicate concepts, or even emotions, and can also help us emotionally navigate the journey of struggling with an illness to facilitate the process of dealing with more difficult emotions at more emergent and challenging times (Stuckey

& Nobel, 2010; Palaparathi, 2016). Furthermore, art exploration and art-making result in well-being, which can be a very crucial motivating factor in recovery from the point of view of a person with a mental illness experience (Hu et al., 2021; Pénczes et al., 2016; Kaimal et al., 2016; Bolwerk et al., 2014). This process means acquiring and maintaining hope, understanding one's abilities and disabilities, and engaging in an active life that includes purpose and optimism (Patel et al., 2018).

In addition, museums and other community settings can serve as a collection of significant connections that tend to elicit associations that enable people who are struggling with mental health issues to recall and share experiences from the past (Coleborne, 2014). As a result, museums have helped to promote social inclusion at the individual or community level. It is proven that people's well-being increases when they interact with and share collections and cultural ideas in the company of others (Ioannides, 2016). Given the connection between culture, identity, and social equality, cultural rights are a topic of discussion that is becoming more and more significant in the context of human rights (Caust, 2019). The arts are frequently viewed as being just a small part of community development and the process of revitalizing communities (Kay, 2000). Communities are starting to understand the need of cooperating locally and acknowledging their own identity, culture, and traditional artistic forms despite the rapid advancement of globalization (Kay, 2000). Since the dawn of human settlement, there has been a clear relationship between culture and artistic activity (Morriss-Kay, 2010). Since artists are products of the culture in which they live and because their creations mirror the issues, perceptions, and understandings of that culture, art and culture are inextricably linked (Caust, 2019). It is also noted that diverse voices should be represented in artistic activity (De Beukelaer, 2015). It should not be restricted to a society's most affluent or influential members (Caust, 2019). Everybody is entitled to the ability to discover and express their voice. Likewise, the ability to express their artistic activities should be granted to many socioeconomic, ethnic, and cultural groups (Caruso, 2005). However, due of problems with fairness and access, this is not feasible for a large number of individuals (Caust, 2019).

Beyond art observation and exploration, also art creation seems to demonstrate interesting results (Aldridge & Bethel, 2021; Tereso, 2012). Novel approaches are being used, namely the combination of art and virtual reality because with this tool anyone can build and design immersive virtual environments such as imaginary worlds, recreate real places, or experience abstract concepts at scale (Hadjipanayi et al., 2023). Virtual reality enables a unique immersive experience, allowing artists and viewers to fully immerse themselves in a virtual environment, thus enabling a more intense connection to art, the expression of emotions, thoughts, and experiences in a visually stimulating way (Freeman et al., 2017; Wilson & Soranzo, 2015). Another interesting approach is using nature to create art. Green areas have demonstrated significant advantages in supporting a healthy way of life and general well-being (Slade et al., 2017; Thomson et al., 2020). Even though there is still little evidence about this theme, it is confirmed that therapies conducted in these settings reduce some of the quantifiable symptoms of diseases (Gidlow et al., 2016; Kondo et al., 2018; Raquejo, 1998; Thomson et al., 2020).

Despite all the advances made in this area, the approaches used continue to be developed within rehabilitation services. Thus, this study aims to evaluate the effectiveness of the SuperART, a project that combines arts, nature, and virtual reality.

As a research hypothesis, it is stated that the study's participants will demonstrate improved well-being following the intervention.

Methods

Study design

This mixed method study was carried out mainly at the Fundação de Serralves (Fundação de Serralves, 2024), a renowned cultural and landscape space. Its mission is to serve as a global reference point and knowledge centre in the fields of contemporary art, architecture, landscape, and critical themes for society and its future. Through innovative interventions that sustainably draw a diverse range of audiences and foster community support, the organization hopes to promote the diversity of the cultural offer. It should be noted that although Fundação de Serralves has free entrance on the first Sunday of every month, even to the most vulnerable groups in the city of Porto. Due to this project, SuperART, participants had access to this venue weekly.

The sessions were held weekly on Fridays, from February till April, with a two-week break on April 7th and 14th 2023 due to a break in the outside activities at the institution because of Easter. There were a total of five sessions of museum exhibitions exploration and two sessions of creation, using as inspiration LandArt, a type of art that uses nature as support and resource (Raquejo, 1998), and also Virtual Reality. The Psychosocial Rehabilitation Laboratory - Center for Rehabilitation Research from Escola Superior de Saúde hosted this last session, the virtual reality one, using Google Tilt Brush, a virtual reality application with 3D art creation (Chittenden, 2018). This study is an adaptation of the project named “Museo, arte y cultura como escenarios y recursos para el bienestar y la participación- Experiencias de recuperación en salud mental” (Museo Nacional Thyssen-Bornemisza, 2021). The researchers are occupational therapists and Occupational Therapy professors. Their collective interest in the therapeutic potential of art, coupled with their backgrounds in several past projects, prompted the investigation into the relation between artistic engagement and mental well-being. With previous research indicating promising connections, this study seeks to explore deeper into understanding more about the impact of artistic interventions. The research related to human use has been complied with all the relevant national regulations, institutional policies and in accordance the tenets of the Helsinki Declaration, and has been approved by the authors' institutional review board (CE0062D).

Participants

All participants were recruited from Encontrar-se (Associação Encontrar+se, 2024), which is a non-profit organization. The aim of Encontrar-se is to provide support, training, intervention, evaluation, and research in the field of mental health and the psychosocial rehabilitation of people with mental disorders. Each participant deliberately and spontaneously decided, according to their interests, to enrol in this new project after a presentation made at the institution by the researchers. The inclusion criteria for this study were to be 18 years old or older, fluent in Portuguese, and have a mental illness diagnosis. As exclusion criteria, we considered that users who were in an acute moment of the

pathology, crisis, or relapse should not participate. Considering the above-mentioned eligibility criteria, the study sample consisted of 8 participants. It should be emphasized that since the association was chosen based on the researchers' ease of access, the recruitment of participants was conducted using a non-probability sampling method (Turner, 2020).

Data collection techniques

In the first phase, to obtain some information about each of the participants, a sociodemographic questionnaire was applied, which was filled out by each of them at the "Encontrar+se" Association. Information such as age, gender, education, employment status as well as other relevant information to this study such as the diagnosis and contact with the artists of the exhibitions involved in this project or even with art and museums is presented in this questionnaire. All participants also signed the Informed Consent Statement, after being duly informed about the objectives, methodology, and procedures of this study.

Quantitative collection methods, such as the Non-pharmacological Therapy Experience Scale (NPT-ES) and the Portuguese version of the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) were used throughout the sessions. The Non-pharmacological Therapy Experience Scale (NPT-ES), a Portuguese adaptation authorized in 2013 (Alves & Núñez- Navarro, 2013) aims to assess some parameters of the individual's experience at the moment of intervention. The highlighted items in this scale are participation, pleasure, relation with others, displeasure, and rejection, which will be assessed as "Never", "Sometimes", "Often", "Always", or "Not assessable", these options being associated with a scale from 0 to 3. Thus, the minimum possible score is 0 points, and the maximum is 15 points, which indicates a more positive experience at the time of the intervention. It is worth noting that in the event of ambiguous or questionable responses, the evaluator must make a decision based on what is known about the patient while keeping the scale's objective in mind. The internal consistency in terms of Cronbach's α of the 4-point scale was between 0.86 and 0.88 (Alves & Núñez- Navarro, 2013; Muñiz et al., 2011). The Portuguese Version of the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) (Figueiredo et al., 2022) aims at measuring the mental well-being of groups and populations over time. It consists of 14 items and addresses aspects of subjective and psychological well-being, which are expressed in a affirmative way (Figueiredo et al., 2022; Tennant et al., 2007). The Psychosocial Rehabilitation Laboratory (LabRP) validated this scale for the Portuguese population and its consistency value is $\alpha=0.91$ (Figueiredo et al., 2022). Throughout the completion each participant had to select the space that best represented how they felt in the previous two weeks, using a 5-point Likert scale (1= never and 5= always). The total score is calculated by adding up each value assigned across the 14 items on the scale, with the minimum possible score being 14 points and the maximum being 70 points. The higher the total score, the greater the mental well-being (Figueiredo et al., 2022; Tennant et al., 2007).

In the last phase, to obtain information about the feedback from the sessions, a final evaluation questionnaire was applied and a focus group was held. The questionnaire had some questions about the session's satisfaction where each participant had to select the space that best represented how they felt in the indicated sessions, using a Satisfaction

Scale (1= dissatisfied and 5= very satisfied). The focus group guide asked about how the participants felt during the sessions, what they liked best, what they liked least and suggestions that have.

Procedures

To maximize the participation of all participants, all sessions were announced well in advance so that any constraints regarding schedule compliance were reduced. All sessions were also previously scheduled. In all sessions, several artistic works were explored, focusing on important reflection themes such as stigma, sexuality, social participation/citizenship, well-being, purpose/significance, and normality. Some of the sessions also featured some reflective and conscious awareness-raising dynamics of the significance of me and the stabilization of relationships with others for this same construction. So, every Friday at 10:00 a.m. the sessions began, for 90 minutes. Every session includes a brief introduction to the session's artist as well as a brief reflection on the same artist's feedback at the end. Some of the session's key questions were "What does this work remind you of?" or even "What does it look like?". Thus, it was possible to understand the most predominant theme and to start from there, using a dialogue that was as unstructured as possible, almost emulating a conversation so that everyone felt as comfortable as possible. The colors, materials, forms, textures, and titles of the works prompted reflection on the widest range of subjects.

Statistical analysis

For the statistical analysis and data treatment, version 28.0 of the software IBM Statistical Package for Social Sciences for Windows (SPSS), was used, considering a significance level (α) of 0,05 for all statistical tests used. Descriptive analyses were used to characterize the sample and the results of the socio-demographic questionnaire. For quantitative variables, the mean (\bar{x}) and median (M_e) were used as the measures of central tendency, and the Standard Deviation (SD) and the Interquartile Deviation (IQD) as the measures of dispersion. For qualitative variables, absolute frequencies (n) and relative frequencies (%) were used. Before the analysis, the normality assumptions of the data were tested using appropriate statistical tests (Marôco, 2011). To understand the impact on well-being, the non-parametric Wilcoxon test was performed to verify the existence of significant differences between the two moments of evaluation (Marôco, 2011). To assess the impact of each of the intervention sessions and analyze the participants' involvement and participation, we used the mean scores obtained in the Non-pharmacological Therapy Experience Scale (NPT-ES). Thus, it was possible to understand the evolution of the scores over the various sessions.

Results

The sample of 8 participants in this study consists of mostly male participants, accounting for 75% of the total sample, while female participants account for 25% of the total sample. In this sample, 5 participants are diagnosed with Schizophrenia and the remaining participants are diagnosed with Depression, Anxiety, and Asperger's

Syndrome. Furthermore, it is recognized that this group had already had contact with works by some of the artists explored during the various sessions of this study and that, for the most part, they had completed higher education. In a sample of 8 participants, 7 revealed that they knew some of the works of the artists Paula Rego and Joan Miró. It is also worth noting that participants' ages ranged between 35 and 56 years, with a mean age of 46,13 (SD=7,64), and that they all live in Porto. The characterization of each participant, listed from 1 to 8, is shown in the Table 1.

Table 1. Characterization of the participants using sociodemographic data.

Participant	Gender	Age (y)	Diagnostic	Occupation	Academic degree	Knowledge of the artists mentioned
P1	Male	52	Anxiety	Unemployed	Higher education	Yes
P2	Male	35	Schizophrenia	Unemployed	Higher education	Yes
P3	Male	41	Schizophrenia	Unemployed	Higher education	Yes
P4	Female	56	Schizophrenia	Retired/ Pensioner	Higher education	No
P5	Male	55	Schizophrenia	Unemployed	Primary education	Yes
P6	Male	47	Depression	Retired/ Pensioner	Higher education	Yes
P7	Female	43	Schizophrenia	Employed	Higher education	Yes
P8	Male	40	Asperger's Syndrome	Unemployed	Secondary education	Yes

Concerning Table 2, all sessions were evaluated with an average close to the maximum value, these being represented by an average value of almost 5 points. This average value represents favourable feedback from all users. The minimum value obtained in all sessions was 3 points and the maximum value was 5 points.

Table 3 shows all the scores obtained in the Non-pharmacological Therapy Experience Scale (NPT-ES). It is also possible to see which aspects of each session had the highest scores, which represents greater well-being. It should be noted that the averages fluctuate over the weeks, which may be due mainly to the content of the sessions. Therefore, it is possible to see that the sessions with a higher average are representative of a session that was more in tune with the artistic interests of each participant. It is also possible to check that it is the last three sessions that represent a higher total result (the result closest to the maximum value of 15 points). Thus, there is a positive change over time when compared with previous sessions. Finally, none of the participants demonstrated rejection behaviors, such as folding arms and staring at the floor, pushing away or throwing objects, pacing about, retreating, or even leaving. In contrast to this, in all the sessions, the behaviors present were attentive and collaborative, and there was even a semblance of smiling during several moments in the different sessions.

Concerning Table 4, it is possible to see that there are statistically significant differences in well-being (p-value = 0.011) between before and after the intervention,

meaning that there was an increase in the mean total score of the Portuguese Version of the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) when comparing the pre-and post-intervention results. This instrument, ranging from 14 to 70 points, at the pre-intervention moment, corresponds to a mean of 48,88 ($\pm 10,33$) and at the post-intervention moment, it corresponds to a mean of 54,00 ($\pm 10,09$). In addition, the sample presents a moderate level of well-being at both moments.

Table 2. Description and comparison of the results obtained in the questions of the Satisfaction Scale.

	Observation Sessions	Landart Session	Virtual Reality Session
$\bar{x} \pm SD$	4,25 \pm 0,71	4,25 \pm 0,71	4,25 \pm 0,89
Maximum value	5,00	5,00	5,00
Minimum value	3,00	3,00	3,00

Regarding the qualitative data, participants demonstrated that they were very satisfied with the project. Each participant expressed that they had benefited in different ways from the project, and they all believed that it had helped their wellbeing:

The sessions were very interesting, a moment of sharing between us. It's more interesting to analyze the art works like this, to see things that you wouldn't see on your own. (P3).

I talk because I have an anxiety problem and it's the only space, (...) when I write or draw, I totally free myself, that's the difference. (P1).

It is completely stimulating to realize that 10 people can have different views on the same thing, fantastic! (P1).

Art transforms me into other worlds, it's very liberating. (P7).

The group experience helps us to get out of the shell we're always in, inside ourselves. (P7).

The space itself, being the museum itself, just the museum itself allows us to take other journeys, it's different. (P1).

Regarding the two innovative approaches, art with nature and virtual reality, participants felt that the experiences were beneficial, and they would like to explore both experiences further.

(LandART was) a separate adventure, it felt like I was a little child making my own garden with other people. (P7).

I mean, we didn't need so much technique... it would be good for a project to have a series of sessions here (GARDEN) for a common project. (P1).

I draw a lot with a pen... this time it was with an electronic pen, a funny experience. (P6).

I felt I'd like to have something like this to hold and develop it further. (P1).

It really involves the senses, it's as if we're in a different universe. (P5).

Table 3. Description and comparison of the results obtained in each of the sessions, recorded using the Non-pharmacological Therapy Experience Scale (NPT-ES).

	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8
	$\bar{x} \pm SD$	$\bar{x} \pm SD$	$\bar{x} \pm SD$	$\bar{x} \pm SD$	$\bar{x} \pm SD$	$\bar{x} \pm SD$	$\bar{x} \pm SD$	$\bar{x} \pm SD$
Total Score	13,13 ± 1,96	13,75 ± 1,58	13,50 ± 2,00	13,50 ± 2,14	13,00 ± 2,33	14,38 ± 0,92	14,75 ± 0,46	13,62 ± 1,60
Participation	1,87 ± 0,64	2,13 ± 0,64	2,25 ± 0,71	2,38 ± 0,74	2,25 ± 0,71	2,63 ± 0,52	3,00 ± 0,00	2,25 ± 0,10
Pleasure	2,75 ± 0,46	2,88 ± 0,35	2,88 ± 0,35	2,88 ± 0,35	2,63 ± 0,74	3,00 ± 0,00	3,00 ± 0,00	2,88 ± 0,35
Relation with others	2,75 ± 0,46	2,88 ± 0,35	2,50 ± 0,76	2,38 ± 0,92	2,25 ± 0,71	2,75 ± 0,46	2,75 ± 0,46	2,50 ± 0,54
Displeasure	2,75 ± 0,46	2,88 ± 0,35	2,88 ± 0,35	2,88 ± 0,35	2,88 ± 0,35	3,00 ± 0,00	3,00 ± 0,00	3,00 ± 0,00
Rejection	3,00 ± 0,00	3,00 ± 0,00	3,00 ± 0,00	3,00 ± 0,00	3,00 ± 0,00	3,00 ± 0,00	3,00 ± 0,00	3,00 ± 0,00

Table 4. Description and comparison of results obtained pre- and post-intervention, recorded using the Portuguese Version of the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS).

Variables	$\bar{x} \pm sd$ (standard deviation)	$M_e \pm IQD$ (Interquartile Deviation)
WEMWBS pre	48,88 ± 10,33	47,00 ± 8,00
WEMWBS post	54,00 ± 10,09	51,00 ± 10,00
p-value *		0,011 ^(a)

*p-value for paired samples; a- Wilcoxon's Test; n.

Discussion

This study aims to evaluate the effectiveness of an intervention using art with people with mental illness, increasing their general well-being. The findings indicated that the intervention had a important impact on well-being. Our results suggest that it was possible to recognize significant differences between the pre-and post-intervention periods, signifying an encouraging development in well-being, which agrees with the therapeutic purpose of the sessions. The increase in these variables detected after this study's intervention is consistent with that observed following other types of non-pharmacological treatments, such as a study by Laranjeira et al. (2019). In addition, based on participant accounts, the findings of a study by Tegljaerg (2011) conducted in Denmark (with a group of ten patients, most of whom had schizophrenia) support the idea that someone with a mental disorder can reinforce his or her unique perception through "art therapy," creating new meaning structures and boosting creativity and self-esteem.

By reviewing the literature, it is also evidenced how mental health professionals can develop a program of activities to promote the potential therapeutic function of museums and integrate artistic approaches into practice. The literature also suggests that museum therapy practices are strongly associated with participants' sense of self-

identity, well-being, and social well-being (Wallen & Docherty-Hughes, 2022). These findings are consistent with other studies reporting that the benefit of the use of museums and galleries is a small but expanding area of art therapies and one that is rapidly developing as museums seek to readdress their obligations regarding social and community engagement (Jury & Landes, 2015; Watson et al., 2021). The museum space turned out to be a vital factor in this project's success as all the participants are used to making regular visits to these spaces. According to the literature, the environment in which art viewing takes place may boost its therapeutic value (Colbert et al., 2013). While there may be benefits to using books or replicas to bring art to individuals, there may be other advantages to having clients view art in a gallery (Colbert et al., 2013; Roberts et al., 2011), which is congruent with the community psychology approach to base therapeutic action outside of mental health service facilities by situating practice in regular social contexts (Levine et al., 2005). It is also evidence supported that art has a peculiar pull for certain people that is hard to define since it is such a powerful emotional experience (Jury & Landes, 2015; Leavy, 2018). Visitors to museums may encounter emotions that are so strong they remember them for a long time. These encounters are frequently intense, uplifting, and expressive (Jury & Landes, 2015). The study by Springham & Huet (2018) verified that viewing museum exhibits and objects may be a social activity fostering partnerships and bonding since it provides a shared focus of attention allowing a shared inquiry and experience. Joint attention is thought to encourage the growth of trust, which can make us more receptive to learning about ourselves and others (Coles et al., 2019; Isserow, 2008). Furthermore, the evidence says that a more embodied form of movement, exploration, and creativity is possible in the museum than in the static environment of a clinical therapy room. The museum offers objects that help bridge subjective experience and objective reality and allows for journeys through real and imagined worlds (Coles et al., 2019). This might be especially beneficial for someone who struggles to connect with their inner world (Coles et al., 2019; Pantagoutsou et al., 2017).

Our results also suggest several variables such as interest in art, knowledge before the intervention about the various artists explored, session duration and the type and stage of the pathology may have influenced the results. It is possible to conclude that these variables could influence the degree of adherence, participation, and pleasure taken from each of the sessions. In addition, it is also important to emphasize the fact that the "Encontrar+se" Association goes regularly to art spaces such as museums and galleries with users who are interested in art, which was the case for all the participants in this study, which may have generated a greater predisposition for better results after the intervention and throughout the various sessions of the two scales applied.

Regarding the sessions held, one of the lower scores associated with the first session may be because it was one of the first interactions and even that it was a not so well known artist. In addition, it did not date back to the period of art history that most of the participants were interested in. As the sessions progressed, the interaction became easier, the sharing of memories became more regular, and the exploration of more sensitive topics also became easier. Some artists claim that their work may be used to elicit conversation on sensitive subjects (Jury & Landes, 2015; Roberson, 2011). Museum exhibits are used to encourage creativity and the expression of sentiments through art-making, as well as to assist participants to connect with their own unique

stories (Jury & Landes, 2015; Salom, 2011). In addition to fostering social cohesiveness, the creation and viewing of art can serve as an effective vehicle for psychological expression and integration (Roberson, 2011).

The creation of art in nature was also a beneficial part of the success of the project as the session of art creation according to the land art approach held outside the Fundação de Serralves was the session with the highest average, according to the results obtained in the Non-pharmacological Therapy Experience Scale (NPT-ES). These results are supported by evidence that mental health and natural environments have a strong connection, and spending time in nature can have an effective impact on our well-being. Research has shown that exposure to nature and natural environments can contribute to reduced stress levels, improved mood, increased cognitive function, and enhanced overall mental health (Mantler & Logan, 2015).

According to the findings of the Non-pharmacological Therapy Experience Scale (NPT-ES), the production of art in Virtual Reality (VR) was also an important factor in the project's success. This session was one of the four with the highest value. Virtual reality (VR) activates visual, aural, and motor processes to give an escape from the actual world (Kaimal et al., 2019) Partridge (2016), said imaginative uses of immersive environments can be a source of support and healing for patients who are unable to fully benefit from current therapy alternatives or who could be looking for imaginative, unique options. Furthermore, as the marks made in virtual reality are easy to reverse or erase, they encourage experimentation and errors without the sense of finality that comes with traditional art supplies. Many participants reported feeling motivated and delighted by the sensation of being in an imaginary realm that was unlike anything that existed in the real world.

Limitations of this study include the small sample size, which was, however, deemed statistically appropriate for this pilot study and a larger study should be performed to confirm these results. Furthermore, as qualitative data adds additional dimensions to the participants' subjective experiences based on their narratives, it should receive more attention in future research and be thoroughly examined and presented. Despite this, it is important to recognize some of the benefits connected to the venue chosen for the development of the sessions. The Fundação de Serralves is currently considered one of the most successful and consolidated cultural projects in Portugal, whose main mission is to stimulate the interest and knowledge of audiences of different origins and ages in contemporary art, architecture, landscape, and critical issues for society and its future. Furthermore, because the sample is made up exclusively of residents of the city of Porto, the choice of this Foundation brought several benefits in terms of accessibility and due to its well known location.

Conclusion

It is possible to conclude that working with art in community settings offers a variety of opportunities and it can be a helpful setting for the therapeutic use of art as a therapeutic medium for the wellbeing of people with mental illness.

Participants enjoyed participating in the sessions and expressed that they felt better and happier, and that art helped them relate to others. Thus, it is possible to realize that participating in this project as a meaningful occupation was relevant in enhancing the

users' well-being. Moreover, the project produced a variety of real opportunities to enhance internal competence and enable empowerment that is closely related to feelings of self-efficacy and, consequently, to an improvement in self-concept. The Fundação de Serralves made it easier for people to engage in their occupations, which naturally leads to an increased sense of belonging that generates a feeling of being part of a common world.

Occupational therapists must not only innovate in the use of the arts, using different approaches that can increase the motivation of participants, but also implement these activities outside of clinical contexts.

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Author's Contributions

Isa Alves handled data collection, contributed to the analysis and interpretation of the results and draft manuscript. Raquel Simões de Almeida contributed to the study's conception and design, analysis and interpretation of the results and draft manuscript. Salvador Simó Algado and António Marques were responsible for the study's conception, design and draft manuscript. All authors reviewed the results and approved the final version of the text.

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