

Exploring the Therapeutic Role of Art in Enhancing Mental Health and Quality of Life in Older Adults

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ABSTRACT

With a growing population of older adults facing age-related health issues, cognitive decline, and prevalent mental health disorders, the study focuses on the potential of art therapy as a holistic solution. Art therapy, beyond cognitive benefits, offers profound purpose, joy, and playfulness. It serves as a coping mechanism for traumatic events, fostering autonomy and positive self-perception. The study investigates the science and psychology of art therapy and highlights the neural basis for the rewarding aspects of creating art and the role of meta-cognitive processes. Other benefits include its impact on the environment, cognitive function, medical conditions, dementia, and cancer. Comparatively, art therapy emerges as a cost-effective and successful treatment option, particularly for individuals who may struggle with exclusively verbal approaches. Case studies, such as the Open Studio Approach, emphasize the flexibility of art therapy and its potential to aid depression and cognitive interventions for older adults. In conclusion, the incorporation of art therapy to comprehensively address the many health challenges faced by older adults showcases a potential to improve cognitive function, mental health, and overall quality of life.

Introduction

Events such as the COVID-19 pandemic in 2020, have exacerbated the challenges faced by older adults in long-term care settings worldwide, emphasizing the need for diverse solutions to enhance their health and well-being while fostering active aging (Groot et al., 2021). While increased life expectancy and improved life conditions contribute to a growing population of older adults, with the percentage expected to double between 2015 and 2050 from 12% to 22%, there arises a concomitant strain on pensions, healthcare, and social systems due to age-related health issues, impacting their daily life (Roswiyani et al., 2019; Peplau, 1994; World Health Organization, 2021). Research indicates a notable decline in cognitive function among older adults, correlating with an increased risk of encountering difficulties in performing instrumental activities of daily living (IADLs) (e.g. managing finances and housekeeping) (Willis et al., 2006). Moreover, as the population of older adults continues to rise, their health becomes more vulnerable. This shift is associated with more prevalent multimorbidity and higher risks of mental health disorders, with non-psychotic conditions such as depression, anxiety, and phobias emerging as the most predominant concerns (Galassi et al., 2022; Uttley et al., 2015). Notably, mental health issues are increasingly recognized as a leading cause of disability, emphasizing the need to address the relationship between aging, health, and mental health in older populations (Uttley et al., 2015).

The onset of mental illness is complicated, with distinctions between late onset (occurring in old age) and early onset (experiencing early in life), each with different impacts. In particular, late-onset depression, compromising a significant part of geriatric major depression cases, is associated with brain changes, vascular risk factors, cognitive decline, and potential links to dementia (Fiske et al., 2009). Although major depression becomes less prevalent with age (among community samples), symptoms of depression remain high in older adults compared to midlife (Fiske et al., 2009). Currently, global rates of depression among older adults reach

up to 7%, with even higher rates, up to 27%, in the United States, and trends suggest further increases over time (Dunphy et al., 2019) (World Health Organization, 2017; Mental Health America, 2018). Notably, rates may vary by gender, with higher rates seen in older women, and by subsets, such as medical outpatients (5-10%), inpatients (10-12%), and long-term care facility residents (14-42%) (Fiske et al., 2009). Various causes contribute to late-life depression, including genetic factors, neurobiological changes, and behavioral explanations, such as reduced engagement in positive activities and social skill deficits. Aging itself, coupled with negative stereotypes that associate old age with dependence, illness, decline, and stressful life events common in late life, further demonstrates the impact depression has on older adults (Kim, 2013). Many depressed older adults frequently complain about poor memory and concentration, and show slower cognitive processing and executive dysfunction (Fiske et al., 2009). Geriatric-specific variants of depression, such as the "depression-executive dysfunction syndrome," sees impaired cognitive performance, psychomotor retardation, and anhedonia (Fiske et al., 2009). Additionally, depressed older women tend to suffer more appetite disturbances while depressed older men report more agitation.

Moreover, the symptoms of depression have detrimental impacts on older people, like helplessness, sadness, anxiety, and feelings of loneliness and disconnection. While the elderly struggle with high depression rates, they also struggle with medical conditions, with approximately 15% enduring chronic depression alongside other serious illnesses, impeding healthy aging processes; maintaining a positive mindset and lifestyle is significant for healthy aging, despite the age-related declines (Kim, 2013) In addition, their poor mental health impacts their physical health, potentially causing severe conditions such as dementia. The older population faces a myriad of chronic conditions, such as hypertension, diabetes, arthritis, heart disease, and stroke, diminishing both life expectancy and healthy life expectancy (Kim, 2013). This burden of chronic illnesses also extends beyond just their health condition, as it impacts their educational attainment and employment prospects (Abrams et al., 2023). The presence of multiple chronic conditions significantly shows a lower probability of working as having two or more chronic conditions reduces employment by 11% to 29%. A significant proportion of those who do work, ultimately report frequent missed work days due to their health conditions, such as 10% of workers with diabetes, 17% of workers with heart disease, and 20% of workers with asthma (Abrams et al., 2023). Therefore, health problems tend to be the reason for the decrease in quality of life among the elderly (Peplau, 1994; Roswiyani et al., 2019).

Overview of Art Therapy

Art therapy activities offer participants a profound sense of purpose and motivation through engaging in artworks, ultimately shaping their self-identity and fostering meaningfulness in their lives (Galassi et al., 2022). Engaging in such activities goes beyond benefiting mere cognitive processes, but allows individuals to fully immerse themselves in the present moment, touching a deeper layer of consciousness (Groot et al., 2021). Moreover, in addition to the sense of 'being in the moment,' the act of creating art brings about feelings of joy and playfulness, which serve as powerful distractions from worries and limitations, contributing significantly to positive overall well-being. Additionally, completing an art piece instills a sense of agency and mastery, empowering participants to confront challenges and experience personal and artistic growth (Poulos et al., 2018). These challenges not only lead to fulfillment as they learn new skills, face fears, and gain confidence but also challenge societal norms, particularly regarding aging and capabilities.

Through creative expression, individuals can also effectively cope with traumatic events, externalize inner experiences, and foster autonomy, all while promoting positive self-perception (Dunphy et al., 2019). Creating art products offers a sense of detachment that creates an external visual communication of their experiences. For instance, art has been shown to decrease depressive symptoms by recalling positive memories and addressing death, loss, and end-of-life in older adults. It can act as an adjunctive treatment to disorders like Major Depressive Disorder and improve depressive and anxiety symptoms. In a study that compared two groups

of women, logistic regression analysis adjusted for age, revealed that the experimental group (EG), who was assigned to 20 weekly art therapy sessions, showed significant improvement in depressive and anxiety symptoms in 20 weeks compared to the control group (CG) (Ciasca et al., 2018). Art has proven to allow individuals to express both positive and negative emotions, rather than holding them in, improving the state of mind. Furthermore, art therapy serves as a conduit for individuals to connect with others, even in the absence of physical presence, while simultaneously decreasing depressive symptoms and improving emotional well-being (Chapin Stephenson, 2013). In essence, art therapy not only stimulates artistic identity but also raises a sense of purpose and motivation through creative works, offering a holistic approach to mental health and personal development (Morrison et al., 2018).

Science and Psychology of Art Therapy

Art therapy is a form of psychological treatment aimed at addressing issues related to the mind and behavior, with the primary objective of facilitating the expression of feelings and promoting personal growth in patients (Deshmukh et al., 2018). One of the defining aspects of art therapy is the tactile experience of engaging in art-making activities, which draws out bodily sensations and emotions. Engaging with art materials through touch and manipulation stimulates sensory reactions to pressure, vibration, and temperature, enhancing the emotional aspect of the artistic process. This is because the activation of the amygdala (a small part of the human brain that is responsible as the major processing center for emotion by linking emotions to brain abilities like memories), occurs due to the influx of sensory information transmitted through the somatosensory primary cortex, turning the art experience into an emotional one even before making meaning to an artwork (Professional, 2023; Lusebrink, 2014). Moreover, the imagery involved in art therapy evokes emotion in three possible ways: sensory stimulation of emotional systems in the brain, responding to imagery as real emotion-arousing events, and activating memories of emotional episodes in the past (Czamanski-Cohen & Weihs, 2016).

There is also a neural basis for the rewarding aspects of creating art. Art experiences are linked to pleasure, which engages brain regions associated with reward processing, such as the ventral striatum, orbitofrontal cortex, amygdala, and dopaminergic midbrain. This neural reward mechanism plays a significant role in the positive impact that art can have on an individual's emotional well-being. In addition, the art infusion effect (incorporating the image of a masterpiece by integrating it into a product, packaging, or advertisement) suggests that recognizing an image as art positively influences behavior and perceptions, with the impact tied to the perceived status of the image as art. (Hagtvedt & Patrick, 2008; Lacey et al., 2011). This hints at the role of neural reward mechanisms in response to art status.

During the therapeutic process in art therapy, several key points are emphasized. Firstly, there is an emphasized triangular relationship between the art therapist, the art process, and the art product. This relationship facilitates secure attachment that mimics primary relationships (Czamanski-Cohen & Weihs, 2016). The supportive individual, represented by the art therapist, offers a safe and nurturing environment, while the art materials nurture the individual's self-engagement. This self-engagement (the second key point) is a crucial aspect of art therapy, as it allows individuals to explore and express their emotions, even when addressing negative content. Qualitative research of art therapy intervention demonstrates that even when someone expresses themselves negatively on a subject, the overall experience stays positive (Collie et al., 2006). The aforementioned soothing and nurturing environment offered by creative art therapies also further fosters self-engagement—which is distinct from verbal psychotherapy (Czamanski-Cohen & Weihs, 2016). Additionally, embodied self-expression is emphasized in art therapy, as it assists in the translation of somatic knowledge into explicit forms (Subic-Wrana et al., 2011). This process involves interpreting implicit emotions, such as physical sensations, into explicit verbal or pictorial representations, allowing for the progression from undifferentiated to differentiated and integrated expression (Czamanski-Cohen & Weihs, 2016). Finally, meta-cognitive processes are explored in art therapy, allowing for relaxed exploration and emotional transition. This involves evaluating one's thinking, thus transitioning from automatic to reflective processes, with an emphasis on the importance

of safety, relaxed attention, and exploratory motivation in fostering metacognitive abilities (Czamanski-Cohen & Weihs, 2016).

Engaging in visual arts bolsters psychological resilience in its participants as the experience gradually improves their ability to withstand stress and adversity. Furthermore, a study utilizing ANCOVA analysis explored the relationship between the functional connectivity of the brain's Default Mode Network (DMN) (a network of brain regions active during introspection and self-referential thinking) and psychological resilience. The findings indicate statistically that there is a significant positive correlation between greater resilience and increased functional connectivity in specific brain regions, including the frontal cortices and superior/middle temporal gyri. However, a negative correlation was noted between higher resilience and decreased DMN functional connectivity in the parietal cortex. This suggests that while some brain regions exhibit enhanced connectivity with greater resilience, others may display reduced connectivity within the DMN (Bolwerk et al., 2014).

Other Benefits of Art Therapy

Environment

For the success of art therapy to be possible, creating a safe, relaxing, and supportive environment is paramount. Within this type of environment, engaging in arts not only increases creativity but also facilitates meaningful social interactions and relationships, which participants perceive as deeper and more authentic than their usual daily interactions (Morrison et al., 2018; Poulos et al., 2018). The socialization aspect inherent in art therapy significantly contributes to improving the health of older adults, as participants create connections forged through shared experiences, emotions, and bodily sensations, fostering a sense of belonging and understanding (Groot et al., 2021). For some older adults, art may become a minor activity, but the community aspect truly enhances their experience. In addition, access to transportation, venues, health considerations, and societal stigma can influence participation in art therapy, making the sessions more interesting and enjoyable (Windle et al., 2017). In essence, while the artistic aspect of art therapy is essential, the socialization component plays a crucial role in improving the health and emotional well-being of older adults.

Cognitive Function

Participating in art programs offers numerous cognitive benefits, including the opportunity to learn new skills and improve cognitive stimulation (Johnson et al., 2020). For starters, studies have shown that the approach and duration of engagement in art programs can significantly enhance cognitive performance. For instance, Alders Pike's Study on 91 older adults revealed that longer sessions and utilizing art as therapy were associated with improved cognitive performance, as measured by the Clock Drawing Test (CDT) and Cognitive Failures Questionnaire (CFQ) method, after 10 weeks of art therapy (Galassi et al., 2022). This aligns with the findings that engaging in art activities not only stimulates cognitive function but also assists in recalling positive memories and distracting ruminative thoughts (Dunphy et al., 2019). These cognitive improvements are supported by theories of brain plasticity and cognitive reserve (Vance & Crowe, 2006; Noice et al., 2013). Employing art therapy additionally showcases positive changes in cerebral function, seen through improvements in neuropsychological test scores after participants engaged in the arts (Mahendran et al., 2017).

Moreover, engaging in activities with physical aspects, such as art, helps with relaxation and reduces stress. Art activities or therapies also have the potential to diminish negative physical symptoms, further promoting overall well-being (Jensen & Bonde, 2018). Physical health in general is correlated with higher life satisfaction and lower depressive symptoms. Additionally, physical exercise is an effective method for older

adults to improve their emotional conditions. For older adults specifically, physical activity not only benefits physical health but also cognition and mood, while reducing anxiety, depression, and stress (Roswiyani et al., 2019). The integration of art programs as physical activities offers holistic benefits for older adults.

Medical Conditions

Art therapy plays a crucial role in aiding various medical conditions, influencing both psychological and physiological aspects, thereby aiding in chronic disease management. For individuals grappling with negative emotions associated with illness, art provides a refuge and a means for grief expression through diverse creative outlets like clay molding, offering tactile involvement and cathartic release (Stuckey & Nobel, 2010). Studies conducted across hospital settings have revealed the positive effects of arts interventions on clinical outcomes, including reduced hospital stays, improved vital signs, decreased stress-related cortisol levels, and reduced medication needs.

Dementia

In the case of dementia, a condition with significant impacts on memory, thinking, emotions, and behavior, art programs have shown promising outcomes. Lack of physical health is often associated with the development of dementia, highlighting the importance of maintaining physical well-being throughout life. Good physical health is correlated with higher life satisfaction and lower depressive symptoms as it benefits physical health, cognition, and mood while also reducing anxiety, depression, and stress in older adults, which can be provided through art therapy (Galassi et al., 2022). For example, after a study demonstrated that art therapy for dementia patients positively impacts aspects of well-being, leading to positive changes in realms of "interest," "attention," "pleasure," and "self-esteem" after a series of structured questionnaires, open-ended questions, self-evaluations, and behavioral observations (Windle et al., 2017). Moreover, art programs can be both stimulating and socially engaging for individuals with dementia, contributing to their overall well-being.

Cancer

In the context of those diagnosed with cancer, art can serve as a therapeutic tool to understand the emotional expression of individuals navigating the traumatic journey. Engaging in art-making workshops related to cancer experiences leads to emotional benefits, as evidenced by moderately positive emotional expression, ambivalent self-image that develops more positively, resilient humor, and expressive art creation, when scored through the Silver Drawing Test and Draw-a-Story method (Morrison et al., 2018). Art therapy enables individuals to express the inexpressible aspects of their cancer diagnosis, integrating it into the personal narratives of their artworks (Stuckey & Nobel, 2010). Additionally, engaging in visual arts offers other numerous benefits, including alleviating the emotional weight of a cancer diagnosis, bolstering self-worth, sustaining social identity, and enabling symbolic expression of feelings during chemotherapy. Participation in the arts has shown efficacy in decreasing emotional distress by enhancing emotional expression, spirituality, and psychological well-being, while also benefiting family caregivers of cancer patients and cancer inpatients by reducing stress, anxiety, and improving emotional well-being (Stuckey & Nobel, 2010). Furthermore, art therapy can be a treatment that addresses the multifaceted needs of individuals coping with medical conditions, offering an approach for emotional expression, social connection, and improved quality of life.

Comparison to Other Therapies

The various forms of art interventions (e.g. expressive/autobiographical writing, music, theater, music, and

visual arts) all provide positive outcomes, with specific effectiveness found in each. For instance, writing/auto-biographical writing shows significant improvements in processing speed, attention, and verbal memory; participation in music therapy demonstrates improvement in cognitive performance; theater activities are linked with increase in memory, comprehension, and problem-solving (Noice et al., 2013). However, engagement in visual arts is emphasized for its association with increased social interactions, sense of empowerment, and psychological health (Noice et al., 2013).

In comparison to other therapy methods, art therapy demonstrates remarkable success and cost-effectiveness as a treatment option. Systematic reviews focusing on art therapy and depression have highlighted its efficacy and affordability as a mental health intervention (Dunphy et al., 2019). In a study consisting of a quantitative systematic review, eleven randomized controlled trials, and comprehensive literature searches for studies examining art therapy in populations with non-psychotic mental health disorders, approximately 20% of simulations favor art therapy. Despite the expected dominance of verbal therapy in terms of expected values, it indicates art therapy's viability as a treatment model (Uttley et al., 2015). Particularly, art therapy is significantly helpful to those who struggle to adapt to psychotherapeutic approaches that are exclusively verbal as art can be a form of alternate communication (Ciasca et al., 2018). Studies find that participants struggle to express the significance of their engagement with the arts using language because the benefits they experience go beyond what can be effectively conveyed through verbal expression (Groot et al., 2021).

Case Studies and Their Benefits

The Open Studio Approach is a possible methodology recommended for art therapy. Finkel & Bat Or, 2020 conducted a literature study utilizing a rigorous and replicable search of international literature in databases in art therapy journals, discovering two main themes: the primary therapeutic role of art and the flexibility of the open studio model. The Open Studio Approach, when implemented in art therapy sessions, prioritizes artistic processes for healing over interpretation. As a result, this involves unrestricted art creation sessions, creating a welcoming atmosphere conducive to a supportive, communal environment, and allowing freedom in participation, enabling individuals to choose their level of involvement (Finkel & Bat Or, 2020). The approach places an emphasis on group compositions (a changing group of participants), the facilitator's role (instead of actively creating art, they focus on witnessing and helping the participants; becoming the participant artists apprentice), facilitators' perception of participants (participants being perceived as clients or patients), exhibiting artwork (potential exhibitions shifting the focus on the quality and aesthetics of the created artworks), length (most commonly 1.5 to 2 hours, but sometimes 3 to 6 hours), and theoretical foundation (the ideology and political considerations from professional perceptions of pathology and health determined whether a model classifies itself as art therapy (Finkel & Bat Or, 2020). Therefore, the Open Studio Approach is suggested for its flexibility that can be implemented among different populations and settings, and its benefits of assisting in the discovery of inner wisdom and embodied knowledge as transformation occurs.

Encouraging participants' expression and learning art while being sensitive to group needs is a fundamental aspect of the therapeutic techniques approach. Ciasca et al., 2018 evaluated whether art therapy is beneficial as an adjuvant treatment for specifically elderly women, by utilizing a randomized, controlled, and single-blind study, carried out in a sample of women with major depressive disorder (MDD) stable on pharmacotherapy. While the experimental group (EG) was assigned to 20 weekly art therapy, the control group was not subjected to any treatment. Using the Depression Scale (GDS), Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), and cognitive measures, results after the trials demonstrated that art therapy is indeed an adjunctive treatment for MDD in elderly women, as it can improve depressive and anxiety symptoms. Particularly, the study's results were consistent with other psychotherapies that have been shown to alleviate depression symptoms in the elderly, such as interpersonal therapy (positive social interactions), depression management therapy (reflection on depression-related issues), and life review therapy (revisiting past issues)

(Ciasca et al., 2018). For it to be especially successful, an emphasis is placed on fostering interaction and pro-social experiences between group members. The approaches used techniques such as guided imagery, relaxation stimulation, and emotional exploration to alleviate negative thoughts associated with depression and anxiety (Ciasca et al., 2018).

Using the Advanced Cognitive Training for Independent and Vital Elderly (ACTIVE) as a guideline, Willis et al., 2006 examined the cognitive interventions and benefits of art therapy, focusing on the effect of cognitive training and its duration on daily function and cognitive abilities among elderly individuals. The study involved 2832 volunteers with a mean age of 73.6 years, divided into randomized controlled single-blind trials with four treatment groups. Following the initial investigation, a five-year follow-up research was carried out, which yielded some important findings. First, compared to the control group, the Reasoning group demonstrated noticeably reduced difficulties with Instrumental Activities of Daily Living (IADL). Processing speed and memory training, however, had no effect on IADL. Booster training in the speed of processing group resulted in significant improvement in everyday speed of processing, but no booster effects were observed for everyday problem-solving or self-reported difficulty in IADL across any groups. Interventions pertaining to memory, logic, and processing speed were beneficial in terms of maintaining cognitive capacities over the long term. Notably, speed of processing intervention with booster training showed increased speed of processing performance, whereas reasoning intervention with booster training demonstrated improved reasoning performance (Willis et al., 2006).

Conclusion

The COVID-19 pandemic has acted as a reminder on the vulnerabilities present in long-term care for the elderly, emphasizing the urgent need for diverse solutions to enhance their health and quality of life. In recent years, the increasing population of older adults has been impacted by issues from healthcare, pensions, and other age-related health problems. Among the most pressing concerns are the prevalence of mental health challenges, particularly depression, in addition to chronic conditions and negative societal perceptions.

The complexity of aging-related issues encompasses not only declining physical health but also mental and social well-being. Older adults face an increased chance of struggling with mental health problems due to reasons such as social skill deficits and lack of positive engagement. This struggle coupled with higher risks of being diagnosed with chronic conditions, increases the challenges they face in their daily life. Moreover, societal stereotypes and perceptions often contribute to feelings of loneliness and disconnection, further diminishing the quality of life for older individuals. Thus, the efficacy of art therapy in addressing these challenges stands out as a significant solution.

Addressing these challenges requires a comprehensive approach that recognizes the needs and experiences of older adults. Therefore, incorporating art therapy requires careful consideration of accessibility, inclusivity, and the creation of supportive environments to conduct successful artistic expressions. Evidently, various research studies, case studies, and systematic reviews on the efficacy of art therapy demonstrate that it improves mental health outcomes and enhances overall well-being. For instance, art therapy and artistic engagement have been shown to improve cognitive functioning by stimulating neural pathways and promoting neuroplasticity. Additionally, they contribute to emotional well-being by providing outlets for expression and fostering positive emotions. Physical participation in art programs has also been linked to increased life satisfaction and overall quality of life among older adults. However, future research can assess the long-term effects of art therapy interventions as further exploration of the subject can help understand the mechanisms underlying the therapeutic benefits of artistic engagement in order to develop more detailed approaches to help the diverse needs of older adults.

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