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# Measuring The Effect of Art Therapy on Self-Esteem Among Older Adults: A Pretest Post Test Intervention Study

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## Abstract

Art therapyis a therapeutic form which uses drawing, painting, clay as a form of expression as well as therapy which helps boost self-esteem and has been effective for children, adolescents, adults, and older adults alike. As people age, both physical changes and changes in their social lives put them at a higher risk of developing multiple physical and psychological health problems. Therefore, fostering an individual's social and emotional well-being is crucial for building positive self-esteem and helps to lead a healthy, quality and productive lifestyle. This study tries to understand the outcome of art therapy on self-esteem among older adults in Pune using the pretest and posttest research design. The results of the research showed that there is a significant increase in self-esteem due to art therapy (p value< 0.01). From the resultsit can be inferred that art therapy has a significant impact in boosting self-esteem in older adults and such modules must be recommended for all older adults for a better well-being.

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## INTRODUCTION

his study aims to explore how art therapy can bring about meaningful changes in self-esteem among older adults, a population that faces unique psychological and social challenges. Self-esteem is a critical component of an individual's psychological well-being, reflecting how one evaluates their worth and capabilities. It encompasses how positively a person perceives the characteristics and qualities that make up their self-concept, including their physical self-image, view of their accomplishments and capabilities, values and perceived success in living up to them, as well as the ways in which others view and respond to that person (American Psychological Association, 2023). Fundamentally, self-esteem represents the feeling of self-worth and value that results when the self, judges itself and it is frequently measured by asking respondents to give straightforward evaluations of their feelings toward themselves (Rosenberg, 1965).

The importance of self-esteem becomes evident when examining its effects on human behavior and mental health.

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Elevated self-esteem correlates with individuals' confidence and competence in approaching new challenges, such as initiating social interactions, maintaining persistence during difficult tasks, and withstanding peer pressure (Baumeister et al., 2003; Baumeister, Campbell, Krueger & Vohs, 2005). Those possessing high self-esteem view themselves favorably as competent, likeable, and successful, with robust self-esteem potentially serving as a buffer against stress and anxiety arising from life events that may threaten and diminish our self-concept (Baumeister, 1992; Steele, 1998). In contrast, individuals experiencing low self-esteem tend to feel unhappy, lack confidence, and may surrender rather than intensify their efforts when confronting demanding obstacles.

Self-esteem plays a crucial role in overall wellbeing. Among older adults, psychological stress may arise when a combination of social, intellectual, physical, and emotional requirements remains unmet (Tandon M, 2017). Those who experience psychological stress have a poorer quality of life, with stress being associated with age, education, income, and financial dependence. Therefore, fostering social and emotional well-being is crucial for enhancing an individual's positive self-esteem (Mann M, Hosman CMH, Schaalma HP et al, 2004). Research has demonstrated that selfesteem is also a possible mediator in the relationship between functional social support and enhanced mental health (Rippon et al., 2022), suggesting that self-esteem enhancement interventions may prove effective in alleviating or diminishing depressive symptoms and improving overall mental health. (Sowislo & Orth, 2013). Moreover, research indicates that self-esteem mediates the positive relationship between social support and subjective well-being among physically disabled populations(Ji et al., 2019), highlighting its broad significance across various populations.

The National Policy for Older Persons 1999 has defined the age of older adults as people aged more than 60 years. Aging is a universal process with implications extending beyond social dimensions to encompass economic, political, and health-related domains, and elderly individuals face vulnerability to both physical and psychological comorbidities stemming from age-associated factors and changes in social contexts (Kaushik, 2018). The mental health of older adults is influenced by their physical and social surroundings, cumulative life experiences, and age-specific stressors. This population faces an increased likelihood of encountering adverse events including the loss of loved ones, financial decline, or diminished

sense of meaning following retirement. These negative experiences, combined with substantial reductions in physical capacity, bereavement, and declining functionality, can lead to psychological distress. Additionally, social isolation and loneliness represent critical contributors to mental health outcomes, alongside various psychological factors that older adults' overall well-being.These psychological factors function as important determinants in establishing individuals' likelihood of developing illness. For instance, possessing autonomy over one's surroundings through decision-making in daily activities results in improved psychological wellbeing and enhanced health outcomes (Taylor, 1991; Levy et al., 2002), demonstrating that mental health remains critically important at this stage of life.

The relationship between self-esteem and overall well-being becomes even more pronounced in the elderly population. Elderly individuals with selfelevated self-esteem confidence exhibit greater resilience in managing demonstrate Conversely, psychosocial challenges. experiencing life dissatisfaction or harboring adverse past experiences display lower confidence and hold less positive self-perceptions (Franak et al., 2015). Strong self-esteem represents an essential element of health promotion, as it supports well-being and fosters happiness. Evidence indicates that robust self-esteem may also contribute to extended longevity in elderly populations, highlighting the importance implementing effective interventions to strengthen self-esteem among this at-risk group.

One such intervention that shows considerable promise is art therapy, which offers a unique approach to addressing psychological well-being. Art therapy is defined by the British Association of Art Therapists as "a form of psychotherapy that uses art media as its primary mode of expression and communication." Importantly, clients referred to art therapists are not required to have experience or skills in the arts, and the art therapist's primary concern is not to make an aesthetic or diagnostic assessment of the client's image. Rather, the overall goal of its practitioners is to enable clients to change and grow on a personal level through the use of artistic materials in a safe and convenient environment (British Association of Art Therapists, 2015). The American Art Therapy Association extends this definition, describing it as "an integrative mental health and human services profession that enriches the lives of individuals, families, and communities through active art-making, creative process, applied psychological theory, and human experience within a psychotherapeutic relationship" (American Art Therapy Association, 2018).

The therapeutic mechanisms of art therapy operate on multiple levels to support psychological growth and healing. Art therapy provides clients with an opportunity to express thoughts, emotions, concerns, issues, aspirations, hopes, dreams, and desires within a relatively safe environment while helping to enhance problem-solving skills, increase independence and self-esteem. According to the American Art Therapy Association, its primary objectives include enhancing cognitive sensorimotor abilities, building self-esteem and selfawareness, developing emotional facilitating insight, strengthening social competencies, alleviating and addressing conflicts and distress, and encouraging societal and environmental transformation. (American Art Therapy Association, 2018). Essentially, art therapy utilizes creative techniques to address psychological conditions and improve mental health, based on the belief that artistic expression can foster healing and enhance psychological well-being(Van Lith, 2015). As clients engage in artistic creation, they may examine their work and reflect on the emotions it evokes, and through artistic exploration, individuals can identify patterns and conflicts that may be influencing their cognitions, emotions, and behaviors.

The versatility and effectiveness of art therapy extend across diverse populations and settings. Art therapy promotes personal development, enhances self-awareness, and supports emotional healing, and has been utilized across diverse settings with children, adults, families, and groups. This therapeutic approach enables individuals across all age groups to construct meaning and gain insight, obtain relief from intense emotions or trauma, address conflicts and challenges, enhance everyday life, and experience improved overall well-being. (Malchiodi, 1998). Art-making within community settings can improve mental wellness, and through visual and symbolic expression in art therapy, individuals can strengthen their sense of worth and self-esteem, enabling people with mental health conditions to connect with others and expand their social connections (Stuckey & Nobel, 2009).

The application of art therapy in India demonstrates its cultural adaptability and effectiveness across different age groups. Arts therapy is used for mental health of adult, child, and adolescent populations in India, with research showing that in children, art therapy could be integrated into their daily curriculum to enhance overall well-being (Prakashan & Banerjee, 2024).

According to Saikia and Deuri (2024), the flexibility of art therapy in addressing the distinct requirements of and adolescents produces psychosocial results, demonstrating how art-based therapeutic approaches effectively build emotional resilience, self-esteem, and self-concept among varied groups of young people facing different difficulties. Art therapy successfully focuses on individuals' existing strengths and capabilities while supporting them in addressing their limitations. By incorporating self-love and self-compassion techniques, art therapy helps individuals develop a caring and supportive relationship with themselves, resulting in enhanced emotional health and more positive interpersonal connections. Considering these proven advantages across multiple populations and the particular susceptibilities of elderly individuals, investigating art therapy's potential to boost self-esteem in older adults offers a promising pathway for enhancing their quality of life and mental well-being.

#### **RATIONALE AND SIGNIFICANCE**

It is known that arts contribute to one's well-being. There are various researches which showcase that there is a positive effect of art therapy on one's self concept. There are various components which come under Self which are self-awareness, self-efficacy, self-confidence, self-esteem etc. Out of this self-esteem is one of the important components which is very important to have a productive and a good quality life.

There are various researches which show the increase in one's self esteem due to art therapy interventions. These researches are mainly focused on children, adolescents and adults. There are very few which focus on older adults/senior citizens. Along with that art therapy is popularly used in western countries but is still a growing field in India. Thus, there are very few researches about the Indian population and none focusing on older adults.

The current study aims to study if Art Therapy is a good way to boost self-esteem in senior citizens. It contributes in a unique way to the existing body of knowledge by not only working on the psychological aspect but also with emotional, social and cognitive aspect. It addresses the crucial knowledge gap of the effective of art therapy intervention on the self-esteem among older adults in Indian. The arts intervention sessions will help them boost their confidence, productivity, optimism and will help form a good community. Sharing creative work can boost selfesteem and provide a sense of purpose expressive accomplishment. Thus, using art

interventions will not only increase one's self esteem but also will help with holistic development of one's mental well-being. This research looks forward to establish a scientific basis for policy decisions among old residential homes/ old-age orphanages etc. regarding geriatric mental health.

## **OBJECTIVE AND HYPOTHESES**

#### **Objectives**

- To find out if art therapy is beneficial to enhance self-esteem in older adults.
- To examine and compare the increase in selfesteem between male and female participants to determine whether gender has a significant effect on self-esteem enhancement.

#### **Hypothesis**

Hypothesis 1 - There is no significant difference between pretest and post test scores on Self-esteem among older adults.

Hypothesis 2 – There is no significant difference between increase in self-esteem between male and females.

#### **METHODS**

#### **Research Design**

The research design used is One group Pretest Posttest design. This pre-experimental design involves administering identical assessment measures to participants before and after treatment or exposure to a condition, with these measures used to identify any changes attributable to the intervention or condition. The effect of the treatment is measured by making a comparison between pretest and posttest scores. In this there is no control group and the tests are given to one particular group only.

#### **Participants**

The study was conducted on 15 participants residing in Bavdhan, Pune. The age group of the participants is above 65 years of age. The homogeneity of the participants is maintained by taking the sample of a particular senior citizens group living in the same vicinity. This will ensure participants share same environmental conditions which will help control the extraneous variables.

Purposive sampling and convenience sampling are the two types of non-probability sampling used for this research.

## Demographic characteristics of the participants

There was a total of 15 participants of which 10 were females and 5 were males. 53.33% of the sample were in the age range 60 to 69 years, 40% were in the

age range 70 to 79 years and 6.66% of the sample were in the age range of 80 and above. The same has been mentioned in the tables below.

#### **Tools used**

Rosenberg's Self Esteem Scale (RSES) was used to measure self-esteem.

The RSES is a 10-item self-report instrument that evaluates self-esteem in individuals aged 12 years and older, applicable across varied populations ranging from adolescents to elderly individuals and from community samples to clinical populations experiencing different mental health issues (Sinclair et al., 2010; Orth & Robins, 2014). Rosenberg (1965) developed the RSES to measure "a positive or negative attitude toward the self as a totality," operationalizing the theoretical framework of global self-acceptance. The scale reflects Rosenberg's conceptualization of self-esteem as a fundamental component of selfevaluation, encompassing an individual's overall sense of worth and personal value. The RSES contains two subscales that differentiate between performancebased self-assessment and inherent self-worth: Self Competence and Self Liking.

The RSES represents one of the most widely employed instruments for measuring self-esteem (Sinclair et al., 2010). Participants completed the Hindi version of the scale for both pretest and posttest assessments (Aachal et al., 2024)

Studies have confirmed its internal consistency, with Cronbach's alpha values indicating good reliability. Cronbach's alpha of 0.83in an Indian sample indicates good reliability. A test-retest reliability coefficient of r=0.76was reported, indicating good stability(Aachal et al., 2024b).

Validity has been established through methods like Exploratory and Confirmatory Factor Analysis, which show the scale measures the underlying construct of self-esteem, and by confirming its convergent validity with other scales. The scale's content validity is supported by a high Content Validity Index (CVI) of 0.98, suggesting that the items are a good representation of the self-esteem construct(Aachal et al., 2024b).

### **Procedure**

the participants.

For this research, the group of participants were given the pretest and paper pencil format was used. Privacy and confidentiality were maintained throughout the data collection and analysis process. RSES was given to the participants before the intervention. After a 6-day art therapy intervention was conducted, on the last day, the same test was given to

## Intervention plan

DAY	ACTIVITY
Day 1	Smiley Face
	Self-esteem exercise
	Honor
Day 2	Leisure skills
	Love Letter
Day 3	Key to Happiness
	Tree of Strength
Day 4	Traits
	Passion
Day 5	Gratitude Treasure Chest
	Tiny Victories
Day 6	Collage

## **Data Analysis**

Mean differences were calculated using Wilcoxon Sign Rank Test, which is a non-parametric test. The test is used to compare two related samples or repeated measurements on a single sample to determine if their population median ranks differ. The test is distribution free and does not require too many assumptions and can be used on small (N < 30) as well as large (N > 30) samples. It takes into account the direction as well as the magnitude of the differences between two related samples that is pairs matched on same ground (Mangal, 2002).

## **RESULT AND DISCUSSION**

Once the data was collected, JASP was used for data analysis. Differences of the mean were calculated

among pre-test and post-test scores using Wilcoxon Sign Rank Test.

## Self esteem

The research includes independent and dependent variables where art therapy is the independent variable and self-esteem is the dependent variable. There has been a significant increase in the dependent variable, that is self-esteem after the intervention. This validates the findings of Michael Franklin (2013). Descriptive statistics was done. The mean in pretest is 27.93, the standard deviation is 3.693, the Shapiro Wilk value is 0.983 and the P value of Shapiro Wilk is 0.984 stating that the data is normalized. The same has been mentioned in the table below.

	Pre Test	Post Test
Valid	15	15
Missing	0	0
Mean	27.93	
Std. Deviation	3.693	
Shapiro-Wilk	0.983	
P-value of Shapiro-Wilk	.984	
Minimum	21.00	29
Maximum	34.00	38

#### Mean differences between the variables

Wilcoxon signed rank test to measure the mean differences between the variables. The mean of the pretest is 27.93 which increased to 34.67 in the posttest. The standard deviation of the pretest is 3.693 while of the posttest it is 0.838. The same has been mentioned in the tables below

## .Paired Samples T-Test

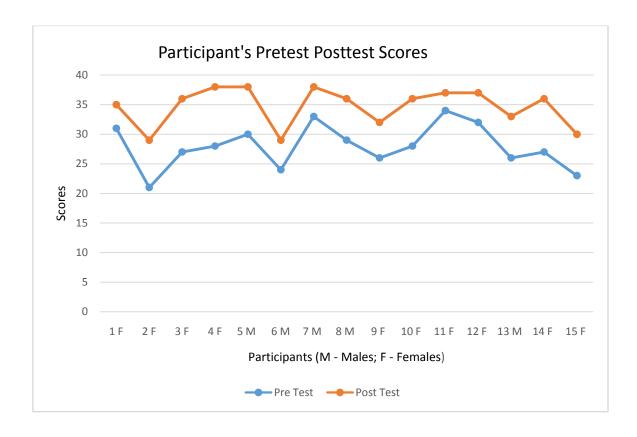
Measure 1	Measure 2	Test	Statistic	Z	df	р
Pre Test	Post Test	Student	-12.932		14	<.001
		Wilcoxon	0.000	-3.408		<.001

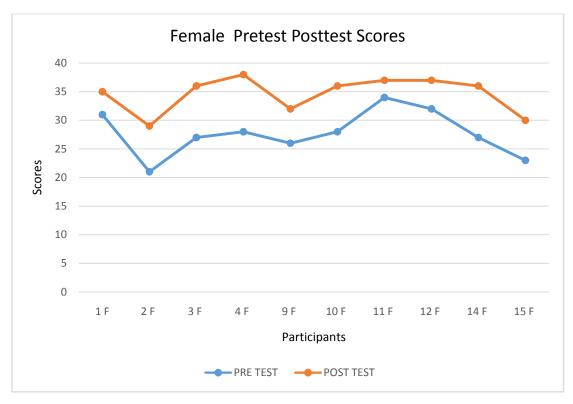
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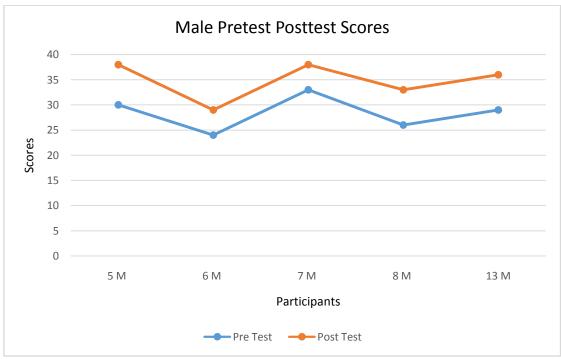
	Ν	Mean	SD	SE	Coefficient of variation
Pre Test	15	27.93	3.693	0.954	0.132
Post Test	15	34.67	3.244	0.838	0.094

A negative z value indicates that the pretest group mean is lower than posttest group mean. An increased mean in the posttest compared to pretest in a preposttest design indicates that there has been a change or improvement after an intervention. This increase, especially when statistically significant

suggests that the intervention had a positive effect on the measured outcome leading to higher scores of the measured variable after the intervention. Thus, the 1st null Hypothesis that there is no significant difference between pretest and post test scores on Self-esteem among older adults, is rejected.







## **Gender specific observations**

Descriptive statistics were done before understanding the significance between self-esteem between both genders. For all the four scores – male pretest, male posttest, female pretest and male posttest the P value of Shapiro Wilk was greater than 0.05. For male pretest it was 0.984, male posttest 0.016, female pretest 0.885 and female posttest 0.056. It shows that the data is normalized.

The following has been mentioned in the table below.

#### **Descriptive Statistics**

	Male pretest	Female pre test	Female post test	Male posttest
Valid	15	10	10	15
Missing	85	90	90	85
Mode	27.46	27.30	36.36	36.60
Median	28.00	27.50	36.00	36.00
Mean	27.93	27.70	34.60	34.67
Std. Deviation	3.693	3.945	3.134	3.244
Shapiro-Wilk	0.983	0.969	0.849	0.847
P-value of Shapiro-Wilk	.984	.885	.056	.016
Minimum	21.00	21.00	29.00	29.00
Maximum	34.00	34.00	38.00	38.00

Student Welch Test were conducted to understand the significance of self-esteem between male and female gender.

#### Test of Normality (Shapiro-Wilk)

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Residuals	W	р		
Female pre test	0.942	.579		
Male pretest	0.979	.963		

**Pre test** -The pretest scores were measured where the p value of female pretest of the Welch test is 0.411 and male pretest is 0.735. The following is mentioned in the table below.

## Independent Samples T-Test

	Test	Statistic	df	р
Female pre test	Student	-0.870	8.000	.410
	Welch	-0.870	7.778	.411
Male pretest	Student	0.335	13.000	.743
	Welch	0.349	9.053	.735

**Post Test** - The pretest scores were measured where the p value of female pretest of the Welch test is 0.577 and male pretest is 0.922. The following is mentioned in the table below.

#### Independent Samples T-Test

	Test	Statistic	df	р
Female post test	Student	-0.583	8.000	.576
	Welch	-0.583	7.751	.577
Male posttest	Student	0.109	13.000	.915
	Welch	0.101	6.783	.922

#### Test of Normality (Shapiro-Wilk)

Residuals	W	р
Female post test	0.857	.071
Male posttest	0.852	.018

We see from the above data that one group of variances is different from others. Thus, the  $2^{nd}$  null othesis that there is no significant difference between increase in self-esteem between male and females is accepted.

## **CONCLUSION**

The current research study demonstrates a positive effect of art therapy on self-esteem among older adults, though several limitations must be acknowledged. The sample size was considerably small due to difficulties in securing participants for six consecutive days, and the study was confined to a limited geographical area. Controlling extraneous

variables such as socioeconomic status, education level, living arrangements (with children/grandchildren or independently), and marital proved challenging; conducting intervention in old age homes might have better addressed these concerns. Despite these limitations, the study addresses a crucial knowledge gap regarding art therapy's impact on self-esteem in India's older adult population, revealing that such interventions boost confidence, productivity, optimism, and overall mental well-being, which subsequently enhances relationships, independence, physical and emotional health, cognitive function, stress management, social engagement, and quality of life. These findings underscore the significance of implementing art therapy modules in senior citizen circles, laughter clubs, old age homes, and similar settings, suggesting the need for policy development that incorporates art therapy for older adults' mental well-being. Future research should expand the sample size, compare outcomes across larger geographical areas versus controlled old age home environments, extend intervention duration to 7-10 consecutive days, mixed-methods approaches combining qualitative and quantitative data, and investigate gender differences in self-esteem improvement with larger, more diverse samples to provide more precise and comprehensive understanding of art therapy's therapeutic potential for this demographic.

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