

Effectiveness of Arts Based Therapy Across Domains for Persons with Disabilities

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Abstract

Persons with disabilities, particularly those with intellectual deficits, lack the ability to perform daily tasks smoothly unlike neurotypical individuals who are able to perform the same tasks without any limitations. These individuals show improvement with limited kinds of interventions in order to improve their understanding of the world. Some interventions have shown a wide range of changes in their psycho-motor domain, social skills, communication skills, emotional capability and cognitive domain. Arts Based Therapy (ABT) involves different forms of art as a means of providing therapy to these individuals to bring about functional improvement across the aforementioned domains of their lives. This paper explores the changes in persons with disabilities across various domains reported in persons with disabilities through ABT.

Keywords: Arts Based Therapy, Psycho-motor Domain, Social Skills, Communication Skills, Emotional Capability, Cognitive Domain.

Introduction-

Persons with disabilities are individuals who have challenges or a limited ability to carry out activities of daily living, to the extent that he or she may require assistance in such tasks. The American Disabilities Act of 1990 defines incapacity as ‘a physical or mental impairment that limits one or a lot of life abilities’.

The inability to function in full capacity could develop over the course of a person’s lifespan or exist from birth. As per United Nations, limitation or inability to perform an activity reasonably in the manner which is considered traditional/normally practiced for somebody’s being– these activities are restricted by a purposeful limitation or by an impairment.

Arts Based Therapy- Arts Based Therapy (ABT) is the application of creative techniques like drama expression, play therapy, visual aesthetics and other mediums of expression to improve mental health and treat psychological illnesses through . The practice of ABT is based on the notion that mental health and healing can be promoted via artistic expression^[1]. For thousands of years, people have used the arts

as a means of self-expression, communication, and healing. However, it wasn't until the 1940s that art in therapy began to take on a systematic structure^[2].

Psycho-motor domain- As per Bloom's taxonomy, the bodily function domain includes physical movement, coordination, and use of the motor-skill areas. Development of these skills are measured in terms of speed, accuracy, distance, procedures, or techniques in execution of specific task. There are seven major checklists which check the abilities to perform simple behaviour to the most complicated behaviour: Simpson and Harrow's bodily function domain's square measures are particularly helpful for the event of kids and youth, and for developing skills in adults that takes individuals out of their comfort zones. Persons with psycho-motor disabilities tend to lack in these functioning areas.

Social skills- Social domain involves communication-related skills in goal-oriented contexts. There are 5 important measures of social skills that are outlined by Pacific Crest that embrace a) communication, b) relating with others, c) relating culturally, d) managing, and e) leading. A bit like the other domains, the social domain processes encompass a hierarchy of complexity from basic or foundational human activity to complicated tasks such as managing and leading.

Communication skills- Communication, at its simplest, is outlined because of the act of transferring data from one place to another either vocally (using voice), or in written form (using written language or digital media like books, magazines, websites or emails), visually (using logos, maps, charts or graphs) or non-verbally (using visual communication, gestures and the tone and pitch of voice). Communication usually occurs in a combination of the above stated modalities, such as verbal communication with gestures. Of all our life skills, having the ability to speak effectively is perhaps the most essential.

Emotional capability- The construct of emotional ability is within the understanding of emotions as being traditional, helpful aspects of being human. The flexibility to be precise and control emotions is a necessary part of one's life. However, equally is that the ability to grasp, interpret, and respond to the emotions of others. It is what allows us to perceive when someone is angry or upset with us.

Cognitive Skills- Psychological features that measure the core skills our brain used to assume, read, learn, remember, reason, and listen. The brain takes the external stimulus and pass it to the other body part in the form of response to be produce.

Each of the psychological feature skills plays a crucial role in processing new stimulus which means that if even one among these skills is weak, in spite of having the proper information the response might not be proper while performing certain cognitive functions that is required to produce the desirable response. In fact, most of our learning struggles are caused by one or more of weak psychological feature skills. Cognitive psychological feature skills include perception, attention, memory, motor skills, language etc.

Literature Review-

Several medical professionals investigated the use of art as a therapeutic tool after observing that patients with mental illnesses frequently expressed themselves via drawings and other artwork^[3]. Since then, art has grown in significance within the therapeutic domain and has been incorporated into various methods of evaluation and intervention.

Because it offers a person-centered, recovery-oriented approach that takes into account clinical requirements as well as emotional, spiritual, and social needs, art therapy is becoming more and more

popular in mental health and disability settings^[4]. Art therapy interventions have helped in reducing stress among severely abused clients^[5].

A quarter of the world's disease burden is attributed to mental and behavioral disorders^[6]. Worldwide, two out of every three psychotic patients do not receive specialized mental health treatment^[7]. India has a mental health burden of 2443 disability-adjusted life years (DALYs) per lakh population, and an age-adjusted suicide rate of 21.1 per lakh population, according to the World Health Organization (WHO)^[6, 7, 8]. "Just a small proportion" of more than 45 million people who experience mental and behavioral health issues globally receive the proper care, according to the World Health Organization's 2001 World Health Report^[6].

Psychological illness has a wide range of intricate causes. They vary depending on the circumstances^[9]. People were using the arts for self-expression, healing, and communication thousands of years ago. However, it wasn't until 1940 that art therapy was included in official curricula. Physicians started to observe that individuals suffering from mental illnesses often express themselves via drawings and other artistic creations. Many were prompted by this to think about employing art as a healing method^[10, 11]. Engaging in artistic endeavors can assist individuals in managing anxiety and hopelessness as well as lessening the impact of long-term mental health conditions^[12]. The notion that artistic expression can significantly contribute to the healing process has gained acceptance in many cultures. Paintings, stories, dances, yoga, and chants have all been employed as therapeutic practices throughout history^[13, 14]. Health psychologists have spent the last ten years closely examining the ways in which art therapy can alleviate emotional trauma, improve self-awareness and that of others, develop the ability to reflect on oneself, lessen mental symptoms, and alter thought patterns and behaviour.

Studies on non-pharmacological treatments for Alzheimer's have looked at recollection therapy, dance or movement therapy, music therapy, and art therapy^[15]. Multidisciplinary cognitive rehabilitation has been demonstrated in patients with moderate Alzheimer's disease^[16]. One of the exercises for cognitive recovery was art therapy. A variety of techniques were used, including memory training, computer-assisted brain stimulation, expressive arts (writing, drawing, and verbal expression), physical training, and physiotherapy. Patients' quality of life consequently increased^[17]. The therapeutic and psychological effects of engaging in art interventions involving dance, expressive writing, music, theatre, and visual arts have been investigated^[18]. Persons with intellectual disabilities face greater difficulty in expressing their emotions and feelings verbally or through socially-acceptable gestures, which makes them prone to expressing their emotions unconventionally and in a maladaptive manner^[19, 20]. Arts based therapy programs have a positive impact on the social and emotional well-being of the young adults with intellectual disability, resulting in increased self-confidence and improvement in developing friendships^[21].

Methodology-

Scope of the study- The study was conducted on persons with disabilities who were receiving Arts Based Therapy.

1. Research design- The study employs action research design, which is solution-driven and helps to carry out various observations by making solution-based interventions. The study will include descriptive accounts, and comparison between observations made about the participants over time.
2. Participants- Initially, 20 participants were part of the study but 3 participants were not able to continue. Hence, 17 participants were part of the study.

3. Sampling technique- Purposive sampling technique was employed as a method of selecting sample for the study.
4. Material/measures used for data collection- A structured questionnaire was used based on the dimensions chosen as the area of the study i.e. psycho-motor domain, social skills domain, communication skills domain, emotional skills domain and cognitive domain.
5. Procedure for data collection- Data was collected by means of observations made by the therapist providing Arts Based Therapy over a time period of 6 months i.e. 2 quarters of the year. Initial observation was made before providing the therapy, the second observation was made after providing therapy for 3 months i.e. one quarter, and the third observation was made when the therapy had been provided for another 3 months i.e. second quarter.
6. Data analysis- Data analysis was done using SPSS.

Results-

Table 1- Descriptive Table

	N	Minimum	Maximum	Mean	Std. Deviation
Psycho-motor Domain Before	17	24.00	59.00	42.06	10.34
Psycho-motor Domain- One Quarter	17	24.00	61.00	43.24	10.99
Psycho-motor Domain Second Quarter	17	24.00	60.00	44.76	11.87
Social Skill Domain Before	17	32.00	83.00	60.76	13.71
Social Skill Domain One Quarter	17	32.00	84.00	62.94	14.68
Social Skill Domain Second Quarter	17	32.00	82.00	62.29	14.42
Communication Skill Domain Before	17	27.00	75.00	52.94	13.39
Communication Skill Domain One Quarter	17	27.00	77.00	54.53	14.44
Communication Skill Domain Second Quarter	17	26.00	75.00	54.88	14.99
Emotional Skill Domain Before	17	41.00	72.00	55.71	7.09
Emotional Skill Domain one Quarter	17	43.00	73.00	55.71	7.09
Emotional Skill Domain Second Quarter	17	43.00	73.00	56.41	6.96
Cognitive Skill Domain Before	17	15.00	42.00	31.06	8.30
Cognitive Skill Domain One Quarter	17	15.00	45.00	31.71	8.84
Cognitive Skill Domain Second Quarter	17	15.00	45.00	32.00	9.14

Table 1 shows the mean value obtained by the participants on different domains at different intervals of time during which they were provided Arts Based Therapy (ABT). The Mean score obtained by participants on Psycho-motor domain before providing any ABT is ($M_P = 42.06$), after providing therapy for one quarter ($M_{P1} = 43.24$), after providing ABT for two quarters ($M_{P2} = 44.76$). The Mean score obtained by participants on Social Skills domain before providing any ABT is ($M_S = 60.76$), after providing therapy for one quarter ($M_{S1} = 62.94$), after providing ABT for two quarters ($M_{S2} = 62.29$). The Mean score obtained by participants on Communication Skills domain before providing any ABT is ($M_C = 52.94$), after providing therapy for one quarter ($M_{C1} = 54.53$), after providing ABT for two quarters ($M_{C2} = 54.88$). The Mean score obtained by participants on Emotional Skills domain before providing any ABT is ($M_E = 55.71$), after providing therapy for one quarter ($M_{E1} = 55.71$), after providing ABT for two quarters ($M_{E2} = 56.41$) and The Mean score obtained by participants on Cognitive Skills domain

before providing any ABT is ($M_{CO} = 31.06$), after providing therapy for one quarter ($M_{CO1} = 31.71$), after providing ABT for two quarters ($M_{CO2} = 32$).

Table 2- Comparison of Psychomotor Domain Before and After Arts Based Therapy

Pair 1- Psycho-motor Domain Before and After- One Quarter

Pair 2- Psycho-motor Domain Before and After- Second Quarter

Pair 3- Psycho-motor Domain One Quarter and Psycho-motor Domain Second Quarter

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	-1.17647	1.55062	.37608	-1.97372	-.37922	-3.128	16	.006
Pair 2	-2.70588	3.31219	.80332	-4.40885	-1.00291	-3.368	16	.004
Pair 3	-1.52941	2.78652	.67583	-2.96211	-.09671	-2.263	16	.038

Table 2 shows the difference in Psycho-motor skills of the participants after they have been provided Art Based Therapy (ABT) initially for one quarter and then for two quarters. The difference reflected in the table shows that there is a significant change in the Psycho-motor domain of the participants before ABT was provided and after ABT was provided for one quarter of the year i.e. (.006). There is also a significant change in Psycho-motor skills of the participants before ABT was provided and after ABT was provided for two quarters (.004), and it also shows that ABT has an increased effect on improving the Psycho-motor domain of the participants when they were provided ABT for two quarters as compared to one quarter (.038). The difference is significant at .05 level of significance.

Table 3- Comparison of Social Skills Domain Before and After Arts Based Therapy

Pair 1- Social Skills Domain Before and After- One Quarter

Pair 2- Social Skills Domain Before and After- Second Quarter

Pair 3- Social Skills Domain One Quarter and Social Skill Domain Second Quarter

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	-2.17647	3.24491	.78701	-3.84485	-.50809	-2.766	16	.014
Pair 2	-1.52941	3.84249	.93194	-3.50504	.44621	-1.641	16	.120

Pair 3	.64706	2.80493	.68030	-.79510	2.08922	.951	16	.356
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Table 3 shows the difference in Social Skills of the participants after they have been provided Arts Based Therapy (ABT) initially for one quarter and then for two quarters. The difference reflected in the table shows that there is a significant change in the Social Skills domain of the participants before ABT was provided and after ABT was provided for one quarter of the year i.e. (.014), which is significant at .05 level of significance. There is also a change in Social skills of the participants before ABT was provided and after ABT was provided for two quarters (.120), but is not significant at any level of significance.

Table 4- Comparison of Communication Skills Domain Before and After Arts Based Therapy

Pair 1- Communication Skills Domain Before and After- One Quarter

Pair 2- Communication Skills Domain Before and After- Second Quarter

Pair 3- Communication Skills Domain One Quarter and Communication Skill Domain Second Quarter

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	-1.58824	1.83912	.44605	-2.53382	-.64265	-3.561	16	.003
Pair 2	-1.94118	2.63322	.63865	-3.29505	-.58730	-3.040	16	.008
Pair 3	-.35294	2.26222	.54867	-1.51607	.81019	-.643	16	.529

Table 4 shows the difference in Communication Skills of the participants after they have been provided Arts Based Therapy (ABT) initially for one quarter and then for two quarters. The difference reflected in the table shows that there is a significant change in the Communication Skills domain of the participants before ABT was provided and after ABT was provided for one quarter of the year i.e. (.003). There is also a significant change in Communication skills of the participants before ABT was provided and after ABT was provided for two quarters (.008), and the difference is significant at .05 level of significance. The table also shows that ABT has a mean difference among participants' communication skills when they were provided ABT for two quarters as compared to one quarter (.529), but the difference is not significant at any level of significance.

Table 5- Comparison of Emotional Skills Domain Before and After Arts Based Therapy

Pair 1- Emotional Skills Domain Before and After- One Quarter

Pair 2- Emotional Skills Domain Before and After- Second Quarter

Pair 3- Emotional Skills Domain One Quarter and Emotional Skills Domain Second Quarter

Paired Samples Test							
	Paired Differences				t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			
				Lower			

Pair 1	.00000	2.82843	.68599	-1.45424	1.45424	.000	16	1.000
Pair 2	-.70588	2.56819	.62288	-2.02632	.61456	-1.133	16	.274
Pair 3	-.70588	1.53153	.37145	-1.49332	.08156	-1.900	16	.076

Table 5 shows the difference in Emotional Skills of the participants after they have been provided Arts Based Therapy (ABT) initially for one quarter and then for two quarters. The difference reflected in the table shows that there is a no change in the Emotional Skills domain of the participants before ABT was provided and after ABT was provided for one quarter of the year i.e. (1.000). But there is a change in the mean score of the participants on the emotional skills domain before ABT was provided and after ABT was provided for two quarters (.274). The table also shows that there is a mean difference among participants' emotional skills when they were provided ABT for two quarters as compared to one quarter (.076), but the difference is not significant at any level of significance.

Table 6- Comparison of Cognitive Skills Domain Before and After Arts Based Therapy

Pair 1- Cognitive Skills Domain Before and After- One Quarter

Pair 2- Cognitive Skills Domain Before and After- Second Quarter

Pair 3- Cognitive Skills Domain One Quarter and Cognitive Skill Domain Second Quarter

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	-.64706	.93148	.22592	-1.12598	-.16814	-2.864	16	.011
Pair 2	-.94118	2.07577	.50345	-2.00844	.12609	-1.869	16	.080
Pair 3	-.29412	1.72354	.41802	-1.18028	.59204	-.704	16	.492

Table 6 shows the difference in Cognitive Skills of the participants after they have been provided Arts Based Therapy (ABT) initially for one quarter and then for two quarters. The difference reflected in the table shows that there is a significant change in the Cognitive Skills domain of the participants before ABT was provided and after ABT was provided for one quarter of the year i.e. (.011), which is significant at .05 level of significance. There is also a change in Cognitive skills of the participants before ABT was provided and after ABT was provided for two quarters (.08) and when ABT was provided for two quarters as compared to one quarter (.492), but the difference is not significant at any level of significance.

Discussions-

The results show that Arts Based Therapy provided to persons with disabilities is effective in enhancing their abilities in selective domains of the study. The results of the study reflect an improvement in their psycho-motor abilities, social skills, communication skills and cognitive skills when Arts Based Therapy is provided for one quarter and consecutively for two quarters. The psycho-motor domain shows more improvement than other domains as it shows continuous growth from the first quarter to the second quarter, which means that when ABT is provided continuously, the sample's psycho-motor abilities

improved. Communication abilities also enhanced with ABT when compared with initial observation, and observations made at the end of first quarter and second quarter. For ages, art has been in use for expression and releasing stress and anxiety. Moreover, art has been helpful in treating several mental disorders which has a direct relation with the limitation of self-expression in an individual. Arts Based Therapy has the tendency to make an individual express themselves without having to say anything or use words. It could be one of many reasons why ABT is helpful in enhancing communication among persons with disabilities. Social skills and cognitive skills also show significant improvement from initial observation to observation made by the therapist after providing ABT for one quarter. Although some improvement is also seen from one quarter to the second quarter, the improvement is not significantly different. One reason could be that persons with disabilities struggle more in social settings and cognitive abilities. ABT has successfully impacted these domains and helped in enabling persons with disabilities to be confident in social settings and improved their decision-making ability. The emotional skills domain did not show significant improvement when ABT was provided for one quarter, but it showed mean difference when ABT was provided for two quarters. It is possible that since emotional regulation is difficult for many, not just persons with disabilities, if ABT had been provided to the participants for a longer duration, a significant change in emotional regulation could have been observed over time.

Conclusion-

This study definitely looks at the vast scope of Arts Based Therapy's (ABT) impact on the capabilities of persons with disabilities. It also reflects that ABT needs to be administered persistently for a visible improvement in abilities of the individual over time. Art forms have been used for ages for improvement in our abilities and self-expression; however, more extensive research is necessary to observe Arts Based Therapy's scientific basis and benefits for persons with disabilities.

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