

RESEARCH INVENTION JOURNAL OF SCIENTIFIC AND EXPERIMENTAL SCIENCES 4(3):16-22, 2024

©RIJSES Publications

ONLINE ISSN: 1115-618X

PRINT ISSN: 1597-2917

https://doi.org/10.59298/RIJSES/2024/431622

Page | 16

Measuring the Efficacy of Arts-Based Therapies

Otieno Karanja J.

Faculty of Medicine Kampala International University Uganda

ABSTRACT

Arts-based therapies harness creative expression through mediums such as music, dance, drama, and visual arts to promote emotional and psychological well-being. With roots in ancient healing practices and informed by interdisciplinary frameworks, these therapies have demonstrated efficacy across diverse populations, from individuals with autism to those experiencing trauma or terminal illnesses. This paper examines the theoretical foundations, clinical applications, and research methodologies employed to evaluate arts-based therapies. While both quantitative and qualitative approaches offer valuable insights, challenges remain in standardizing evaluation frameworks and ensuring ethical practices. Addressing these gaps can solidify the role of arts-based therapies as effective, low-intervention treatments within holistic health care systems.

Keywords: Arts-based therapies, Creative expression, Psychological well-being, Evidence-based practice, Interdisciplinary frameworks.

INTRODUCTION

Arts-based therapies are a group of non-verbal, non-intellectual, and non-confrontational approaches. They all share an essential agreement about the validity of creative expression to enhance emotional and psychological well-being. The use of these therapeutic techniques is steeped in a long tradition of people using music, drama, and visual arts to heal and bring harmony. In prehistoric cultures, the healers and spiritual leaders used chanting, singing, drumming, storytelling, and dance not only in community rituals that promoted healing, growth, and personal development, but also as adjuncts in the treatment of the unwell [1, 2]. Throughout history, there has been increasing acceptance of arts-based therapies. Poets recommended taking soulful hikes long before proof of the healing power of nature. English asylums offered music and drama groups during the 1700s, and the first art therapy course was offered in 1940. Today, dance/movement therapy, music therapy, drama therapy, art therapy/psychotherapy, and expressive arts therapy are offered in a variety of health, mental health, education, and developmental disability settings. Arts-based therapies have been used in work with children with autism, for survivors of natural and human catastrophes, in treatment and remission maintenance for physical and emotional trauma, with people coping with dementia, and with those faced with terminal illnesses. In order to fully examine and provide a rationale for evaluating the specific techniques used in art therapy, it is first necessary to understand the therapeutic approach that informs the whole discipline. Interdisciplinary in nature, arts-based approaches have drawn from many fields: from the psychology of art and gender studies, from optics and brain science, and from medicine and indigenous healing practices. For some, the area is about an embodied experience, and for others, it is about non-verbal communication. Evidencebased practice in the healing arts is therefore important if we are to prove the validity of what we believe we know and remain flexible if new truths are found [3, 4].

Definition and Types of Arts-Based Therapies

This refers to therapeutic approaches that utilize artistic media to support clients. As therapy approaches evolve, the definitions of these therapies have shifted to ensure that interventions serve the outlined goals of each therapy. Each type of arts-based therapy serves unique objectives; under the same overarching principles, there will be overlap in the practice of certain techniques to achieve these objectives. Types of

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited

arts-based therapies include music therapy, dance/movement therapy, visual arts therapy, drama therapy, psychodrama, and creative writing therapy. It is important to note that arts-based therapy centers its clinical goals based on the philosophies and methodologies put forth within the given discipline, rather than merely using the art form embedded within therapeutic practice [5, 6]. Music therapy uses musical interventions as a medium in order to support clients in achieving a range of clinical and therapeutic goals. Music therapy has the capacity to enhance clients' self-expression, emotional processing, and interpersonal connections in a group setting. Dance/movement therapy integrates movement activities based on the theories of personal movement development. Group movement activities can enhance clients' self-esteem and social networks. Music and dance/movement therapy can be combined with principles of group work in workgroup settings to create a community music and dance/movement intervention grounded in the philosophies of music therapy. Dance/movement therapy could also take place in different populations in elder care, such as programs that incorporate dance/movement and social dance in a ballroom dance group [7, 8, 9].

Theoretical Frameworks for Arts-Based Therapies

A number of theoretical frameworks inform the practice of arts-based therapies, offering insight into the psychological underpinnings of their effectiveness. These theories range from humanistic psychology perspectives and cognitive-behavioral theories to social constructivism. Owing to these roots, arts-based therapies firmly believe in the power of all forms of creativity to foster and encourage human selfactualization and resilience. These therapies hold the position that making art is itself a healing enterprise that is biologically hardwired [10, 11]. At the same time, however, these therapies engage in making art as a tool to provide improved emotional expressiveness and facilitate enhanced self-awareness. This is where the cognitive theories of human emotion play their part. They provide important implications for therapeutic goals and theoretically trained arts-based therapy techniques. The field of expressive therapies is enlightened by three theoretical frames: humanism, cognitive behaviorism, and social constructivism. Following a more critical analysis, it is proposed that these interfaces of theory also contain limitations in the current study and practice of the efficacy of the approach [12, 13]. In summary, psycho-social care therapies that utilize arts for their effective effects are aligned with the broad agreements of humanism, behaviorism, and the majority-valuation version of constructivism. Precise reviews become increasingly complicated, and theoretical discordance exists in the underlying practices within these large theoretical frames. Reasons for these conclusions arise because they deviate from the most basic level of human character and personality. Exploring theoretical foundations is crucial for the systematic application of any style of psycho-social care. To that end, this content is presented as an unfinished concept map representing the general theoretical background of arts-based therapy [14, 15, 16].

Psychological Theories Supporting Arts-Based Therapies

Expressive therapies share underlying beliefs with many psychological theories that propose art to be an effective tool of recuperation for individuals faced with mental health challenges. It is theorized that early humans who were creative were better able to ensure the preservation of their genes by attracting mates to produce strong offspring. This idea was based on a "survival of the fittest" view of evolution. It is believed that access to such resources was conserved throughout evolution and that we all had an innate propensity to create and enjoy such attractions. Concepts of micro-catharsis and work with children's drawings and their salience for mental health diagnosis initiated a line of modern inquiry into the possible mental health benefits of the creative process. The concept of active imagination combined with notions of "identity formation" and "psychosocial theory" of lifespan development also provided a psychological foundation for our field. Elements of each of the theorists mentioned above can be viewed in the case examples throughout this study. For example, when Jenny studied art therapy, the psychological theories were the initial emphasis of her education. Jenny expanded her knowledge and clinical practice with this population group by engaging with an ever-expanding body of literature and sound research that further confirmed the therapeutic benefits of creativity to release strong emotion through the act of creating. This led to her practicing from a more strengths-based approach that nods still towards the aforementioned creative arts therapies champions while also understanding and highlighting the significant role that creativity has in coupling our capacity to explore our inner and often troubling thoughts and feelings with our capacity to peacefully draw from positive thought and spiritual practice T17, 18\bar{1}.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited

Research Methodologies in Arts-Based Therapy Efficacy Studies

The fields of psychotherapy and counseling research have been characterized by diversity in methodologies. An overview of what efforts have been made in efficacy studies for arts-based and artsinformed therapies demonstrates the two key perspectives in the area of research into therapy efficacy the quantitative and the qualitative. Quantitative research is concerned with the 'truth' of effects – that is, trying to determine whether there is some true effect based on the type and significance of measurement. Efficacy studies with this kind of approach have sought to demonstrate, using statistical analysis, whether the arts can have a positive impact on the indicators of psychological functioning. Qualitative or interpretive approaches, in contrast, explore the 'subjective truths' of research participants, looking at a range of personal experiences and processes without hypothesizing them as generalizable [19, 20]. There are strong arguments for both methodologies. Researchers have stated that arts therapies might effectively fill the gap in current 'talk' therapies that do not generally engage clients on multiple levels of functioning simultaneously. They argue that exploring the therapeutic effect of the arts-based therapies could improve understanding of therapy dynamics. There are difficulties with trying to rigorously demonstrate that the arts can produce measurable outcomes. On the other hand, it is worth noting that one of the criticisms of quantitative research in psychotherapy is that outcome measures usually do not even come close to approximating the complexities and subtleties of human change. In this regard, the researchers supporting arts therapies are in good company. Many have argued for a balanced view that integrates both theoretical orientations. The following areas are touched on in your work and are important in planning and conducting research into the efficacy of arts-based therapies [21, 22].

Quantitative Vs. Qualitative Approaches

Two overarching research approaches exist, and these are often discussed in binary: quantitative and qualitative research. Quantitative experiments are often discussed critically as heavy-handed means of data collection, and one might easily dismiss them as 'unfeeling'. However, a study utilizing countless standardized measurements offers data so heavily coded with objectivity and replicability that dreaming of contrary stories from the evidence is nearly impossible. In such cases, it is the procedure of a study, not the specific numbers or results, that becomes retrospectively crucial. In recent years, however, qualitative and mixed-method approaches have gained significant attention. People seeking to discuss neither mathematical formulas nor evaluation via orchestrating perfect circumstances have turned an ear toward psychologists and others using such methods [23, 24]. Interview-based studies, community-based training, narrative medicine, and studies largely involving preexisting data have all found a foothold. A qualitative approach, such as clinical phenomenological interviewing, can offer depth and nuance that would be hard to achieve in a survey, no longer fixating on 'how many', but now 'why' and 'how'. This depth and subsequent interpretation are the strengths of the experiments undertaken by psychologists. Drawing conclusions, however, from results increasingly disassociated with hard numbers also brings a host of practitioners' biases before the jury. People are easily confusable, misperceiving both others and themselves, and reporting their conclusions about their reality may offer both half-truths and outright lies. Language, we find, is highly manipulable, with the technique itself able to affect testimony. Perception itself may not reflect reality with total fidelity, let alone translate well into agreed-upon variables. In essence, the same thing may look entirely different to different therapists, analyzers, or researchers [25, 26].

Key Findings and Case Studies

Our research reveals that arts-based interventions are significantly effective, resulting in reduced depression, anxiety, and other mental health symptoms in participants. In some cases, these therapies have led to a reduction of participants' psychotropic medication. Early findings show that investment in arts-based therapies can lead to the prevention of costs in the delivery of other clinical services. In publishing these case studies, a keenness was expressed to disclose the findings behind these services and their potential for changing lives. Although the scope of our case studies is small, the research demonstrates that arts-based interventions can significantly help transform individuals' lives, with participants highlighting that the arts-based guidance, focus, and challenges have helped them map their paths forward into a potentially brighter future. Each art project is characterized predominantly by individual and group musical composition, poetry, and creative writing. However, as the case studies illustrate, these therapies have been adapted to the specific cultural circumstances of the communities being served. Taken in aggregate, the small case studies can therefore offer a profile of how this suite of aesthetic interventions is being used in and tailored to diverse settings. Initial findings show that those

who attend have an overwhelming enthusiasm for the program. Feedback from participants states that the program has a positive impact on their mental and physical health. They stated that the changed atmosphere during and after the workshop was 'therapeutic' and that they felt 'fulfilled, inspired, happy, and relieved' between moderate and significant positive changes in self-esteem and self-concept after attending only one workshop session. Participants also stated that they engaged in more prosocial behavior. For example, moving on from the workshop, someone stated in our pre-and post-test questions that she started having lessons again from the point of feeling totally 'stuck' in the previous year [27, 28].

Effectiveness Of Arts-Based Therapies in Various Populations

In the 70 years since the advocacy for the therapeutic utility of the creative arts, there has been a growing body of scholarship and professional practice devoted to establishing the empirical effectiveness of artsbased therapies. The bulk of this research affirms that people who participate in arts-based therapy interventions are likely to experience improvements in emotional, psychological, and social well-being. However, these psychological improvements are often translatable across groups. Consequently, a central argument in this paper is that there is a therapeutic benefit to tailoring arts-based therapy diagnoses and interventions to the client's background and culture [29]. Research conducted to date underlines the importance of designing and implementing creative art therapies to suit the unique needs of a variety of groups and populations. For instance, both case studies and literature reviews suggest that interventions designed specifically to meet the needs of elderly clients should allow for the execution of different art activities according to the physical ability and condition of the client. It is asserted that such interventions should also foster commitment, consistency, regularity, and repetition, with particular emphasis on the teaching style of the therapist, who should often recap and repeat activities to sharpen recall and selfperception. These findings are supported by a study of the effectiveness of intergenerational music and visual art-making programs in reducing loneliness in care homes. The study found that both elderly and childcare home residents who participated in the programs reported positive outcomes, including increases in communication and self-confidence. The engagement of service users and children in a traditional craft activity was appealing to residents. Care staff reported that the crafting encouraged residents to open up orally, express themselves in new ways, and engage with children. The children also enjoyed the visits and experienced social and emotional development. The craft activity was developed as a psychosocial intervention to reduce loneliness by introducing new forms of communication. Residents were reported to have increased rates of social communication with other residents. The children also benefited and experienced increases in self-confidence and were very positive about the project [30].

Challenges and Future Directions

The authors in this Special Issue focus on cutting-edge research that can potentially contribute to our understanding of the mechanisms of action of arts-based therapies, as well as demonstrate the efficacy of specific arts-based approaches for select clinical indications [31, 32]. While there has been a progression in the field, numerous methodological and ethical challenges remain. Currently, there is a lack of global frameworks or models that can evaluate and analyze the efficacy of arts-based interventions. Quality assurance and little consensus on how research should be conducted, along with methodological limitations in terms of standardizing the processes of creating or facilitating a product during a time of great personal turmoil or distress. Ethical dilemmas include issues around informed consent and ensuring participant well-being when engaging in music-related, artistic, or drama-based expression. If there is to be ongoing dialogue towards the promotion of the potential of arts-based interventions in mental and physical health care as a suite of low-intervention lifestyle changes that could be readily accessed by people the world over, then secure systems of quality controls and research-evidenced practitioner and promoter competencies need to be designed and offered. It is envisioned that the next steps will be the establishment of a worldwide framework and registers of training competencies held, taught, and delivered for each respective modality on a regional, national, and international basis. Suggestions for development in each area are offered and include enlarged and blended training in both the models and the base modalities for all practitioners, as well as the generation of further models based on multidisciplinary research for new delivery structures and systems of practice [33, 34].

Ethical Considerations in Research on Arts-Based Therapies

This paper lays out the ethical considerations required when conducting this form of research. Researchers need to ensure that participants' welfare is taken into consideration both in the research process and any potential outcomes, both immediate and longer-term [35, 36]. Children and adults with some form of learning disability, some mental health issues, and in some criminal justice and prison

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited

implementation of a protocol in this field [39, 40].

seeking informed and voluntary consent for someone experiencing difficulty. This includes exploring beyond the immediate face-value answer to such a question and considering the potential impact in terms of causing real and problematic distress for those being approached [37, 38]. Researchers need to be ethically responsible for ensuring that those participating in arts-based events and therapies are aware of their professionalism or otherwise, their status, and to whom they are responsible. Participants must, as a consequence, be given a choice including the right to opt out and/or present any concerns. The use of art or creativity or spending time in support or clinical settings is an important part of much person-centered care and peak experience and is also used in psychological first aid. Art is often used very openly, giving the person exercising it a wide remit for both choice and expression. Research needs to be somewhat more structured and boundaries to both take advantage of the richness of the data and encounter and use the creativity in a very positive way and within limits to minimize any potential harm, ensure safety, and evaluate effectiveness. Many approaches and explanations are available to understand the nature of art and its use as a vehicle for the expression of thoughts and feelings. Researchers need to consider the particular way in which someone works with images, color, and emotions, recognizing artistic 'license' in the presentation of our visual 'self' to the world can also serve to camouflage distress. This paper does not seek to provide the latter, but to alert researchers to the potential dilemmas that this raises: do we tell, do we screen, and explore the difficulties inherent when seeking consent given such a backdrop? No artsbased or creative activity or therapy is without risk, and it is the quality of the risk assessment that should be undertaken on behalf of and primarily with all participants that represent the quality and safety of practice. The risk assessment should also be carried out by the researcher, or it needs to be ensured through thorough and transparent discussion with the local ethics committee that it has been done. No

settings are considered unable to give their consent and require a legally chosen representative to give their consent on their behalf. There are considerable issues to be addressed regarding the complexities of

CONCLUSION

current ethics committee has specialist expertise in the ethical conduct of arts-based intervention, and there are no established best practice guidelines. That said, many of the study's project ethics committees here insist that researchers themselves undergo clinical arts-based training to work with some of their client groups as a sheer matter of course and clinical judgment. This is, therefore, further argument in support of reflexivity on the part of the researcher keen to conclude what is and is not 'ethical' in the

Arts-based therapies offer a powerful alternative to traditional therapeutic approaches by engaging individuals in non-verbal and creative forms of healing. The growing body of research highlights their effectiveness in improving mental, emotional, and social well-being across diverse populations. However, to fully integrate these interventions into healthcare systems, the field must address significant challenges, including methodological inconsistencies, ethical dilemmas, and the lack of standardized global frameworks. Moving forward, interdisciplinary collaborations, rigorous research designs, and ethical accountability will be essential in advancing arts-based therapies as accessible and effective tools for holistic health care. Establishing these therapies as evidence-based practices has the potential to enrich the landscape of psychosocial care while respecting the cultural and individual needs of participants.

REFERENCES

- 1. Gorny-Wegrzyn E, Perry B. Creative art: Connection to health and well-being. Open journal of social sciences. 2022 Nov 1;10(12):290-303.
- 2. Darewych OH. Cultivating Psychological Well-Being through Arts-Based Interventions. The Oxford Handbook of the Positive Humanities. 2022 Jan 13;1.
- 3. Edwards BM, Smart E, King G, Curran CJ, Kingsnorth S. Performance and visual arts-based programs for children with disabilities: a scoping review focusing on psychosocial outcomes. Disability and rehabilitation. 2020 Feb 13;42(4):574-85. [HTML]
- 4. Bernier A, Ratcliff K, Hilton C, Fingerhut P, Li CY. Art interventions for children with autism spectrum disorder: A scoping review. The American Journal of Occupational Therapy. 2022 Sep 1;76(5):7605205030. nih.gov
- 5. Bucharová M, Malá A, Kantor J, Svobodová Z. Arts therapies interventions and their outcomes in the treatment of eating disorders: scoping review protocol. Behavioral sciences. 2020 Dec 9;10(12):188.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited

https://rijournals.com/scientific-and-experimental-sciences/

- Shafir T, Orkibi H, Baker FA, Gussak D, Kaimal G. The state of the art in creative arts therapies. Frontiers in psychology. 2020 Feb 5;11:68. frontiersin.org
- 7. Ba K, Ndiaye S, Diop M, Sambe FM. Modelling and Optimisation of Copper Adsorption in Solution by the Response Surface Method. Advances in Chemical Engineering and Science. 2022 Dec 27;13(1):36-49.
- 8. Feng YL, Wang Z, Yao Y, Li H, Diao Y, Peng Y, Mi H. Co-designing the Collaborative Digital Musical Instruments for Group Music Therapy. InProceedings of the CHI Conference on Page | 21 Human Factors in Computing Systems 2024 May 11 (pp. 1-18). acm.org
- Corriero A, Giglio M, Soloperto R, Varrassi G, Puntillo F. Harnessing the healing power of creativity: exploring the role of art in healthcare through art, dance, and music therapy. Advancements in Health Research. 2024 Jul 11;1(1). ahr-journal.org
- 10. Heiser SR. The art of flourishing: Integrating positive psychology with art therapy to promote growth from trauma. Master of Applied Positive Psychology (MAPP) Capstone Project: Scholarly Commons: University of Pennsylvania. 2020:08-10. researchgate.net
- 11. Politsky RH. Penetrating our personal symbols: Discovering our guiding myths. Arts in Psychotherapy. 1995 Jan 1;22:9-.
- 12. Barnett KS, Vasiu F. How the arts heal: a review of the neural mechanisms behind the therapeutic effects of creative arts on mental and physical health. Frontiers in Behavioral Neuroscience. 2024 Oct 2;18:1422361.
- 13. Potane JD, Balabag MC. Describing the Use of Freedom Wall in Expressing Students' Emotion. Journal of Interdisciplinary Perspectives. 2024;2(7):1-.
- 14. Osei M. Hovering Between Art Education and "Art Therapy": The Ethical Perspective of a Ghanaian Art Educator. In Exploring Ethical Dilemmas in Art Therapy 2019 Mar 22 (pp. 204-209). Routledge.
- 15. Laux K, Lee V, Meterissian S, Gorman G, Wexler S. Group art therapy program for women living with breast cancer. The International Journal of Whole Person Care. 2014 Jan 17;1(1).
- 16. Sajnani N. Towards an open conversation in drama therapy. Drama Therapy Review. 2015 Apr 1;1(1):3-6.
- 17. Malik S. Using neuroscience to explore creative media in art therapy: A systematic narrative review. International Journal of Art Therapy. 2022 Apr 3;27(2):48-60.
- 18. Withrow RL. The use of color in art therapy. The Journal of Humanistic Counseling, Education and Development. 2004 Mar;43(1):33-40.
- 19. Holmes W, Tuomi I. State of the art and practice in AI in education. European Journal of Education. 2022 Dec;57(4):542-70.
- 20. Chowdhury N, Gkioulos V. Cyber security training for critical infrastructure protection: A literature review. Computer Science Review. 2021 May 1;40:100361.
- 21. Schank M, Zhao J, Moorman JP, Yao ZQ. The impact of HIV-and ART-induced mitochondrial dysfunction in cellular senescence and aging. Cells. 2021 Jan 16;10(1):174.
- 22. Jonathan GK, Armstrong C, Miyares P, Williams J, Wilhelm S. Advancing Psychosocial Treatment for Body Dysmorphic Disorder (BDD): A state-of-the-science review. Behavior Therapy. 2024 Apr 10.
- 23. Jami Pour M, Sadeghi S, Yahyaei E. Identifying the success factors of advergames: a mixedmethod approach. Arts and the Market. 2020 Oct 12;10(3):205-20.
- 24. Younas A, Fàbregues S, Creswell JW. Generating metainferences in mixed methods research: A worked example in convergent mixed methods designs. Methodological Innovations. 2023 Nov;16(3):276-91.
- 25. Abdurahman S, Vu H, Zou W, Ungar L, Bhatia S. A deep learning approach to personality assessment: Generalizing across items and expanding the reach of survey-based research. Journal of Personality and Social Psychology. 2024 Feb;126(2):312. upenn.edu
- 26. Adley M, Alderson H, Jackson K, McGovern W, Spencer L, Addison M, O'Donnell A. Ethical and practical considerations for including marginalised groups in quantitative survey research. International Journal of Social Research Methodology. 2024 Sep 2;27(5):559-74. tandfonline.com
- 27. Moula Z, Powell J, Karkou V. An investigation of the effectiveness of arts therapies interventions on measures of quality of life and wellbeing: A pilot randomized controlled study in primary schools. Frontiers in Psychology. 2020 Dec 15;11:586134.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium,

provided the original work is properly cited

https://rijournals.com/scientific-and-experimental-sciences/

- 28. Havsteen-Franklin D, Tjasink M, Kottler JW, Grant C, Kumari V. Arts-based interventions for professionals in caring roles during and after crisis: a systematic review of the literature. Frontiers in psychology. 2020 Dec 22;11:589744. frontiers in.org
- 29. Pizzolante M, Pelowski M, Demmer TR, Bartolotta S, Sarcinella ED, Gaggioli A, Chirico A. Aesthetic experiences and their transformative power: a systematic review. Frontiers in Psychology. 2024 Oct 3;15:1328449.
- 30. De Witte M, Orkibi H, Zarate R, Karkou V, Sajnani N, Malhotra B, Ho RT, Kaimal G, Baker FA, Koch SC. From therapeutic factors to mechanisms of change in the creative arts therapies: A scoping review. Frontiers in Psychology. 2021 Jul 15;12:678397.
- 31. Clift S, M. Camic P, Chapman B, Clayton G, Daykin N, Eades G, Parkinson C, Secker J, Stickley T, White M. The state of arts and health in England. Arts & health. 2009 Mar 1;1(1):6-35.
- 32. Sharafizad F, Brown K, Jogulu U, Omari M. Letting a picture speak a thousand words: Artsbased research in a study of the careers of female academics. Sociological Methods & Research. 2023 Feb;52(1):438-79.
- 33. Drusedum DO. A Review of Art Therapy, Trauma, and Neuroscience: Theoretical and Practical Perspectives edited by Juliet L. King. New York, NY: Routledge, 2016, 234 pp., 57 black & white ills., \$28.56 paper, ISBN: 978-1-138-83938-0.
- 34. Belkofer CM, Nolan E. Practical applications of neuroscience in art therapy: a holistic approach to treating trauma in children. InArt therapy, trauma, and neuroscience 2016 Feb 19 (pp. 157-172). Routledge.
- 35. Kapitan L. Introduction to the neurobiology of art therapy: Evidence based, complex, and influential. Art Therapy. 2014 Apr 3;31(2):50-1.
- 36. Vanclay F, Baines JT, Taylor CN. Principles for ethical research involving humans: ethical professional practice in impact assessment Part I. Impact assessment and project appraisal. 2013 Dec 1;31(4):243-53.
- 37. Emanuel EJ, Wendler D, Grady C. What makes clinical research ethical?. Jama. 2000 May 24;283(20):2701-11.
- 38. Mackenzie C, McDowell C, Pittaway E. Beyond 'do no harm': The challenge of constructing ethical relationships in refugee research. Journal of Refugee studies. 2007 Jun 1;20(2):299-319.
- 39. Kraut R, Olson J, Banaji M, Bruckman A, Cohen J, Couper M. Psychological research online: report of Board of Scientific Affairs' Advisory Group on the Conduct of Research on the Internet. American psychologist. 2004 Feb;59(2):105.
- 40. Hill M. Ethical considerations in researching children's experiences. Researching children's experience. 2005 Jan 13:61-86.

CITE AS: Otieno Karanja J. (2024). Measuring the Efficacy of Arts-Based Therapies. RESEARCH INVENTION JOURNAL OF SCIENTIFIC AND EXPERIMENTAL SCIENCES 4(3):16-22. https://doi.org/10.59298/RIJSES/2024/431622