

A study on artistic empowerment through clay - a case study in a social service center for sensory disability in Indonesia¹

Nur Fajrie

Universitas Muria Kudus  

Imaniar Purbasari  

Slamet Khoeron  

Ika Yuni Purnama  

<https://www.doi.org/10.5209/arte.103815>

Recibido: 7 de julio de mes 2025 • Aceptado: 8 de enero mes 2026

ENG Abstract: This study investigates the process of artistic empowerment facilitated through clay-based art practices among individuals residing in a social service institution in Indonesia. Using a qualitative case study approach, nine participants engaged in a structured series of tactile clay activities designed to enhance self-expression, creativity, and emotional well-being. Data collection methods included participant observation, visual documentation, reflective journaling, and semi-structured interviews. The findings demonstrate that clay art provided a nonverbal medium through which participants articulated personal experiences, developed confidence, and built a sense of agency. Engagement with clay fostered therapeutic benefits, encouraged self-discovery, and strengthened interpersonal connections within the institutional environment. The study highlights the transformative potential of art-making as a tool for empowerment among marginalized groups and suggests its integration into social care programming. These insights contribute to broader discourses on inclusive art practices and their psychosocial impact in institutional settings.

Keywords: artistic empowerment, clay media, social service, social institution, Indonesia, case study.

ES Un estudio sobre el empoderamiento artístico a través de la arcilla: un estudio de caso en un centro de servicio social para discapacidad sensorial en Indonesia

Resumen: Este estudio investiga el proceso de empoderamiento artístico facilitado a través de prácticas artísticas con arcilla en personas que residen en una institución de servicios sociales en Indonesia. Mediante un enfoque de estudio de caso cualitativo, nueve participantes formaron parte de en una serie estructurada de actividades táctiles con arcilla diseñadas para mejorar la autoexpresión, la creatividad y el bienestar emocional. Los métodos de recolección de datos incluyeron observación participante, documentación visual, registro reflexivo y entrevistas semiestructuradas. Los hallazgos demuestran que la creación artística con arcilla proporcionó un medio no verbal a través del cual los participantes expresaron experiencias personales, desarrollaron confianza y construyeron un sentido de autonomía. La interacción con la arcilla fomentó beneficios terapéuticos, fomentó el autodescubrimiento y fortaleció las conexiones interpersonales dentro del entorno institucional. El estudio destaca el potencial transformador de la creación artística como herramienta para el empoderamiento entre grupos marginados y sugiere su integración en los programas de asistencia social. Estas perspectivas contribuyen a discursos más amplios sobre prácticas artísticas inclusivas y su impacto psicosocial en entornos institucionales.

Palabras clave: Empoderamiento artístico, técnicas de arcilla, servicio social, institución social, Indonesia, estudio de caso.

Sumario: 1. Introducción. 1.1. Antecedentes de la investigación. 1.2. Objetivos de la investigación. 1.3. Investigaciones previas. 2. Métodos de investigación. 2.1. Descripción general de las instalaciones utilizadas para la investigación. 2.2. Método de investigación. 2.3. Descripción general del participante. 2.4. Definición del punto de baja vision. 3. Resultados. 4. Discusión. 5. Conclusiones. Referencias.

¹ The Research Grant funded this research from Kemdiktisaintek 2025 "Study on public service regarding artistic experience - case study in social service center for sensory disability in Indonesia", Collaboration with Universitas Muria Kudus (Kudus, Indonesia) and Institut Kesenian (Jakarta, Indonesia)

Cómo citar: Fajrie, N.; Purbasari, I.; Khoeron, S.; Purnama, I. Y. (2026). A study on artistic empowerment through clay - a case study in a social service center for sensory disability in Indonesia. *Arteterapia. Papeles de arteterapia y educación para inclusión social*, 21 (2026).

1. Introduction

1.1. Research Background

Artistic expression has long been recognized as a vital means of communication, identity formation, and personal empowerment, especially for individuals and communities with limited access to traditional modes of expression. Clay, as a tactile and malleable artistic medium, offers unique possibilities for creative engagement that transcends visual or verbal limitations (Uduak & Akpan, 2020; Gryglewski et al., 2020). In the context of social service institutions, particularly those serving vulnerable or marginalized populations, clay-based artistic activities can facilitate psychological healing, foster a sense of self-worth, and create opportunities for meaningful social interaction. This research investigates the role of clay art in fostering artistic empowerment among residents of a social service institution in Indonesia, exploring how engagement in tactile creative processes can serve as a transformative experience.

The concept of empowerment in art therapy and participatory art practices emphasizes the development of agency, autonomy, and self-expression through creative engagement (Kapitan, 2014; Field, 2016). Artistic empowerment refers to the process by which individuals gain control over their lives and identities through artistic exploration and creation. It encompasses personal transformation, confidence building, and the ability to communicate one's experiences and emotions through art. In contexts where individuals may feel socially excluded or psychologically disempowered—such as in residential care institutions—art can serve as a medium to reclaim agency, validate lived experiences, and construct a coherent sense of self (Kraehe, 2018; Pinto et al., 2020).

Clay, specifically, provides an especially powerful medium for such empowerment due to its tactile nature. Unlike visual media that rely heavily on sight, clay invites full bodily engagement, including touch, pressure, movement, and texture exploration. This makes it particularly suitable for participants with sensory impairments or psychological trauma, as it allows for non-verbal communication and embodied expression (Nan et al., 2021). The sensory and kinesthetic qualities of clay can evoke emotional responses and facilitate therapeutic experiences, enabling individuals to externalize inner thoughts and feelings in a concrete form (Malchiodi, 2020). In this regard, clay becomes not only a medium of expression but also a tool for psychological and emotional development.

In Indonesia, the use of art for therapeutic and educational purposes in institutional settings is still relatively underexplored. Social service institutions, particularly those catering to people with disabilities, often focus on basic care and vocational training, with limited emphasis on creative development or psychological well-being. Yet, emerging evidence suggests that integrating artistic practices into social care can significantly improve residents' quality of life, emotional resilience, and social inclusion (Nissen, 2019).

Similarly, where traditional and cultural values often intersect with social care practices, art can serve not only as therapy but also as a culturally relevant medium for empowerment. The communal nature of many Indonesian artistic traditions aligns with participatory and inclusive approaches in art therapy. The use of clay, with its deep symbolic and cultural relevance in Indonesian craft traditions, offers additional resonance for participants. Integrating such practices within social service institutions allows for both individual healing and the reinforcement of cultural identity, contributing to more holistic and respectful care. This study builds on and contributes to the growing body of research that positions clay art as a means of empowerment, especially in institutional care environments. By situating the research in an Indonesian social service institution, it fills a regional research gap and offers culturally contextualized insights into how tactile artistic engagement can foster agency, voice, and psychosocial well-being among marginalized individuals. Therefore, there is a critical need to examine how artistic activities such as clay work can be implemented in these settings and what outcomes they may produce.

1.2. Research Objectives

The objective of this study is to investigate how clay-based artistic practices foster self-expression, creativity, and emotional well-being among residents with sensory disabilities in a social service institution in Indonesia. Specifically, the research explores how engaging with clay as a tactile medium enables participants to communicate feelings, develop confidence, and experience a sense of achievement and belonging within an institutional context that often limits autonomy. While empowerment and identity reconstruction may emerge as secondary outcomes, the primary focus lies in understanding the therapeutic and expressive dimensions of clay-based art-making. By documenting participants' lived experiences, this study seeks to highlight the potential of clay as an inclusive and culturally grounded medium for emotional expression and creative participation. The findings are expected to inform the development of responsive art programs within Indonesian welfare institutions and contribute to the broader discourse on participatory art as a vehicle for emotional well-being and social inclusion.

1.3. Previous Research

Artistic empowerment has become a significant focus in the intersection of art therapy, social work, and community-based interventions. Research in recent years has emphasized how art-making, especially with tactile materials like clay, fosters emotional resilience, identity reconstruction, and personal agency among

marginalized populations. Clay, in particular, as a three-dimensional, malleable medium, enables individuals to engage in expressive, symbolic, and often therapeutic processes. The act of shaping clay offers opportunities for both emotional release and meaning-making, which are essential components of empowerment for individuals in restrictive or institutional settings.

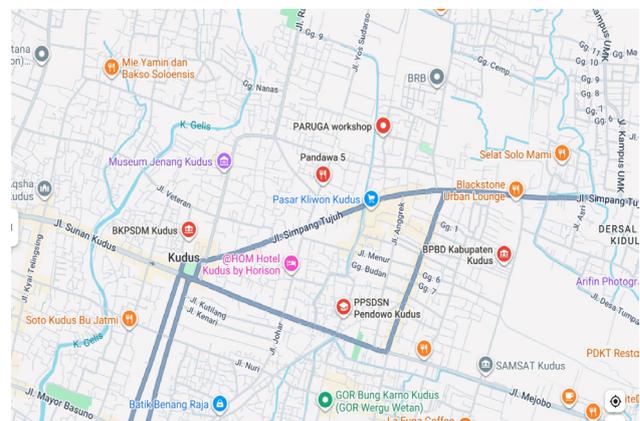
Several studies have demonstrated that clay work enhances emotional expression, especially for those with communication barriers or psychological distress. For instance, van Ede (2024) highlights that the tactile and sensory nature of clay facilitates embodied expression, which is particularly useful in mental health recovery. Similarly, Franklin (2010) emphasizes the role of clay in developing a sense of presence and grounding in trauma survivors, linking this process to empowerment outcomes. These findings are echoed by Moon et al. (2020), who argues that materials like clay serve as both metaphor and process, allowing individuals to externalize internal experiences and explore identity through tangible, form-giving means.

In institutional settings, where routines are often rigid and individual autonomy is limited, art can offer an alternative space of self-determination. Research by Stickley et al. (2018) found that participation in arts-based programs in care institutions improved self-confidence, reduced feelings of isolation, and strengthened personal identity. This aligns with Catalano & Morales (2022) work on community-based art interventions, which demonstrate how creative processes help participants reframe their life stories and assert personal narratives in empowering ways. In the context of disability and social service settings, art activities have been linked to enhanced self-efficacy and social inclusion (Jang, 2020). Although global literature supports the benefits of clay-based empowerment, studies specific to Southeast Asia, particularly Indonesia, remain limited. However, recent localized research is beginning to bridge this gap. Verisa et al. (2024) documented the role of creative activities in improving the psychological well-being of persons with disabilities in Indonesian care centers. Their findings indicate that structured art sessions, including clay modeling, contribute positively to emotional expression and social interaction. Moreover, de Eça & Saldanha (2022) found that participatory art activities foster a sense of dignity and visibility among institutionalized individuals, suggesting that artistic engagement counters social marginalization.

2. Research Methods

2.1. Overview of the Facility Used for the Investigation

The investigation was conducted at the Social Service Center for the Sensory Disability “Pandawa” a government-managed social rehabilitation center located in Kudus Regency, Central Java, Indonesia. This institution specializes in serving individuals with sensory disabilities, particularly those with low vision or blindness. The facility provides long-term residential care, health services, spiritual activities, and vocational rehabilitation, aiming to foster independence and social reintegration. Fig. 1 shows the Location of the research.



(Fig 1)

Despite these provisions, before the study, the integration of expressive arts, especially in the form of tactile or visual art practices, was minimal. The institution comprises structured daily routines but offers limited outlets for personal expression and psychological development. To accommodate the study, a multipurpose room within the center was repurposed as a safe, inclusive art space. This space was adapted to support clay-based artistic activities, allowing residents to engage with the medium through touch, texture, and three-dimensional exploration. Locally sourced air-dry clay and basic hand tools were used to enhance accessibility and cultural relevance. The controlled, supportive environment enabled residents with low vision to work freely and creatively, with facilitation provided by trained art educators and rehabilitation staff. This institutional setting provided a meaningful context for exploring how tactile artistic experiences contribute to empowerment and identity formation.

Research Design

This research employed a qualitative case study approach to explore artistic empowerment through clay among residents of a social service institution in Kudus Regency, Central Java, Indonesia. The case study

method was selected to provide an in-depth understanding of participants' lived experiences within the institutional context, allowing for a detailed examination of how tactile artistic engagement supports personal agency, emotional expression, and identity development. Data were collected through participant observation, in-depth semi-structured interviews, and visual documentation of the clay artworks produced. The clay material used by low vision beneficiaries in making a work of art is obtained from pottery craftsmen in Mayong Lor Village, Jepara Regency, Indonesia. The purpose of choosing clay in the area is that the available material is ready to be used for the benefit of creating art related to the practicality of the art media. The clay processing process makes this natural material easy to use elastically as a medium for creating art for low vision beneficiaries at the "Pandawa" Social Service Center for the Sensory Disability in Kudus Regency. The results of processing clay materials used as a medium for creating art by low vision beneficiaries are expected to be explored from the nature of the material and how to form what is desired. According to Fajrie et al. (2024), in general, clay materials have been used as quality learning media and increase a person's stimulus. One type of learning media, especially in introducing basic three-dimensional shapes.

Nine of fifteen residents were purposively selected based on their willingness to participate and varying levels of physical or sensory disabilities. Observations focused on behavioral, emotional, and interpersonal responses during clay sessions, while interviews explored perceptions of empowerment, self-expression, and the meaning of art-making in their lives. Artworks were analyzed for recurring themes and symbolic representations that reflected psychological and emotional states. Each participant engaged in six weekly clay-based art sessions over one month, employing tactile sculpting techniques such as pinching, coiling, and surface impression. This focused participant group—drawn solely from the low vision population—allowed for in-depth exploration of how tactile art-making contributed to their self-expression, emotional healing, and sense of agency, thereby advancing scholarly understanding of inclusive and accessible art pedagogies in institutional settings.

2.2. Defining the Low Vision Point

In this study, the definition of low vision aligns with the classification adopted by the Pandawa Social Rehabilitation Center in Kudus Regency, Central Java, which refers to individuals with significant visual impairment that is not fully correctable by standard optical aids, yet who retain functional sight for certain tasks. Participants identified as low vision typically experience reduced visual acuity or visual field loss, which limits their ability to perform daily activities without adaptive strategies. According to the Chiang et al. (2011), low vision is characterized by a visual acuity of less than 6/18 but equal to or better than 3/60 in the better eye with the best possible correction, or a corresponding visual field loss. In the context of this research, the low vision participants exhibited varying degrees of visual functioning, some retaining partial sensitivity to light, contrast, or movement. Their perceptual limitations were classified into two primary etiological categories: prenatal and postnatal causes, each influencing their sensory integration and artistic engagement differently. These individuals relied heavily on non-visual sensory modalities—primarily touch and hearing—for spatial recognition and material interaction during clay-based activities.

2.3. Participant Overview

The participants of this study consisted of individuals with low vision residing at the "Pandawa" Social Rehabilitation Center in Kudus Regency, Central Java, Indonesia. The research focused on a purposive sample of residents who were classified as having low vision according to the institution's visual impairment categorization, which follows the World Health Organization's International Classification of Diseases (ICD-11) and International Classification of Functioning, Disability and Health (ICF). Under these guidelines, low vision refers to a condition in which an individual's visual acuity is less than 6/18 but equal to or better than 3/60 in the better eye with the best possible correction, providing a standardized framework for participant inclusion.. These individuals had varying levels of visual capability, ranging from partial to minimal residual sight, and were selected based on their cognitive ability to engage in clay-based artistic activities and willingness to participate.

Table 1 presents the demographic overview of residents with visual disabilities at the social service institution where the study was conducted. The data illustrate the institutional context within which the research took place rather than the actual number of study participants. From this total population, nine residents, both male and female, classified as having low vision were purposively selected to participate in the clay-based artistic intervention. The selection was based on their interest in creative activities, ability to engage with tactile materials, and regular attendance in the institution's daily programs. Presenting this contextual data provides an understanding of the broader environment of the institution while clarifying the specific focus of the study on a smaller group of low-vision participants actively involved in the artistic empowerment sessions.

Table 1. Overview of low vision research participants

No	Level of disability	Gender		Total
		Male	Female	
1	Low Vision	9	6	15
2	Totally Blind	22	13	37
	Amount	31	19	50

The selection process also considered prenatal and postnatal causes of visual impairment, as both groups presented unique perceptual and psychological characteristics (See Table 2). Participants' sensory modalities—especially touch and hearing—played a critical role in their interaction with clay, enabling them to explore texture, form, and spatial orientation through non-visual perception. Their participation in art-making was contextualized within the rehabilitation center's routine, which typically emphasized vocational and religious training, but had limited integration of expressive arts before the study. The participants' engagement with clay became a meaningful experience of empowerment, fostering self-expression and identity development. Their responses, behaviors, and artworks were documented and analyzed to understand how artistic empowerment manifests in individuals with sensory disabilities within an institutional care context.

Table 2. The demographic participant

Code	Age (years)	Gender	Degree of visual impairment	Onset of vision loss	Duration in institution (year)	Prior art experience
MAS	19	Female	Low Vision	Prenatal	1	None
OP	22	Female	Low Vision	Postnatal	6	Poor
MR	23	Female	Low Vision	Prenatal	2	Moderate
AZAF	25	Female	Low Vision	Postnatal	4	Poor
AS	28	Male	Low Vision	Prenatal	10	None
SP	31	Male	Low Vision	Postnatal	12	None
RR	34	Female	Low Vision	Prenatal	2	None
DA	40	Male	Low Vision	Postnatal	3	None
KS	47	Male	Low Vision	Postnatal	5	Moderate

2.4. Data Coding and Data Analysis

The data coding and analysis process in this study followed a qualitative interpretative approach consistent with case study methodology. The data were obtained through observation, semi-structured interviews, reflective journals, and documentation of the clay art process. All qualitative data were transcribed verbatim and organized using a systematic coding procedure to ensure rigor, transparency, and traceability of the findings. Initially, open coding was conducted to identify significant statements, actions, and expressions that reflected participants' experiences of empowerment, creativity, and self-expression during clay-based activities. These initial codes were descriptive in nature and captured observable behaviors, tactile engagement, emotional responses, and participants' reflections on the artistic process.

Subsequently, axial coding was applied to group the initial codes into broader conceptual categories that illustrated the relational patterns between participants' sensory experiences, psychosocial development, and artistic transformation. This process enabled the researcher to connect material engagement with emotional and cognitive responses, revealing how tactile art practices facilitate empowerment for individuals with sensory disabilities. Finally, selective coding was employed to synthesize the major themes that emerged across the data sets. Throughout the analysis, an iterative and reflexive process was maintained, where the researcher continuously revisited the data to validate interpretations and ensure alignment with participants lived experiences. Triangulation was achieved through cross-verification of data sources—observational notes, participant interviews, and art documentation—to strengthen credibility.

The data interpretation was informed by art-based research principles (Leavy, 2020) and the theoretical framework of empowerment through creativity (Rappaport, 1987; Perkins & Zimmerman, 1995), emphasizing that art-making serves as both a method of inquiry and a means of personal and social transformation.

2.5. Reliability of Research

Triangulation was applied to ensure credibility, combining observational notes, interview transcripts, and visual data. Data were coded thematically using interpretive phenomenological analysis to capture emerging patterns related to empowerment, transformation, and artistic voice. Ethical clearance was obtained, and participants gave informed consent. This approach aligns with art therapy and community-based research principles, emphasizing participatory methods and contextual sensitivity.

3. Results

3.1. Results of Interviews

The exploration of ideas faced by objects in clay materials is related to previous knowledge and aesthetic experiences. Initial perception influences the emergence of ideas that originate from personal experiences from the surrounding environment, and formal education that has been experienced. The basic knowledge and experience of low vision beneficiaries has been constructed in understanding the concept of identifying clay materials and the process of creating previous artwork. From the material stimulus in the form of clay

materials, it will produce a way of responding and treating what is felt through the various senses that it has (Fajrie et al., 2020).

To explore the lived experiences and psychological impacts of clay-based artistic empowerment among low vision beneficiaries, a series of in-depth interviews were conducted with nine participants residing in a social service institution in Indonesia. These interviews aimed to capture the participants' personal reflections, emotions, and perceptions related to their involvement in tactile art-making using clay. By focusing on individual voices, the study sought to understand how art can function as a medium for self-expression, emotional healing, and personal agency in contexts where verbal or visual communication is limited.

The transcripts represent authentic expressions that reveal unique psychological transformations and social interactions fostered through the creative process. Each participant's narrative provides insight into how clay facilitated a deeper connection to the self and others. The interpretations are grounded in themes of empowerment, identity formation, and sensory engagement, offering a nuanced understanding of how tactile art contributes to well-being in institutional care. The interview excerpts below distil the participants' own words as captured during individual sessions; they have been lightly edited for clarity but remain faithful to the content reflected in the assessment sheet.

3.2. Emergence of Self-Expression

One of the most significant outcomes observed in this study is the emergence of self-expression among participants, particularly those who initially exhibited limited confidence or difficulty articulating emotions. For individuals with visual impairments, especially those residing in institutional settings, expressive channels are often constrained by physical, sensory, or psychological barriers. The tactile and malleable nature of clay offered an alternative, non-verbal medium through which participants could externalize their inner thoughts, emotions, and identities. Unlike traditional verbal therapy, clay work invites embodied creativity, allowing participants to shape meaning with their hands when words are insufficient (Nan et al., 2021). The interview data reveal how this process of creating and completing clay art helped participants recognize personal value, reconnect with suppressed feelings, and begin to narrate their experiences in symbolic and tangible forms. The excerpts of interviews below illustrate how the act of sculpting led to transformative moments of self-recognition, pride, and a renewed sense of identity.

"Moving around and socialising are okay for me, but feelings? Not so good. I never thought of myself as 'skilled.' Sculpting a small bird made me realise I can create something meaningful, even if words fail."
Participant MAS.

MAS's revelation of creative ability ("I never thought of myself as skilled") marks a pivotal shift in self-perception. The clay sculpture becomes a symbol of latent potential and a substitute for verbal expression. MAS experiences an identity transformation—from passive participant to expressive creator—through the symbolic and emotional power of clay.

"The centre's programmes helped me improve already; clay took it further. Forming a bowl, glazing it, seeing it fired—each step told me 'I can finish things.' Now I greet visitors with pride and show them my pieces." Participant OP.

Besides, OP reflects on structured, step-by-step processes in clay as proof of capability and follow-through. Completing tangible art objects symbolizes achievement, reinforcing task persistence and self-worth. Public sharing ("*I greet visitors*") evidences not only internal empowerment but social positioning as a capable contributor in the institutional community.

3.3. Emotional Release and Healing

Clay-based artistic activities provided a valuable channel for emotional release and healing among participants, many of whom had limited opportunities to process or express deep-seated feelings through conventional means (Fry, 2005). For individuals with visual impairments living in institutional care, emotional expression is often inhibited by both internal factors—such as trauma, self-doubt, or emotional numbness—and external conditions, including routine structure and limited therapeutic outlets. The tactile quality of clay, however, enabled participants to connect with their emotions physically and symbolically. Through the sensory engagement of molding, pressing, and shaping the material, participants began to access, regulate, and communicate emotions that had long remained unspoken or unprocessed. These small but meaningful emotional shifts, often catalyzed by repetitive, mindful interaction with the clay, signaled the early stages of healing. The following excerpts highlight participants' experiences of emotional awakening and regulation, showing how clay supported not only temporary relief but also long-term emotional resilience and introspective growth.

"I like chatting with friends; that part is easy. My problem is inside—feelings stay stuck, and my senses don't always catch details. When I press the clay, I notice textures and my mood shifts, yet the emotional fog lifts only a little." Participant MR.

Participant MR, from the analysis of the interview transcripts, was known to be sociable but had difficulty with emotional and sensory adjustment. The texture of the clay stimulated sensory engagement and slightly improved mood, indicating an initial step towards emotional regulation. Although MR experienced only a "*slight increase*" in emotional clarity, the material began to mediate internal awareness, supporting gradual healing and self-awareness.

“My body slows down these days, yet my feelings stay steady. Working with the clay keeps me motivated; I forget the decline for a while. I aim to craft a series that tells my story—even if it takes longer.” Participant AZAF.

AZAF acknowledges physical decline but repositions clay art as a motivational anchor. By referring to their work as “chapters”, they frame the artistic process as biographical storytelling. Clay provides temporal control and emotional continuity, fostering resilience, purpose, and a narrative identity despite physical constraints.

3.4. Growth of Personal Agency

Personal agency—the ability to act independently, make choices, and influence one’s environment—is a vital component of empowerment, especially within institutional care settings where routines and limitations often restrict individual autonomy (Anderson, 2014). For individuals with visual impairments, developing agency can be particularly challenging due to physical barriers, dependency on others, and reduced opportunities for self-directed expression. However, the clay-based activities in this study offered a unique space where participants could exercise control, make decisions, and express themselves without fear of judgment or failure. The tactile process of shaping clay, selecting forms, and completing personal projects created moments where participants felt capable, valued, and self-determined. These experiences not only encouraged task persistence and self-trust but also translated into increased participation in social and daily activities. The interview data below illustrate how engagement with clay fostered participants’ sense of ownership, decision-making, and identity affirmation—key indicators of growing personal agency in both creative and everyday contexts.

“Since joining the sessions, my social side has grown—I joke more. My body feels stronger, too. Still, I struggle to shape thoughts into skills. Clay gives me a quiet way to show what’s inside without needing perfect technique.” Participant AS.

AS shows improved sociability and physical energy, but cognitive and skill-based expression remains underdeveloped. Clay offers a “quiet way” to represent internal experiences, acting as a non-verbal scaffold for complex thoughts. The medium supports identity exploration without performance pressure, enabling AS to externalize emotions safely.

“My hands remember how to do things, and my mind plans well, yet my eyes tire fast. That makes meeting people hard. With clay I can pace myself—work slowly—and still contribute to the group, which feels empowering.” Participant SP.

Based on the interview results, SP participants experienced visual impairment but maintained cognitive and manual coordination. Clay allowed SP to work at their own pace while maintaining meaningful group contributions. This reflects a shift from limitation to adaptation, with clay serving as a validation platform that maintains dignity and purpose in a communal context.

3.5. Development of Social Connectedness

Social connectedness plays a crucial role in the psychological well-being of individuals in institutional settings, where feelings of isolation, disempowerment, and diminished identity are common. For persons with visual impairments, these challenges can be further intensified by communication barriers and limited opportunities for meaningful interaction. Through clay-based activities, participants in this study experienced not only personal expression but also relational growth. The collaborative and non-threatening environment of the clay sessions fostered peer recognition, mutual support, and shared pride in creative outcomes. As participants shaped their artworks, they simultaneously shaped their social identities—moving from passive observers to active contributors within their community. The interviews reveal that clay art became a social bridge, allowing participants to communicate, receive affirmation, and reframe how they were perceived by others. These interactions not only enhanced self-esteem but also cultivated trust, empathy, and inclusion. The following excerpts illustrate how artistic engagement facilitated deeper interpersonal connections and strengthened social bonds.

“Physically, I can manage most tasks, and I get along with people here, but when it comes to speaking up about my work still feel small. Clay helps because my hands talk first, then I find the confidence to explain what I’ve made.” Participant RR.

Based on the interview results, RR participants showed physical and social readiness but lacked emotional assertiveness, especially in verbal expression. Clay became a transitional medium where kinesthetic expression preceded verbal articulation, indicating that tactile engagement lowered internal inhibitions and built self-confidence. The phrase “my hands speak first” illustrates the empowerment realized through clay work.

“Honestly, I entered with almost no practical skills. The first figure I made was lumpy, but everyone clapped, and I wanted more. Each week I dare to try something new, and that courage is spilling into other areas of life.” Participant DA.

DA’s initial insecurity is replaced by increased motivation through social reinforcement (“they clapped”). Clay sessions foster a growth mindset, where small creative risks result in cumulative confidence. This

mirrors the psychological principle of mastery experiences and shows how positive feedback within artistic contexts can activate broader personal development.

“I’ve noticed progress in many parts of my life here, and clay reinforces that. When I hold up a sculpture and others nod in appreciation, my confidence rises. It’s like the clay mirrors the better version of me I’m becoming.” Participant KS.

KS participant highlights the transference of confidence from clay-making to everyday tasks. The symbolic recognition (*“the clay nods back”*) suggests a relational interaction with the material, indicating deep internalization of empowerment. KS sees clay not just as a tool, but as a mirror of transformation, reflecting an evolving sense of self.

Based on the results of the interviews, each interpretation confirms that clay art is not merely a craft activity, but a therapeutic and developmental space where low vision beneficiaries—despite diverse challenges—engage in meaning-making, self-affirmation, and agency building. This reinforces the case for integrating tactile creative practices into institutional support systems for marginalized populations.

3.6. Participant Engagement

Fig. 2 provides important contextual insights into how beneficiaries with low vision physically and sensorily engage with clay as a tactile medium in an institutional setting. Captured during one of the early intervention sessions, the image illustrates the adaptive strategies used by participants to identify, manipulate, and relate to clay using their residual visual abilities, haptic sensitivity, and spatial awareness. This embodied interaction with the material is central to the study’s theme of artistic empowerment, as it demonstrates not only the accessibility of clay but also the active role participants play in redefining their sensory limitations as creative forces. The processes seen in this image directly reflect findings from the interview data, where emotional release, self-expression, personal agency, and social connectedness are rooted in tactile exploration.

It not only illustrates the physical process of identifying clay materials among beneficiaries with low vision but also symbolizes the broader cognitive, emotional, and social engagement that underlies artistic empowerment. The embodied interaction with clay—grounded in sensory exploration—mirrors the verbal reflections and emotional trajectories of participants recorded throughout the study. Thus, Fig. 2 serves as a visual representation of empowerment in the process, where creativity, identity, and resilience are formed in the hands of the participants.

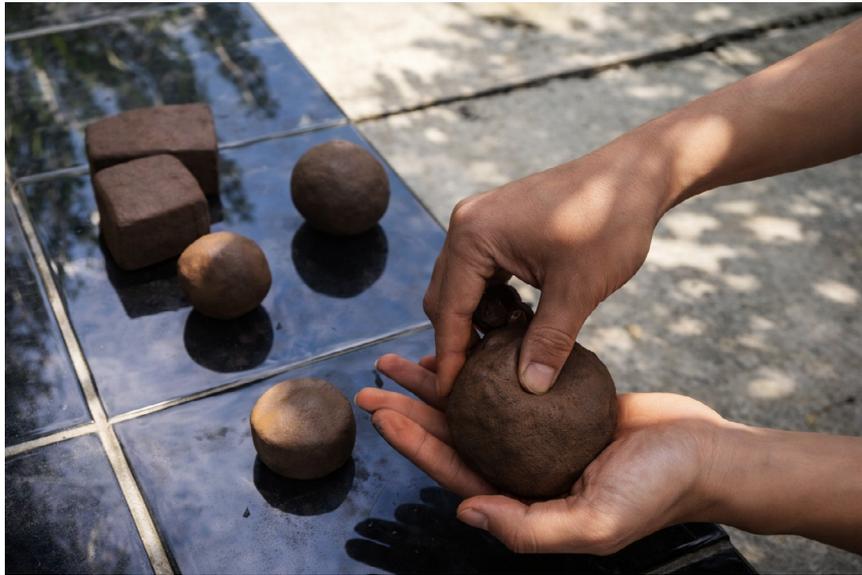


(Fig 2)

Fig. 3 illustrates the tactile pinching technique, one of the most foundational hand-building methods in clay art. This technique, as shown through the hands manipulating a spherical clay form, exemplifies the intimate and direct connection between the individual and the material, an essential aspect of the empowerment process for individuals with visual impairments. In the context of this study, the tactile pinching motion reflects more than manual skill; it represents a physical dialogue between the maker and the medium. This sensory-driven interaction becomes particularly meaningful for low vision beneficiaries, whose primary mode of perception is haptic rather than visual. The act of pinching is not only a technical step but also a symbolic expression of personal agency, intention, and emotional release.

The figure also emphasizes the accessibility of clay as an inclusive medium. Without the need for vision or formal tools, participants engage fully with their environment and produce meaningful outcomes. The variety of shapes in the background signifies experimentation and play, both crucial in the journey toward creative empowerment. In summary, the figure visually encapsulates the essence of clay-based empowerment, where

each pinch signifies tactile decision-making, emotional presence, and expressive identity. This form of engagement affirms the value of embodied artistic practice for individuals with sensory impairments, reinforcing the study's core finding that empowerment arises not from visual precision but from meaningful sensory interaction and personal agency.



(Fig 3)

Clay, being a tactile and malleable medium, offers a sensory-rich experience that allows participants to construct form through touch rather than sight. Among the various techniques introduced during the intervention, the coiling method became a central practice that not only facilitated creative engagement but also revealed individual responses, emotional reflections, and cognitive adaptations during the process. The repetitive motion of rolling, layering, and shaping clay coils enabled participants to build physical structures while simultaneously reconstructing their inner narratives. This process allowed for a symbolic transformation, as participants projected their emotions, struggles, and hopes into a tangible form.

Fig. 4 captures a moment of active engagement, where the participant's hands are forming a vessel using the coiling method. This technique became instrumental in helping participants explore spatial relationships, tactile rhythm, and structural balance. One participant who often expressed difficulty with focus found calmness and concentration through the repetitive tactile engagement. The controlled motion of coiling helped to quiet inner restlessness, leading to an increased ability to sustain attention during the sessions. It represents more than a technical illustration—it symbolizes the therapeutic and developmental processes experienced by participants. The tactile coiling technique served as a channel through which individuals not only formed clay but also reconstructed aspects of their identities, cultivated self-efficacy, and experienced empowerment within a safe and creative environment.



(Fig 4)

The use of tactile surface impression techniques enabled participants to embed their feelings and thoughts into clay by creating texture, pattern, and symbolic markings. This technique offered an accessible form of artistic expression, allowing participants to engage deeply with the material while developing a personal language of touch. The impressions made were not merely decorative but served as reflections of inner experiences, emotional states, and individual identities. The surface impression technique empowered participants to translate abstract emotions into physical form, establish control over their creative process, and express personal narratives in a medium attuned to their sensory realities. Through this process, the participants did not merely create texture—they shaped meaning, built resilience, and affirmed their capacity to create and communicate through art.



(Fig 5)

4. Discussion

The results of this study demonstrate that artistic empowerment through clay offers significant psychosocial benefits to individuals with low vision residing in a social service institution, fostering self-expression, confidence, and social connection through tactile artistic engagement. Clay, as a tactile and malleable medium, enabled participants to engage in non-verbal expression, process internal experiences, and reclaim a sense of personal agency. These findings align with previous literature emphasizing the therapeutic potential of art-making in institutionalized and vulnerable populations (Malchiodi, 2020; Richesin et al., 2021).

Participants' evolving relationship with clay—from tentative manipulation to confident sculptural expression—illustrates the role of art in fostering autonomy and emotional articulation. This finding aligns with Gussak's (2019) research, which highlights how engagement with tactile art materials can foster self-expression and identity reconstruction—an outcome similarly observed in the clay-based creative processes explored in this study. The symbolic and often metaphorical forms created by participants further echo findings from Moon et al. (2020), who argues that clay enables the externalization of unspoken psychological content through its responsive, three-dimensional properties. This study also supports the findings by Alotaibi et al. (2020), who emphasized that tactile and kinesthetic involvement in art-making promotes neurobiological regulation and emotional grounding. The embodied nature of working with clay stimulates sensory awareness and offers a calming effect, particularly crucial for individuals experiencing institutional or emotional detachment. Moreover, participation in collective art sessions contributed to social bonding and a renewed sense of belonging—elements crucial for well-being in long-term care settings (Stickley et al., 2018; Nan et al., 2021; Freeman-Croft, 2023).

The emergence of empowerment among participants was evidenced in their growing self-efficacy and narrative ownership, themes echoed in art empowerment research with disabled populations (Thomson & Hall, 2022; Juneau, 2023). Empowerment, in this context, did not solely mean increased independence, but also included emotional insight, interpersonal engagement, and self-reflection (Joseph, 2020). Participants' capacity to derive meaning from their creations reinforced this interpretation, supporting Malchiodi's (2023) framework of trauma-informed expressive arts as both therapeutic and developmental. Although the results of the data analysis showed positive results, this study also has limitations such as the small sample size and single-site context limiting its generalizability. Furthermore, participant responses may have been influenced by the presence of a facilitator, increasing the potential for social desirability bias and its long-term impact. Nonetheless, the findings of this study offer valuable insights into individual processes of artistic growth and emotional development.

Future research should explore the longitudinal effects of tactile art engagement, including diverse social care populations, such as people with disabilities, older adults, and at-risk youth, and investigate the cross-cultural aspects of clay art empowerment. A mixed-methods approach that incorporates biometric,

psychological, and qualitative measures may offer more robust data on transformation over time. Additionally, integrating digital documentation and narrative reflection may enhance participants' self-awareness and longitudinal tracking of their artistic journeys. Clay-based art practices have great potential as low-cost, inclusive, and effective interventions to promote empowerment, healing, and personal growth in institutionalized populations. Their implementation in social care programs could enrich therapeutic services, improve mental health, and foster creative resilience among vulnerable individuals.

5. Conclusion

In sum, the findings of this study demonstrate that clay-based artistic activities serve as a meaningful medium for empowerment among individuals living in a social service institution in Indonesia. Through tactile engagement and personal expression, participants experienced increased self-confidence, emotional release, and a sense of agency, which contributed to their psychological well-being and social connectedness. The significance of this research lies in its contribution to the understanding of how art can function not merely as a creative outlet but as a transformative process, especially for marginalized populations in institutional settings. The process of transformation through clay has been captured as a proposal for artistic creation, where the act of molding and shaping clay serves both as a medium and a metaphor for personal change. Through tactile engagement, participants externalize inner emotions, reconstruct fragmented identities, and express narratives that are often silenced in traditional therapeutic or institutional frameworks. The progression from the initial handling of raw clay to the intentional crafting of meaningful forms symbolizes a journey of self-discovery and empowerment. While the study provides valuable insights, it is limited by its small sample size and single-institution scope, which may affect the generalizability of the results. Moreover, the absence of longitudinal follow-up restricts the ability to assess sustained impact over time. Future research should explore comparative studies across different institutions, include diverse participant groups, and incorporate mixed-method approaches to deepen understanding of long-term outcomes and broader applications of art-based empowerment models.

Acknowledgments

We would like to extend our sincere thanks to all the participants in this study for cooperating in the investigation and for allowing us to use their personal information relating to visual acuity. We are also grateful to all the staff and others at the facility that we used for our investigation. This study received assistance from a Grant-in-Aid for Scientific Research by Universitas Muria Kudus (Project number: 127/C3/DT.05.00/PL/2025).

Ethical Clearance

This study was conducted in accordance with the ethical standards of research involving human participants and received formal ethical approval from the Ethics Committee of Universitas Muria Kudus, Indonesia. Participants were fully informed about the purpose and procedures of the study, and written informed consent was obtained from all participants (or their guardians where applicable) prior to data collection. All personal data were anonymized to protect participants' privacy and confidentiality. The research protocol, instruments, and consent procedures were reviewed and approved under the ethical clearance number: 154/MPD.PPS.UMK/B.09.15/VII/2025.

References

- Alotaibi, H., S. Al-Khalifa, H., & AlSaeed, D. (2020). Teaching programming to students with vision impairment: Impact of tactile teaching strategies on student's achievements and perceptions. *Sustainability*, 12(13), 5320. <https://doi.org/10.3390/su12135320>
- Anderson, J. (2014). Autonomy, agency and the self. In *Jurgen Habermas* (pp. 91-112). Routledge.
- Catalano, T., & Morales, A. R. (2022). Dancing across difference: arts and community-based interventions as intercultural education. *Intercultural Education*, 33(1), 48-66. <https://doi.org/10.1080/14675986.2021.2016214>
- Chiang, P. P. C., O'Connor, P. M., Le Mesurier, R. T., & Keeffe, J. E. (2011). A global survey of low vision service provision. *Ophthalmic epidemiology*, 18(3), 109-121. <https://doi.org/10.3109/09286586.2011.560745>
- de Eça, T. T., & Saldanha, Â. (2022). Making IMPACT: Visibility status in participatory projects. In *Artistic Cartography and Design Explorations Towards the Pluriverse* (pp. 203-216). Routledge. <https://doi.org/10.62033/iasjol.v2i2.75>
- Fajrie, N., Purbasari, I., & Bamiro, N. (2024). The perceptual ability of visual impaired children in the experience of making clay media artworks. *Arts Educa*, 40. <https://artseduca.com/submissions/index.php/ae/article/view/352>
- Fajrie, N., Rohidi, T. R., Syakir, M., Syarif, I., & Priyatmojo, A. S. (2020). A study of visual impairment in the art creation process using clay. *International Journal of Innovation, Creativity and Change*, 11(10), 199-218.
- Field, M. (2016). Empowering Students in the Trauma-Informed Classroom through Expressive Arts Therapy. *In Education*, 22(2), 55-71.
- Franklin, M. (2010). Affect regulation, mirror neurons, and the third hand: Formulating mindful empathic art interventions. *Art Therapy*, 27(4), 160-167. <https://doi.org/10.1080/07421656.2010.10129385>
- Freeman-Croft, K. E. (2023). *Co-Regulation with Clay: A Study of Authentic Haptic Perception in the Reduction of Stress, Anxiety, and Depression* (Master's thesis, Pratt Institute).

- Fry, T. (2015). *Dirty Tricks: The relevance of skill, expression and authenticity in contemporary clay-based art* (Doctoral dissertation).
- Gryglewski, P., Ivashko, Y., Chernyshev, D., & Dmytrenko, A. (2020). Art As a Message Realized Through Various Means of Artistic Expression. *Art Inquiry*, (22), 57-88.
- Gussak, D. (2019). *Art and art therapy with the imprisoned: Re-creating identity*. Routledge. <https://doi.org/10.4324/9780429286940>
- Jang, S. M. (2020). The impacts of self-expression on the self-efficacy of intellectually disabled children who participated in a art integration movement program. *Exercise Science*, 29(2), 188-194. <https://doi.org/10.15857/ksep.2020.29.2.188>
- Joseph, R. (2020). The theory of empowerment: A critical analysis with the theory evaluation scale. *Journal of Human Behavior in the Social Environment*, 30(2), 138-157. <https://doi.org/10.1080/10911359.2019.1660294>
- Juneau, A. P. (2023). Empowering Futures: A Journey of Career Maturity in Students with Visual Impairment Through Self-Efficacy and Self-Advocacy. *European International Journal of Pedagogics*, 3(12), 01-04. <https://inlibrary.uz/index.php/eijp/article/view/27776>
- Kapitan, L. (2014). Empowerment in art therapy: Whose point of view and determination? *Art Therapy*, 31(1), 2-3. <https://doi.org/10.1080/07421656.2014.876755>
- Kraehe, A. M. (2018). Creative agency: Empowerment in art and design education. *Art Education*, 71(6), 4-8. <https://doi.org/10.1080/00043125.2018.1514835>
- Leavy, P. (2020). *Method meets art: Arts-based research practice*. Guilford publications.
- Leavy, P. (2018). Introduction to arts-based research. *Handbook of arts-based research*, 3-21.
- Malchiodi, C. (2023). Trauma-informed expressive arts therapy. *Handbook of expressive arts therapy*, 142-154.
- Malchiodi, C. A. (2020). *Trauma and expressive arts therapy: Brain, body, and imagination in the healing process*. Guilford Publications.
- Moon, I., Frost, A. K., & Kim, M. (2020). The role of physical activity on psychological distress and health-related quality of life for people with comorbid mental illness and health conditions. *Social Work in Mental Health*, 18(4), 410-428. <https://doi.org/10.1080/15332985.2020.1776808>
- Nan, J. K., Hinz, L. D., & Lusebrink, V. B. (2021). Clay art therapy on emotion regulation: research, theoretical underpinnings, and treatment mechanisms. In *The neuroscience of depression* (pp. 431-442). Academic Press. <https://doi.org/10.1016/B978-0-12-817933-8.00009-8>
- Nissen, L. B. (2019). Art and social work: History and collaborative possibilities for interdisciplinary synergy. *Research on Social Work Practice*, 29(6), 698-707. <https://doi.org/10.1177/1049731517733804>
- Perkins, D. D., & Zimmerman, M. A. (1995). Empowerment theory, research, and application. *American journal of community psychology*, 23(5), 569-579. <https://doi.org/10.1007/BF02506982>
- Pinto, M. R., Viola, S., Onesti, A., & Ciampa, F. (2020). Artists residencies, challenges and opportunities for communities' empowerment and heritage regeneration. *Sustainability*, 12(22), 9651. <https://doi.org/10.3390/su12229651>
- Uduak, P., & Akpan, R. W. (2020). An overview of the arts as a language of communication, expression and experience: A discourse. *Serbian Research Journal of Education, Humanities and Developmental Studies (SRJEHDS)*, 10 (1), 28-46.
- Rappaport, J. (1987). Terms of empowerment/exemplars of prevention: Toward a theory for community psychology. *American journal of community psychology*, 15(2), 121-148. <https://doi.org/10.1007/BF00919275>
- Richesin, M. T., Baldwin, D. R., & Wicks, L. A. (2021). Art making and virtual reality: A comparison study of physiological and psychological outcomes. *The Arts in Psychotherapy*, 75, 101823. <https://doi.org/10.1016/j.aip.2021.101823>
- Stickley, T., Wright, N., & Slade, M. (2018). The art of recovery: outcomes from participatory arts activities for people using mental health services. *Journal of Mental Health*, 27(4), 367-373. <https://doi.org/10.1080/09638237.2018.1437609>
- Thomson, P., & Hall, C. (2023). *Schools and cultural citizenship: Arts education for life*. Routledge. <https://doi.org/10.4324/9781003093084>
- van Ede, Y. (2024). Dancing Clay: On Kinaesthetic Experience and Tactile Materialization. In *Dance, Performance and Visual Art: Intersections with Material Culture* (pp. 127-146). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-69084-6_7
- Verisa, G. S., Mutmainah, N., Fidyastuti, N., & Minsih, M. (2024). Improving the Creativity of Children with Disabilities Based on Local Culture: An Exploration of the "Karya. Ku" Program. *IAS Journal of Localities*, 2(2), 172-183.