



RESEARCH ARTICLE

Soft Clay Medium of Translating Children's Imaginary: Exploration of Stateless Children in Sabah, Malaysia

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ARTICLE INFO	ABSTRACT
Received: May 22, 2024	<p>This research examines the function of soft clay as an effective medium to translate the imagination of stateless children toward their environment. Given their limited access to formal education in Malaysia, this research aims to reveal the potential of soft clay in helping creative learning with an improvisational concept that can stimulate self-expression. Therefore, a qualitative approach was used covering field methods, observation, interview protocol, and analysis of soft clay works conducted on 18 stateless children aged 8 to 15 years from an alternative school for stateless children in the State of Sabah with the implementation of activities carried out in three phases with using thematic analysis. This research identified key themes that highlighted their experiences and perspectives. The study results reveal that interaction using soft clay facilitates creative expression, allowing them to convey their experiences and perceptions of the world around them more deeply and reflectively. The main themes that emerged consisted of self-expression and tactile-psycho-motor learning, learning through play, development of imagination and creativity, emotional and social impact, and reflection on the environment. All of these themes show the significant benefits of soft clay as a learning tool that breaks the barriers of self-expression that stateless children often face in the situations they face. These findings provide new insights into alternative educational approaches for marginalised communities and suggest the need for more resources and support to expand access to arts activities in alternative education systems.</p>
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INTRODUCTION

Global awareness of the importance of children's mental health and well-being continues to rise. This situation explains the urgent need to take human and social development seriously, especially for education in schools or various social groups (Batool & Anjuni, 2016). No exception, social groups from marginalised children, including the category of children without citizenship, are often excluded from policies and social interventions (Farzana et al., 2020). This group of children often faces major obstacles, especially education, health, rights, and social justice, that cannot be experienced by all other children, which can profoundly impact their emotional and mental well-being.

In the Malaysian state of Sabah, the issue of citizenship among children is so complex and diverse that it is caused by various factors, including migration from two neighbouring countries, the southern Philippines and North Kalimantan, Indonesia. In addition, what is even worse, the strict

citizenship system in the country of Malaysia and the control at the entrances throughout the country make many people who migrate smuggle in so that they are categorised as refugees or illegal immigrants (PATI). This situation became even worse when this group of PATIs built an isolated community and opened illegal settlements, resulting in an increase in the number of children without citizenship (Cicilia Anggi Sholina, 2022; Jam et al., 2011; Mohamed et al., 2020).

These stateless children face the problem of widespread social exclusion, especially having limited access to formal education and limited freedom of life (Nabtalian and Saibeh, 2022). This situation has the potential to have a significant negative impact on their development (Loo and Lagason, 2022). Accordingly, by examining the phenomenon of the dilemma faced by this group, an initial survey approach was taken by this research to review and approach this group to see the space and opportunity that can be used as one of the ways to help their development as well as bring recommendations to preserve the desire of awareness to the mental and well-being of children.

The results of the preliminary survey of this research found that the most simple and logical approach to apply to this group is through the art approach. Art appears as an important tool to support self-expression and psychosocial development of children (Núñez et al., 2021). Consequently, there is a need to reframe and rethink how our education system can integrate such approaches to facilitate the needed change in educational contexts (Arshad et al., 2022; Mazlan et al., 2023, 2024, 2025; Mohd Ramli et al., 2021; Safian et al., 2024). But the question of whether or how art can help in this regard is to look at art therapy, especially through the use of soft clay, which has been proven to provide excellent therapeutic benefits and become an effective medium of communication in the context of children's non-verbal communication (Yaghoobian and Emadian, 2019).

Although the benefits of art therapy using soft clay have been widely recognised, there is still a lack of research specifically exploring this approach to marginalised groups, especially children without citizenship. This research will study the potential of soft clay as a medium capable of translating the imagination and life experiences of stateless children in Sabah to stimulate their emotional and psychosocial development. The main focus of this research is to see creative interactions with soft clay that can facilitate their self-expression and sharing of life experiences while evaluating the therapeutic and psychosocial effects of art-based activities or art therapy.

Therefore, by using a comprehensive literature review strategy and carefully designed research methodology, this research will be able to generate research results on the importance of art in supporting children in disadvantaged social situations and categorised as marginal groups. It is hoped that the results of this study will not only make a significant contribution to the field of psychology and art therapy but also offer practical guidance for policymakers, educators, and practitioners committed to improving the well-being of stateless children in the state of Sabah.

LITERATURE REVIEW

Use of Soft Clay in Art Therapy

Soft clay has long been recognised in art therapy as a rich and flexible medium with various therapeutic benefits, especially for children (Salles, 2023). Its change and manipulation ability make it a very effective tool in supporting self-expression and tactile and psychomotor learning. In their research, Km and Wong (2021) explained how soft clay allows children to explore and convey their emotions and experiences that may be difficult or complex to express through words. According to them, the physical manipulation of soft clay serves as an expressive channel and helps strengthen psychomotor skills that are important for children's development.

Furthermore, Yaghoobian and Emadian (2019) revealed that interaction with soft clay in a therapeutic context can facilitate emotional and cognitive adaptation. According to them, the creative process of replicating from soft clay supports the internal process and reflection. This condition allows children to process and deal with their emotions more effectively. Additionally, soft clay-based activities offer opportunities for children to develop a sense of achievement and pride in the work or replicas they create.

In addition, using soft clay in art therapy promotes exploration and experimentation without pressure to achieve perfect results. This is because it gives children the freedom to try out ideas and emotions in a supportive and non-judgmental environment. This is in line with findings (Núñez et al., 2021; Rashid et al., 2023) that emphasise the importance of a supportive therapeutic environment in facilitating children's emotional and psychological growth through art.

Overall, this literature review shows that soft clay is a functional art therapy medium in supporting children's development from an expressive and therapeutic aspect. Its ability to encourage free and reflective self-expression goes hand in hand with its psychomotor learning benefits. This also explains soft clay as a helpful tool in art therapy, especially for children who may have difficulty communicating their emotions, feelings, and experiences through conventional or literal methods.

Child Development Psychology

In research on the psychology of child development, recent scholars often discuss the importance of creative expression. Creative expression, especially through artistic activities such as the application of soft clay, is suggested not only to benefit the cognitive and psychomotor development of children but also play an important role in supporting the development of their language and social skills (The Benefits of Playing with Clay in Early Childhood) | (Little Scholars, n.d.). This creative activity serves as a bridge that connects children's imagination with reality and allows them to express their thoughts and ideas in a physical form that can be seen and felt (Fajrie et al., 2020; Kanval et al., 2024).

According to (Salles, 2023), the application of art using clay in an educational and therapeutic context has a great impact on children's development. Through this activity, children develop psychomotor skills in controlling and manipulating materials and adapting them to the shape and texture they want. This process also supports cognitive development, as they have to think creatively and solve problems while designing and making their creations.

Furthermore, this clay activity also contributes to the development of children's language. Ambrose and Cheong (2011) explained that when children share ideas and discuss their creations with others, they can hone language skills in a more precise and purposeful context. These interactions enrich vocabulary and improve communication skills by providing a solid foundation for understanding and interpreting more complex language in the future.

In the opinion (Azhima, 2020), children's psychology of social skills can be strengthened through clay-based art activities. Working in groups or a classroom setting allows children to collaborate, share resources, and value teamwork. They learn empathy and appreciation for other people's perspectives and work, which are important social skills they will carry with them throughout their lives.

This statement aligns with the opinion put forward by (Locasto et al., 2002) that through play and exploration, using clay helps children to know themselves and stimulate creativity and self-change from individual or group work. According to them, this method can generate children's behaviour, allowing them to experiment freely, dare to take risks in a safe environment and learn from mistakes

without fear of failure. This reinforces the thrust of (Andrade et al., 2011), which explains that children develop critical and creative skills necessary for future success through playing.

The highlight of the literature on this topic explains the significant importance of creative expression in the psychological development of children. It supports children's overall growth in cognitive, psychomotor, language, and social aspects. It can be explained here that clay not only helps them develop skills that are important for academic and personal development but also gives them a way to express themselves and understand the world in a fun and creative way (Bravo-Fuentes, 2023).

Stateless Children In Sabah

Faced with the challenges of life without citizenship status, these children find themselves in a situation where they are very vulnerable to legal insecurity and are often neglected by the social support system. As explained by (Allerton, 2014; Mohamed et al., 2020), the issue of citizenship in the state of Sabah is a critical issue and exposes this group to complexities and challenges that affect every aspect of their lives.

According to (Nabtalian and Saibeh, 2022), these children's access is limited to education, health services, and social protection. Without legal recognition, they are often trapped in a cycle of poverty, which not only affects their ability to thrive in childhood but also complicates their prospects. At the same time, this situation limits their mobility because they are not involved in the proper formal education system, thus leaving them vulnerable to exploitation and abuse (Loo and Lagason, 2022).

Furthermore, (Pang et al., 2019) describe the uncertainty of this legal and social system as adding a psychological burden to stateless children. They often experience stress, anxiety, and other mental health problems due to social isolation, discrimination, and uncertainty about their future. This condition not only affects their mental health but also affects their overall emotional and psychosocial development. This constant uncertainty can hinder their ability to foster healthy relationships, feel secure in their environment, and develop a coherent sense of identity.

Both of these perspectives emphasise the importance of addressing the issue of citizenship and social inclusion for stateless children. They need interventions designed to address their material and educational needs as well as psychological and social support to overcome the trauma and stress experienced. A holistic and multi-disciplinary approach is needed to ensure these children survive in this group's circulation and thrive on recognising their right to education, health, and fair life opportunities.

In this context, the role of art and creative expression becomes very relevant. Using the medium of soft clay as art therapy can help them find ways for constructive self-expression, overcome some of the emotional challenges they face, and build social and communication skills that are important for their social integration. This highlights the need for innovative and empathetic approaches to supporting children in complex situations that often neglect their needs.

Survey of Alternative Education for Stateless Children in Sabah

The implementation of education in the state of Sabah is under the authority of the federal government, and the education system is closely related to the Education Act 1996, which only emphasises the right to education for residents who have identity documents status as Malaysian citizens (Saibeh, 2014a; 2016). Meanwhile, residents who experience the issue of possession of identity documents and no citizenship are not guaranteed to enjoy national education services in this country (Saibeh, 2018)

Accordingly, uneducated children have affected Malaysia's performance as a member country in Education for All (EFA). The final report of the EFA in 2015 reported that Malaysia could not fully achieve the things in the EFA plan. However, since Malaysia continues to be a member country in the Education 2030 plan (Incheon Declaration) or the upcoming EFA 2030 (UNESCO, 2015a), the Malaysian Government is trying to improve its performance by providing 'education for all' to children in this country, including stateless children. This coincides with the EFA 2030 motto, "Towards inclusive and equitable quality education and lifelong learning for all" (UNESCO, 2015a, 2015b).

Hence, in 2010, the Malaysian Ministry of Education (KPM) introduced Alternative Learning Centers to provide education to children who are not eligible to receive education in national or government schools. These alternative learning centres are established, operated, and financed by non-governmental organisations (NGOs) with monitoring from the Malaysian Ministry of Education (Badariah et al. 2013, 2014b, 2015, 2016). Next, the teaching staff, subjects, and teaching and learning activities at alternative learning centres are also determined by non-governmental bodies.

Alternative education is a generic term for various educational programs that are done differently from the conventional education system. In general, alternative education has the same characteristics: using an individual approach, paying great attention to the student, family, and the educator himself, and developing based on interest and experience. Alternative education is completely self-maintained by NGO organisations or associations with a learning scope and syllabus different from the formal education system, which is more of a form of improvisational teaching that prioritises early learning principles such as reading, writing, and counting. However, according to (Pang et al., 2019), these two forms of education have the same desire and purpose in imparting knowledge and forming students' character.

Until 2024, 162 alternative schools specifically for stateless children and immigrants from the Philippines and Indonesia have been developed. Meanwhile, based in the Kota Kinabalu District, an Indonesian school in Kota Kinabalu was specially developed for the children of Indonesian citizens who were involved in efforts to channel education programs in this state. This effort was developed by seven entities consisting of Borneo Komrad, Good Shepherd Services, ElShaddai Sabah, Etania Schools, Stairway To Hope, Humana Child Aid Society Sabah, and World Vision Malaysia.

Humana Child Aid Society Sabah is the entity that develops the most community schools, with a total of 120 schools covering four districts, namely Semporna (1), Lahad Datu (10), Tawau (18), Kinabatangan (47), Sandakan (43) and Kota Kinabalu (2). Then followed by Etania School, with 30 schools across the state. Next, Borneo Komrad developed 5 alternative schools covering the districts of Kota Kinabalu, Tawau, Sandakan, and Lahad Datu. For ElShaddai Sabah, four community education centres are centred around the Kota Kinabalu district. Likewise, World Vision Malaysia currently operates two community education centres, and Stairway to Hope has one community education service centre in Kota Kinabalu.

This initiative shows a collaborative effort between various parties to address the issue of access to education in Sabah. They not only focus on providing basic education but also include learning practical skills, health education, and training for social integration. This shows the solid commitment of the Sabahan community and alternative education activists to ensuring that every child, regardless of citizenship status or economic background, has access to a decent education.

In this context, it also emphasises the need for a holistic and integrated approach to deal with the issue of stateless children, which not only refers to policy reforms to allow easier access to their children but also better social and educational support for a brighter future. Furthermore, it

emphasises the importance of a deep understanding of the local dynamics and factors that affect the lives of these children while developing solutions that fit their specific needs and the context they face.

Research Gaps

This literature review revealed that using soft clay in art therapy offers a great opportunity to support self-expression and the psychological well-being of stateless children in Sabah. The unique ability of soft clay as a therapeutic medium that facilitates non-verbal expression, sensory-psychomotor learning, and the development of social and emotional skills highlights its potential as an effective tool in supporting the development of children who face complex challenges due to their uncertain status as stateless.

Another research gap focused on is how creative practices with soft clay can be used as a tool to deal with some of the challenges these children face. The research offers new insights into the potential of art-based interventions in complex social and legal contexts. This approach not only aims to develop children's expressive and creative capacity but also to improve their psychological well-being and provide them with the tools to process and communicate their experiences healthily and productively.

Furthermore, this survey emphasises the importance of considering the specific social, political, and cultural context in the state of Sabah in developing and implementing art therapy programs. This understanding is essential to ensure that the relationship between education and art therapy is designed in a way that is sensitive to the unique needs and lived experiences of stateless children, as well as recognising and respecting their cultural diversity.

In conclusion, this research marks an important step towards recognising and utilising art therapy, particularly through soft clay, as an important tool in supporting stateless children. By incorporating these creative practices into social and educational support efforts, this research can open new paths to help stateless children in Sabah overcome the obstacles they face, strengthen their resilience, and support them in building a brighter and more hopeful future.

METHODOLOGY

This research uses a qualitative approach to explore how alternative school students for stateless children in Sabah use soft clay to translate their imaginations about sea life. This approach was chosen because of its ability to understand the subjective experience and personal interpretation of children towards the world around them.

The selection of study participants is based on specific criteria because this research adapts the technique of selecting the study sample using "purposive sampling", which is the selection of study participants based on considerations and criteria determined by the researchers themselves (Creswell and Creswell, 2018). The main criteria for study participants should be i) illiterate, ii) can't read, and iii) cannot write. The selection is made with the help of school teachers to ensure that the participants represent the diversity of abilities and backgrounds required by the research. As such, a total of 18 kids between 8 and 15 years old who met the criteria participated in the study.

Implementation Concept

This research is designed to integrate environmental learning with the daily lives of study participants who live by the sea. This study is divided into three phases;

Table 1: Program Implementation Phase

Phases	Description
Phase 1: Marine Life Exploration	<ul style="list-style-type: none"> Focus on exploring children's imaginations about marine life based on their experiences and knowledge. <ul style="list-style-type: none"> Through small group discussions and brainstorming sessions. Children share stories and their knowledge and experiences about the sea and the creatures that live in it.
Phase 2: Understanding the basics of Soft Clay	<ul style="list-style-type: none"> Children are introduced to soft clay as a medium of artistic expression. They are taught basic shaping techniques, colour mixing, and ways to create texture. <ul style="list-style-type: none"> The aim is to give children basic skills and confidence in using soft clay before they start translating their imaginations into their works of art
Phase 3: Engage the Imagination	<ul style="list-style-type: none"> A creative process where children translate their imaginations about sea life into soft clay creations. They are encouraged to experiment with shapes, colours, and textures to create unique representations of their imaginations. <ul style="list-style-type: none"> During this process, random observations and interviews were conducted to document how the children interacted with the materials and each other, as well as their reflections on the creative process throughout the construction process.

Data Collection Methods

Data was collected through sleep observation, semi-structured interviews, and analysis of the creation of artefacts produced (soft clay works). Observations focused on the children's interaction with soft clay, their creative expression, and group dynamics during the process of building an artefact creation. Semi-structured interviews were conducted to examine the understanding of the children's individual experiences in using soft clay and their perception of marine life that is so close to their environment. The works produced are also analysed to understand the symbols and stories that the children want to convey through their works.

Data Analysis

This research uses thematic analysis using the framework of Braun and Clarke (2006), which covers six phases of systematic thematic analysis for qualitative data analysis, as shown in Table 2. This approach helps identify, analyse, and report patterns (themes).

Table 2: Six Phases of Thematic Analysis, Braun and Clarke (2006)

Phase	Description
Phase 1	Familiarize
Phase 2	Specify the theme codes
Phase 3	Code grouping/Customizing the main theme
Phase 4	Assess the theme
Phase 5	Defining and naming the theme
Phase 6	Theme reporting

Research Ethics

The Research Ethics Management Committee has approved and authorised this research project. An application to conduct the research was submitted to the alternative school, and the teacher

represented the parents and obtained their informed consent before the research was carried out. The privacy and confidentiality of the information provided by the study participants have been strictly protected, and their identities have been safeguarded in this research report.

RESULTS AND DISCUSSION

The study's results found five main themes obtained through 15 code collections from interview data, observation data, and analysis of artefact creation. Table 3 explains the matrix of themes with descriptions that are concluded according to the collection of codes that arise.

Table 3: Thematic matrix and the codes that emerged.

Codes	Description
Theme 1: Self-Expression and Sensory-Motor Learning	
1A: Material Manipulation	Notes on how children roll, pinch and shape soft clay
1B: Emotional Representation	Observation or description of how children express their feelings through their soft clay creations
1C: Skill Development	Explaining the development of children's psychomotor skills over time
Theme 2: Learning Through Playing	
2A: Environmental Knowledge	Statements or actions indicating the use of prior knowledge about marine life.
2B: Exploration and Experimentation	Description of how children explore and experiment with soft clay to learn new things
2C: Social Interaction in Learning	Notes on interactions among children during collaborative learning sessions
Theme 3: Imagination and Creativity Development	
3A: Creation of Fantasy Replicas	Description of soft clay creations that combine elements of different species or create entirely new forms
3B: Symbolism and Metaphor	Analysis of the use of symbols and metaphors in children's artwork
3C: Expression of Hopes and Concerns	Notes to explain the desires and concerns children face and experience
Theme 4: Emotional and Social Impact	
4A: Emotional Well-being	Data showing the impact of soft clay activities on children's feelings and moods
4B: Building Togetherness	Observations on how activities enhance cooperation and a sense of togetherness among children
4C: Safe Environment for Expression	Notes on how activities involving soft clay create a supportive and non-judgmental environment for children.
Theme 5: Reflection on the Environment	
5A: Environmental Awareness	Statements or actions indicating increased awareness among children about environmental issues
5B: Concern for Marine Life	Observations of children's expressions of concern for the preservation of marine life through their artwork
5C: Environmental Learning through Art	Description of how the creative process with soft clay can be used as a medium for environmental education

Self-Expression and Sensory-Motor Learning

The definition of the theme of self-expression and sensory-motor learning describes a dynamic process where study participants use soft clay as a tool to develop their psychomotor skills while expressing emotions, ideas, and personal experiences. This theme highlights the function of soft clay, which is not only an artistic medium but also a pedagogical tool that supports children's physical and emotional growth. This theme is formed from three codes: code 1A: material manipulation, 1B: emotional representation and 1C-skill development.

Code 1A highlights the study participants' physical interactions with soft clay, including rolling, pinching, and shaping the material. Manipulating this material not only strengthens psychomotor skills but also stimulates creative expression. One of the participants described the process by saying,

*I like kneading this soft clay. It's cold in my hands, and I can make anything I imagine
(Respondent 1)*

This shows that the physical contact with the material and the freedom to create allow the participants to express their imagination directly and visibly. By manipulating soft clay, they learn about its properties and intuitively understand form and structure.

The 1B code relates to how participants use soft clay to communicate and process emotions. Examples of quotes from study participants are as follows,

When I get angry, I make a sea monster with many arms. This monster is strong and can fight anyone (Respondent 4)

This statement illustrates how creative activity functions as an emotional channel. Through the process of creating something from soft clay, participants can give shape to feelings that may be difficult for them to explain with words. This affirms the theory that art and creative activities can have a therapeutic value that allows participants to explore and express their emotions creatively and productively.

Next, code 1C refers to the observation of how children develop their psychomotor skills over time through the use of soft clay. It includes conventional and measurable aspects of learning, such as physical hand-eye coordination and hand strength, where the development of physical skills is integrated with tactile and cognitive recognition. This analysis is supported by the statements of two study participants, namely,

I am getting better and better at making the replicas I want (Respondent 7)

It was hard at first, but now I can make many replicas (Respondent 8)

These codes are important because they highlight aspects of hands-on learning. The development of psychomotor skills is important for artistic abilities and supports study participants' cognitive and academic development, for example, in writing. Through improvements in manipulating materials, participants can also build self-confidence and independence. Codes 1A, 1B, and 1C were identified to form theme 1 by describing how interaction with soft clay is a multi-functional tool for their physical, emotional, and creative development. This shows the importance of art activities in supporting the holistic growth of children, covering all aspects of learning and self-expression.

Learning Through Playing

The definition of this theme refers to the process in which study participants acquire knowledge, skills, and understanding of their environment through creative interaction and exploration using soft clay. This theme illustrates how game-based activities are not only an entertainment tool but also an important educational tool, supporting spontaneous learning and the exploration of subjects from new perspectives.

This theme consists of three codes: 2A: environmental knowledge, 2B: exploration and experimentation, and 2C: social interaction in learning. Through observation and interviews, explain how playing with soft clay facilitates informal learning that enriches the participants' educational experience, encourages cooperation, and increases social sensitivity and awareness of the environment.

Code 2A describes how the study participants integrated their marine life experiences into the process. A response from one of the participants explained,

I still remember seeing fish like this when my father and I were fishing in the sea. Now I make the fish using this soft clay (Respondent 11)

This response excerpt shows that this soft clay activity is a form of creative expression and a medium to apply their experience and imagination. This emphasises that learning does not necessarily have to happen in a formal setting but can happen naturally through fun activities and games.

Code 2B explains that the study participants can learn new concepts intuitively. One participant said,

What happens if I mix these colours? Oh, so this is how to make coral colours (Respondent 2)

This state of free experimentation and exploration will lead to the development of their understanding of colour, texture, and more. This explains the importance of giving children space to experiment and explore to support the idea that active and participatory learning is often more effective than direct instruction. Additionally, the resulting replicas, such as detailed and imaginative sea life replicas, demonstrate the application of new skills and knowledge gained through the creative process.



Figure 1: Participants knead and form coral reefs from soft clay.

The 2C Code collection obtained plays an important role in learning through peer interaction activities. Interview data collection from one of the participants mentioned;

We worked together to make seaweed, and my area taught me how to make a more beautiful sulaiman site than I did (Respondent 10)

This data indirectly shows how collaboration and exchange of ideas between participants can enrich their learning experience. Through this collaboration, children learn social skills such as sharing and communication and find value in other people's perspectives and skills. This reflects social learning theory, which suggests that people learn in a social context, and interaction with others can speed up the learning process.

The following analysis sheds light on the three main factors that contributed to the success of theme 2. Firstly, working with soft clay results in aesthetically pleasing outcomes due to the use of experience as a foundation for extensive and multidimensional learning. Secondly, the emphasis on learning as an active process encourages children to participate actively in exploration and discovery. By experimenting with soft clay and engaging in social interaction, children become active contributors to their learning, aligning with the constructivist learning theory. Thirdly, the social interactions during game-based activities emphasise that learning occurs not only through interaction with materials but also through the exchange of ideas and collaboration with others. This demonstrates how children can improve their communication and collaboration skills.

Overall, these three codes form the narrative of theme 2, which shows the intrinsic value of playing games as a learning tool. This aligns with the constructivist learning theory explained by (Sharma, 2020), stating that children learn best through direct experience and social interaction. In addition, it also strengthens academic knowledge and social competence, especially environmental awareness. Therefore, the essence of the results of this soft clay approach shows the potential of a more inclusive and holistic approach to educating stateless children in alternative schools.

Development of Imagination and Creativity

This theme reflects how stateless children in Sabah use their imagination to create and explore new worlds through soft clay art. This theme describes the process in which children develop and express their imagination and creativity as a form of self-expression and a medium to understand and process their environment.

Accordingly, in this theme, three main codes are identified: 3A: creating fantasy replicas; 3B: symbolism and metaphor; and 3C: expressing hope and concern. This code emerges from observations that show these children produce their experiences with the realm of reality. They use that experience to create works that combine elements of reality and fantasy to express their thoughts and feelings.

Code 3A frees their imagination by creating fantastical replicas by pushing the boundaries of biological or physical reality. The replica combines marine life species with creatures with magical elements or unique features not found in real life. This is closely related to their philosophy of social life. It can be explained through the response of two participants, which reads like this,

I made the fish fly so he could be like a bird flying in the sky (Respondent 15)

In the sea, there is a monster that can take care of coral reefs. This monster can also clean the sea (Respondent 6)

From that, the replicas created through imagination show a complex cognitive process where children use their imagination to create something related to values, such as protecting their environment.

Code 3B also provides thrust on using symbols and metaphors to produce soft clay that represents concepts or emotions. This symbolic use conveys a deep message or story through the replicas they produce, and it depicts their thoughts or feelings in the physical form of the creation. It can be explained by the response of the participants of this study, which is;

This flower is not just a flower, and this petal represents my father, this one my mother, and the other one my siblings (Respondent 3)

I made a mountain in the sea because we once hit a rock like a mountain, and my father was injured when he hit a rock. It's the same as our obstacle now because when my father is sick, our life is difficult (Respondent 5)

The symbols and metaphors expressed by the participants of this study highlight children's ability to think abstractly and connect their personal experiences or emotions with objects or the wider world. This reveals how this creative activity can be an important way to express oneself and communicate emotions to the audience.

The 3C code refers to the expression of their hopes and fears about their future through soft clay artwork. For example, some other participants expressed;

I built this small house because I hope one day I can have a comfortable house and live with all my family (Respondent 13)

The expressions like the one mentioned above indicate that individuals are aware of their unfulfilled hopes and desires in their present life. Although this does not necessarily guarantee certainty in their future, it still shows they have hopes and goals to improve their living conditions and the environment around them.

Ultimately, theme 3 is closely related to understanding how stateless children in Sabah use soft clay art as a tool for expression and learning. This theme is significant as it emphasises the crucial role of creativity and imagination in artistic expression, emotional processing, socialisation, and learning.

Emotional and Social Impact

This theme plays a role in helping study participants develop a better emotional relationship with themselves or their community to drive social well-being. In the context of this theme, codes such as 4A: Emotional well-being, 4B: togetherness development, and 4C: a safe environment for expression can be identified. These three codes form theme 4 because they collectively highlight two main aspects: the emotional impact of participating in art activities and its importance in building community spirit.

The data collection that drives code 4A is explained through the following responses when phase 3 activities are carried out,

I enjoyed and was happy doing this soft clay activity. All my friends are also happy (Respondent 12)

Every day, I work collecting seashells on the beach, but today, I rest and prepare my replica with other friends; later, I will show it to my parents at home (Respondent 15)

The two statements above lead to the interpretation that the creative process functions not only as entertainment but also as therapy, allowing children to find peace and happiness in the act of creating. Plus, it is also a way to escape from everyday stress and anxiety, offering a much-needed break from what can be a harsh reality.

Code 4B explores strengthening social bonds and stimulating community spirit among children. This statement can be proven when participants explain;

Even though we are not siblings, when we gather here and do this work together, I feel like I am a brother to the other siblings here. Especially when they ask me to teach them how to make seaweed (Respondent 3)

This reality shows that togetherness in activity can promote cooperation and the spirit of belonging and reduce feelings of isolation. Other responses from participants that are in line with this interpretation are;

When we make turtles together, we become closer because we laugh when there are turtles that do not make it. No one is ashamed, but all laugh together (Respondent 11)

This statement further emphasises the importance of collaboration in artistic activities, which is not only for the result but for sharing experiences, ideas, and the work itself, further strengthening their interpersonal and community relationships.

This string of code, 4C, reveals a visible pattern: the significance of fostering a supportive and non-judgmental environment for children to express themselves to one another freely. Additionally, as outlined in code 4B, certain situations and conditions can aid in promoting self-acceptance and mutual respect. Ultimately, this can instil confidence in children to share their unique perspectives.

The following analysis, extracted from the three codes, demonstrates that the study participants expressed pride and satisfaction by sharing their replica creations, increasing their self-confidence. The replicas produced by the participants also conveyed a sense of togetherness and hope, reflecting the broader values of society. Moreover, this study contributes to the existing literature by emphasising the importance of art-based activities in the education and upbringing of children. It challenges the conventional understanding, as explained by Chevalier and Blaye (2022), that academic activities and cognitive skills are the only important aspects of children's development. Instead, this research shows that art-based activities can be essential to support children's emotional and social well-being in vulnerable situations.

Reflection on the Environment

This theme explains the use of soft clay to explore their thoughts and feelings towards the environment, covering community, the environment and various other environmental issues. Awareness of environmental issues, especially where they live now, will stimulate their concern for environmental sustainability in their environment. This theme emerges from the three identified codes, which are 5A: environmental awareness, 5B: concern for marine life, and 5C: environmental learning through art.

Code 5A conceptually explains their understanding of global environmental problems, such as sea pollution that can damage their life cycle due to their dependence on resources from the sea, as explained in excerpts from interviews with study participants, namely;

I'm worried that all my marine life replicas will die if they are trapped by plastic, especially turtles. After this, I want to take care of the sea and collect the plastic in the sea (Respondent 1)

This statement indirectly shows two impacts from a positive and negative point of view. The negative impact shows that plastic threatens marine life, while the positive impact is the participants of the annual study on the impact of plastic on marine life.

Code 5B, on the other hand, brings the narrative of this research from the perspective of the diversity and beauty of the marine environment but is also concerned with the damage and threats to this habitat. This is because the replicas produced by these children, showing the beauty of marine life and the effects of pollution, highlight their empathy towards sea creatures and the desire to protect the marine environment.



Figure 2: The replicas of marine life produced by participants.

Finally, Code 5C explains how soft clay allows children to explore environmental concepts and consider solutions to environmental problems. This interpretation is collected through the responses of study participants who explain;

My replica is beautiful, and this art taught me the importance of a clean and well-maintained sea so that this marine life remains alive (Respondent 8)

Interview excerpts showing children's reflections on the relationship between life and the importance of maintaining ecological balance underline how art can facilitate a deeper understanding of environmental issues and encourage critical and creative thinking about contributing to environmental sustainability.

Overall, this theme is closely related to the research question about how creative activities with soft clay affect children's understanding and expression of the environment. Showing the importance of integrating environmental education in the curriculum through the arts, this theme adds input to the existing literature review by providing evidence of how art activities can facilitate meaningful environmental learning and increase children's engagement with important issues. It challenges and expands our understanding of the potential of art in education, especially in raising environmental awareness and sustainability among young people.

CONCLUSION

This research has revealed the transformative potential of art, especially through the medium of applying soft clay, which can support the emotional, social and cognitive development of stateless children as participants in this study. These five key themes provide insight into how arts-based activities can be powerful tools for education and personal development. Along with the purpose of this research, it can be concluded that soft clay brings an important narrative in emphasising the importance of art appreciation in supporting children's psychomotor development, especially in their emotional expression, by expressing them based on personal experiences gained from their environment.

The analysis of this research also shows that the method of playing using learning aids such as soft clay enables them to apply knowledge of the environment in a new context that is not subject to conventional learning types alone. This is because this medium generates children's interest in exploring concepts creatively with the help of friends who stimulate collaborative learning. From there, it plays a role in increasing their imagination or abstract and reflective thinking without limits. More importantly, this kind of learning concept proves that the benefits to their environment will be greater, especially for the prospect of protecting the environment they are currently occupying. Indirectly it can contribute to a form of cumulative learning system in a more meaningful environment.

The emphasis here is that, although they do not have the opportunity to enjoy the formal learning system like other children, at least they can enjoy and utilise all their emotional and rational thinking, sharpening continuously and usefully for their future. Without further prejudice, it highlights a new form of insight into their opportunities to adapt to the local community along with other children. Therefore, this research opens a new page or shows a universal educational space using integrating activities based on holistic art activities. The hope is that continued research can be carried out by further exploring the need for an approach using the art medium rather than practical implementation by marginal or focused groups. It is possible that this method can also be applied in the formal learning system in the state of Sabah, particularly or anywhere in general.

AUTHORS' CONTRIBUTIONS

AP conceived the idea, designed the project, and wrote the manuscript. NSH analysed the code for theme formation. CAK provided technical support and contributed to manuscript editing. NMN collected data and conducted field experiments. IMA participated in the study's design and helped write the manuscript. All authors read and approved the final manuscript.

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