

From Hobbies to Lac Jewelry Design: An Art-based Approach to Promote Well-being of Ageing Community

By

Suebsiri Saelee

Faculty of Informatics, Mahasarakham University,

Abstract

Art has a healing potential for individuals and society as a whole. Studies indicate that artistic activities have the power to heal elderly people and foster their well-being. This study explored how the elderly amateur artists in a rural area used raw materials in their neighborhood to create jewelry as a hobby. The elderly people in this study chose lac as their raw material. They cooperatively worked on designing the drafts and developing the lac jewelry prototypes. The expert evaluation of prototypes, the artists' self-evaluation, and the community's evaluation of the products were high and the highest in terms of shapes and forms, proportion and size, harmony, physical attractiveness, proportion and size, harmony, color, textures, and patterns, material suitability, attractiveness, convenience, usefulness, and durability. The lac jewelry art production contributed to the elderly artists' well-being emotionally, affectively, physically, mentally, psychologically, and socially. Individual elderly artists' well-being also positively benefits social well-being and social cohesion. However, this study was limited to an area, specific features of the participants, and the nature of the community. It is necessary to verify the findings of this study in other areas.

Keywords: ageing community, well-being, art-based approach, lac-jewelry design

1. Introduction

Beauty and pleasure are closely related and both positively contribute to human well-being. Art that constitutes both beauty and pleasure has cognitive and affective impacts on human well-being. These impacts might help explain why art is so important to human well-being. Aesthetic appreciation and pleasure that human beings obtain from direct and indirect involvement in artistic activities as a professional artist, an amateur, or a consumer can affect human well-being. Extensive studies [1] have shown that art can promote the well-being of elderly people effectively. For example, [2], for example, examined how the art museum program benefits people with Alzheimer's. In addition, Reynolds and Lim [3] investigated the attitudes of participants regarding their contribution to the creation of art for well-being in the context of living with cancer. The findings suggest that meaningful creative activities may provide psychosocial resources for people with cancer. McEwan, et al. [4] found that street art has been useful in combating the COVID-19 pandemic in the East African nation due to the closeness and shared constitution of creative and public practice coming from street art's incorporation into urban social spaces. Similarly, Baker and Blaagaard [5] asserted that street art has the ability to influence pandemic responses, particularly in urban and informal settings.

As Thailand is considered one of the fastest aging countries in the world, with the population aged 60 and over being expected to increase from 13% in 2010 to 33% in 2040 (Economic Research Institute for ASEAN and East Asia, June 25, 2021), it is necessary to seek a way to promote the well-being of the elderly people, especially in rural locations where resources are limited and to create a healing environment that suits best for the community. This may provide a model for other locations in Thailand and other countries with similar

contexts. So, this study used an art-based approach to improve the well-being of elderly people as amateur artists and to strengthen the social cohesion of elderly art consumers as participants in artistic creativity in a community in Thailand. Lac jewelry design and production were used to improve the well-being of rural elderly as amateur artists and art consumers.

This paper has 5 parts. The first one introduces the rationale for the study, research gap, and an overview of the research approach. The second one describes the literature review, prior research related to this study, a conceptual framework, and research questions. The third one illustrates the specific methodological approach of this study. The fourth one presents the results of the study. The last one highlights a conclusion of the study, discussions of the research findings, limitations of the study, and implications of the study.

2. Literature review

The literature review describes related prior research on the impacts of art and well-being, including consumption of art and well-being; self-determination theory and well-being; cognitive and affective contributions of art to well-being; motivation to art creativity and well-being; and art and social cohesion. This literature review forms the conceptual framework of the study and determines research questions.

2.1 Prior research on the effects of art on well-being

Previous studies have attempted a variety of approaches to demonstrate how art contributes to life satisfaction and the findings provide more insights into the value of art and its well-being in various aspects. Various disciplines have been applied to draw an understanding of this phenomenon, ranging from modern disciplines to classical ones.

2.1.1 Theory of self-determination and well-being

Several contemporary studies employ self-determination theory to comprehend the prevailing innate demands of consumers in the context of cultural consumption. For instance, Siu, et al. [6] investigated the importance of self-determination processes in the relationship between cultural consumption, vitality, and consumers' well-being. Later, Siu, et al. [7] indicated that individual satisfaction with art is a key contributor to future positive consumption behaviors. However, investigations into the relationship between personal satisfaction and physical, psychological, and social well-being of customers in cultural and artistic contexts are scanty. The findings indicate that personal satisfaction acts as a medium to shift the benefits of consumption to independent and relevant needs, which will subsequently affect customer well-being.

2.1.2 Art's cognitive and affective contributions to well-being

Other studies point out that art has both cognitive and affective effects on human mental health and well-being. The effects, according to Christensen and Gomila [8], include: (1) focus, concentration, and flow; (2) emotional experience; (3) visual emotions; (4) interpersonal contact; (5) self-indulgence; and (6) social participation. These impacts positively impact the bio psychological health and well-being of individuals. The fact that creative practice has these consequences helps to explain why art is essential to human life and why it was formed in the first place, i.e. to promote these effects. In addition, Ateca-Amestoy, et al. [9] revealed that living close to an artistic heritage site can render life satisfaction in various ways by participating in the tangible and intangible value of art. According to An, et al. [10], the aesthetic experience of customers includes creative commercial products. It improves the well-being of customers by evoking a feeling of inspiration. Also, Sanz and Rodriguez-Labajos [11]

revealed that the constructive movement was particularly relevant in facilitating the participation, education, and expansion of art and that spatial effects benefited the movement by expanding its scope and making it more demographically inclusive. The use of art increases environmental and political knowledge and public participation in decision-making. Lastly, van Leeuwen, et al. [12] explained how the working style for art is a phenomenon and how the social brain might work when engaging with art.

2.1.3 Motivation inspires creativity

Several scholars [13] have attempted studies of art creativity involving art engagement, participation and meaning-making both in material and immaterial dimensions. According to Ateca-Amestoy, et al. [13], each aspect of cultural heritage as well as factors defining personal cultural capital, social status, civic engagement, and residential communities are related to the level of engagement. Individuals tend to be more involved when they are also involved in the community. In addition, Adipa [14] explored how artistic, cultural experiences can lead to successful social interaction and form artistic meaning-making and aesthetic evaluation.

Like Farokhi [15], it is impossible to imagine a meaningful life without art. Art therapy is one of the inventions of humanistic psychiatry that focuses primarily on a form of treatment using artistic production. Art is intuition, aesthetics, recreation, production, and expression. Artists communicate their emotional universe through their work. The viewers or readers allow the world to penetrate their sensual boundaries. The essence of art is in its visible and imaginative qualities. Art can reflect the direct experiences, emotions, and feelings of individuals. Images and symbols transmit feelings and emotions. Through feelings and emotions, art enriches our inner world, motivates us, and humanizes us. Art imparts 'personality' to an individual. Art may alleviate pedagogical and human psychology concerns by fostering individuality.

Additionally, art is a spiritual remedy for the soul. It is a method for calming the mind and soul. The focus of art therapy is the mind, emotional world, or spirit of the individual. Art can cleanse the tempting world (catharsis) and correct its course. Art therapy can be used to diagnose and treat mental problems. Lastly, Kim and Park [16] explored (i) meaning and essence of coexistence from the perspective of existentialism, (ii) value and meaning of coexistence through art therapy in the community, (iii) how creative arts therapy contributes to human existence. The findings demonstrated that (a) viewing the familiar self from a fresh perspective, (b) comprehending others via self-definition, and (c) establishing a sense of *We* through cooperation and compromise are all necessary for developing a sense of *We*. The researchers analyze the existing definition of community and the function of art in aiding community members to coexist.

2.1.4 Art and social cohesion

Participation in the arts is defined as actively or passively engaging in activities involving one or more of these artistic "languages" (namely new media, music, dance, visual arts, literature, or theatre). Active participation applies to all levels of non-professionals, from novices to experts. It occasionally collaborates with local community art, which promotes social cohesion.

Several researchers [17-20] have attempted to determine how art theory may influence cohesive behavior in relation to social cohesion theory. Studies on social cohesion [21, 22] revealed that art participation supposedly has positive impacts on social cohesion. For example, Otte [23] discovered a correlation between passive art engagement (such as attending

creative art exhibitions, activities, and events) and cohesive attitudes. Art participation refers to artistic activities in the visual arts, music, dance, theater, literature, and new media and may also allude to culture in the broader sense of habits, conventions, or traditions (of particular social groups). The connection between active art participation (e.g., effectiveness in amateur art) and cohesive conduct appears to be less. Art that challenges perceptions may lead to cohesive attitudes. On the other hand, the art that affirms perception seems to strengthen existing relationships.

Some scholars have provided approaches to promoting social cohesion through art. For example, Fonseca, et al. [24], for example, established a framework that can be utilized to promote social cohesion and aid in the development of resilient cities. This framework summarizes the components that play a critical role in fostering social cohesion and demonstrates, from a specific perspective, how art can promote social harmony in terms of individual (perceptions, self-motivation, norms, and values), community (ties, relationships, performance, environment, and goal attainment), process efficiency and goal attainment), and institutions (decision-making, conflict management, human rights, and the environment—structural). On the other hand, other scholars suggested how to use art to raise social awareness. Sanz and Rodriguez-Labajos [11] found that creative movement facilitates participation in art and spatial effects benefit movement by increasing its size and its inclusiveness. The use of art raises public awareness and participation.

Previous research has indicated that participating in art activities improves the well-being of individuals and communities. But empirical evidence documents the impact of appreciation of art on the well-being of professionals or non-professionals (namely amateur artists, inactive participants or consumers of art). Everyday artistic experiences increase well-being and are also inspiring to everyone, including ageing populations. The impact seems more significant in various forms of hobbies, which not only offer them aesthetic appreciation and pleasure but also expand into commercial products which can financially support them in times of life crisis as ageing populations.

In light of the research deficit, it was clear that studies on the social influence of artistic activity on well-being had not been appropriately conducted. The relationship between the unique traits or qualities of art (intrinsic or genuine values) and its potential benefits to social cohesiveness is not sufficiently understood [25-30]. It is, therefore, important to pay more attention to artistic participation as an approach to enhancing social unity. A theoretical and conceptual framework of the study and research questions (RQs) based on the literature review could be determined as shown in the next part.

2.2 Conceptual framework of the study and research questions

The conceptual framework of the study could be photographically illustrated as follows:



Figure 1 The conceptual framework of the study

Figure 1 illustrates the conceptual framework of the study. Art and art activities have the potential to foster individuals' pleasure, well-being and social cohesion. The purpose of this study is primarily to explore how art heals the elderly and enhances the well-being of the community.

In response to the conceptual framework of this study, RQs were determined as follows:

RQ 1: How do the elderly amateur artists go about selecting materials and techniques and designing drafts and creating lac jewelry prototypes?

RQ 2: What is the expert evaluation of the lac jewelry prototype?

RQ 3: What is the evaluation of the lac jewelry products by the artists?

RQ 4: What is the elderly community's opinion of lac jewelry products?

RQ 5: To what extent does participation in art activity contribute to the artists?

To answer the RQs, the research approach was designed as illustrated in the next part.

3. Method of the study

3.1 Research design

This study was based on a mixed-method design. This study aimed to enhance the well-being of an ageing population in the rural contexts of Ban Pa Kung Village, Si Somdet District, Roi Et Province, Thailand, using art activity. The participants in this study were purposively selected based on these attributes. fell into three groups: 3 elderly amateur artists, 50 elderly community members, and 3 local leaders of Ban Pa Kung. Among the three artists, 2 are female and 2 is male. Their average age was 65-70 years old. They have some minor health problems. All experienced in art activity or were interested in art. Among fifty elderly community members as survey questionnaire respondents, 90.00% (n. = 45) were females while 10% (n. = 5) were males. Their average age was 65-70 years old. 60% (n. = 30) were married and 40% were single. 60% (n. = 30) received a bachelor's degree and 40% received high school and vocational education or lower. The three local leaders are key informants for the evaluation of cognitive, affective, and behavioral changes of the elderly amateur artists and community members after their participation in this art activity.

3.2 Instruments

Instruments for data elicitation include interviews and questionnaires. Below are details of each instrument.

3.2.1 Interviews with elderly people about their well-being

These instruments consisted of semi-structured interviews.

3.2.1.1 Semi-structured interview

This instrument aimed to find out about the needs analysis of elderly amateur artists' interests in art production and local materials. Below was an example.

What are the problems for you in craft making?

This instrument also aimed to find out about their conditions. Below was an example.

What are your or their health constraints, physical and mental problems?

3.2.1.2 In-depth interviews

These tools were made to give information about three things: making jewelry out of lac; evaluating it; and changes in how people think and feel.

First, an in-depth production interview was conducted in order to reveal insights into the design and development of lac jewelry. Below were some of the questions.

- What is your idea of designing and developing earrings, necklaces, pendants, bracelets, and bangles?
- What benefits do you take into account in the design?
- What is your inspiration, and how do you have a method for designing shapes that is suitable for the application of an art product from lac?
- What are the reasons for choosing lac?

Second, the in-depth interviews were meant to get opinions from experts, older amateur artists, and older people in the community. Below were some of the questions.

- What are your thoughts/principles regarding design evaluation?
- What does good jewelry look like?

Some of the questions for the elderly community members were as follows:

- What are your thoughts on design evaluation?

Third, the in-depth interviews with the artists as well as interviews with community leaders, family members, and friends who know them well. Below were some of the questions.

- What are the contributions of this craft-making to you?
- What changes can you see in how the artists feel emotionally, physically, mentally, psychologically, and socially?

3.2.2 Questionnaires

3.3.2.1 Product design expert evaluation and handcrafted design

The evaluation includes these items: shapes and forms, proportion and size, harmony, suitability of materials, and physical attractiveness.

3.3.2.2 Elderly amateur artist evaluation of the product

The evaluation includes these items: design (namely proportion and size, harmony, colors, textures, and patterns, material suitability, and attractiveness); convenience and usefulness (easiness to hold and easiness to clean); durability (namely strength, no harmful characteristics, and safety of materials); satisfaction of the product (namely attractiveness, beauty, and suitability for the elderly).

3.3.2.3 Elderly community members' evaluation of the products

The evaluation includes these items: design (namely shape and form, proportion of size, harmony, textures and patterns, colors, attractiveness, and material suitability), convenience and usefulness (namely easiness to wear, easiness to hold, and easiness to clean), durability (namely strength, no harmful characteristics, and material safety), and satisfaction of the product (namely attractiveness, beauty, suitability for the elderly, support hobbies for the elderly, and offer of additional incentive for the elderly).

3.3 Data collection

The theoretical and conceptual framework of the study could be photographically illustrated as follows.

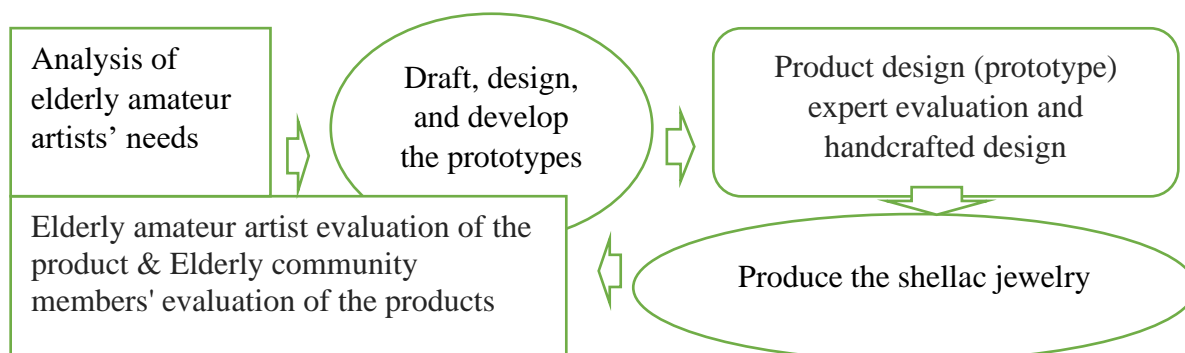


Figure 2 Data collection

Figure 2 illustrates the procedure of data collection. The researcher took part in all Steps of the procedure as a participant. The procedure included these steps. First, an analysis of elderly amateur artists' needs was conducted. Next, the prototypes were drafted, designed, And developed. Then, the prototypes were evaluated by experts. After that, the shellac jewelry Was produced. Finally, the products were evaluated by elderly community members as Representatives of users.

3.4 Data analysis

The qualitative data drawn from the interviews was coded and recoded by the researcher and two research assistants. The contents were compared, and the conclusion was drawn based on their consensus. The quantitative data from the questionnaire was statistically analyzed. The conclusion was drawn from the qualitative and quantitative analyses.

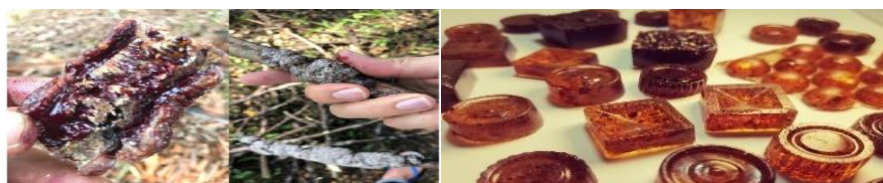
For reliability and content validity checks followed these procedures. To begin with, the questionnaires were constructed based on the need analysis and sent to five reviewers for the content validity check. The researcher adjusted according to their advice. Then, the questionnaire of the product evaluation was administered to 30 community members. The results were tested by Alpha Cronbach reliability and the value was 0.07, indicating reliable level.

4. The results of the study

The results of the study are presented based on the RQs as follows:

4.1 Choosing materials, designing the drafts, and developing the lac jewelry prototypes

The results of the study were drawn from interviews of the elderly amateur artists and researcher observation. The elderly amateur artists are residents of Ban Pa Kung Village. They made lac handicrafts for a living and hobbies. Below is the lac in their area.



(a) Lac in nature (b) Lac-made material for jewelry

Figure 3 Lac in nature and lac-made material

Figure 3 shows natural and man-made materials. Lac in nature (a) is abundant in the area of Ban Pa Kung Village and the amateur artists who are the residents use it as a material for developing jewelry as a hobby and for sale (b).

The interview of their sources of inspiration, as well as a design method for shape and suitability. The use of a lac art product revealed the following:

"Lac inspired this product. It is a component of the original art design. Lac jewelry products applied together with the use of other locally available materials to create a variety of styles and suitable applications is a reduction in the main resource in local production." [Elderly amateur artist no.1]

Having determined to use lac as a material, the three elderly amateur artists commenced the design by discussing the forms. There are many forms and shapes that are suitable for producing art products from shellac. The reason for choosing geometry, as revealed in an interview with the leader of the three elderly amateur artists, is as follows:

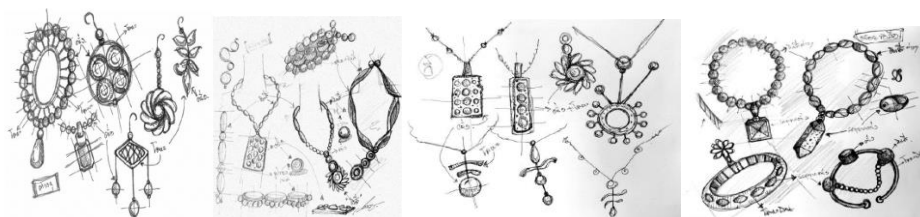
"Taking into account space-saving shape, continuous arrangement, and matching, we can all agree that geometry is the most appropriate form"[Elderly amateur artist no.2]

All the shapes and forms of the lac jewelry that all amateur artists agreed upon are shown in Figures 4.



Figure 4 Shapes and forms of the lac jewelry

Then, they drafted the lac jewelry designs, which could be shown in Figure 5.



(a) Earrings (b) Necklaces (c) Pendants (d) Bracelets, and bangles

Figure 5 Lac jewelry drafts

In the design, the interview revealed that the artists took these benefits into account:

"There is a relationship between design and material. It should enhance the personality of the user It's beautiful, simple, really useful, comfortable to use, easy to clean, safe, and able to be used in other ways.

[Elderly amateur artist no. 3]

"The material used is durable and resistant to changing weather. It is well-balanced in form, and harmonious colors. It is the development of

[Elderly amateur artist no. 1]

Then, they developed the prototypes, which were evaluated by two experts in material design and product design. The artists were then developed as shown in Figures 6.

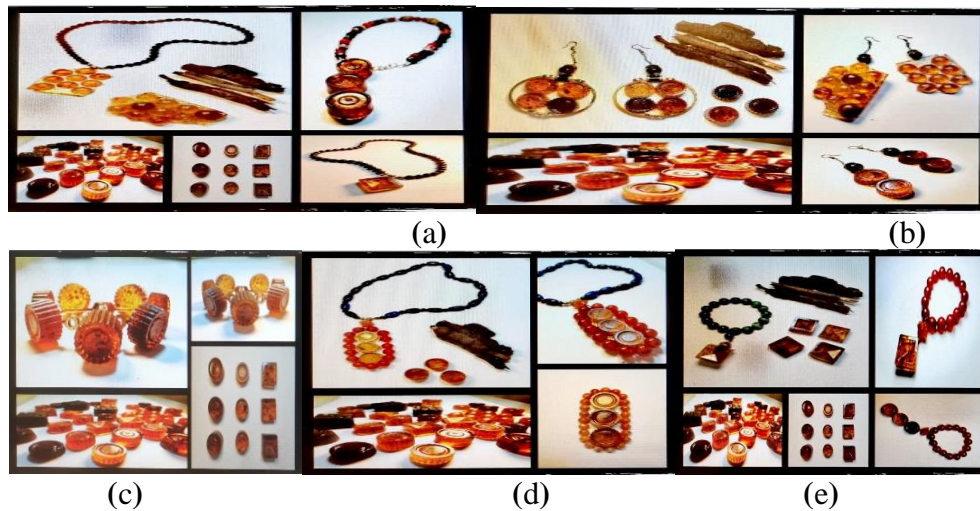


Figure 7 Prototypes 1 - 5

Figure 7 shows prototypes 1 – 5. Prototypes 1 and 2 were developed from the free forms with the aim of drawing the user’s attention with complicated and different patterns. Prototypes 3 and 4 combined silver, colored stones, and lac-made materials with the aim of presenting simplicity. On the other hand, Prototypes 3 and 4 combined silver, colored stones, and lac-made materials with the aim of presenting the user’s character.

The developed products could be presented as shown in Figure 8.



(a) Earrings

(b) Necklace



(c) Pendants

(d) Bracelets

(e) Bangles

Figure 8 illustrates the developed products, including (a) earrings, (b) necklaces, (c) pendants, (d) bracelets, and (e) bangles. All jewelry was made of lac and designed by the local amateur artists.

In designing and developing the lac jewelry, the artists revealed their insights as follows:

"For designing the lac earrings, earrings are an accessory that enhances a beautiful or unattractive face. This ornament is closest to the face; therefore, designers need to be especially thoughtful. The shapes of earrings must fit the facial features and hair style. They should also be compatible with the clothes. Popular shapes are geometric, natural and independent. The materials used should weigh less. We look at the design first and then choose the method to produce the earrings. As the earrings must accompany the dress, it is necessary to look at the characteristics of the style of the costume. Also, designing creative earrings is not necessary to focus solely on the use of the ear. It may be combined with other things, such as necklace. So, the designs of earrings are sometimes compatible with other types of jewelry (such as necklaces, bracelets and bangles, rings, and so on). In case of designing earrings alone, the style must be unique but balanced. However, all good earrings must be convenient to wear and harmless."

[Elderly amateur artists no. 1-3]

"For designing the lac necklace and pendant, free lines are chosen. For a model in making jewelry, especially in jewelry that is a modern work for necklace design. We took into account the relationship of the necklace and pendant. Beauty is the first focus while the use or comfort while wearing is the second focus. Good necklace designs need to fit for various pendant designs and be neat, simple, comfortable, and neither heavy nor luxurious so that it can be used for everyday life. However, stability between each joint is important for necklaces for amulets or talismans. The design may emphasize only on the front or throughout the line. Necklaces for a night event should be luxury and decorated by other materials. The length of a necklace depends on its use and suits for attire."

[Elderly amateur artists no. 1-3]

"When it comes to designing bracelets and bangles, they share similar features in use but are dissimilar in shape and design. Bracelets and necklaces share similar features in use, design, materials, methods, and shape but are dissimilar in length. Bangles have a unique beauty with a focus on balance." [Elderly amateur artists no. 1-3]

All processes of development, from lac to jewelry, the prototypes and products were evaluated, and the results of the evaluation by experts were shown in the next part.

4.2 The evaluation of lac jewelry prototypes

In response to RQ 2, the results were presented below.

Table 1 Expert evaluation of lac jewelry prototypes

Lac jewelry	Mean	S.D.	Level of Satisfaction
Bracelets	4.55	0.55	Highest
Earrings	4.47	0.50	High
Bangles	4.52	0.48	Highest
Necklaces	4.49	0.50	High
Pendants	4.47	0.50	High
Total	4.50	0.48	Highest

Table 1 displays the overall mean scores and standard deviations of expert evaluations of five different types of lac jewelry. The overall mean score was the highest ($\bar{X} = 4.50$, S.D.= 0.48). The mean scores were arranged as follows: bracelets ($\bar{X} = 4.55$, S.D.= 0.55), bangles ($\bar{X} = 4.52$, S.D.= 0.48), necklaces ($\bar{X} = 4.59$, S.D.= 0.50), earrings ($\bar{X} = 4.47$, S.D.= 0.50), and pendants ($\bar{X} = 4.47$, S.D.= 0.50) respectively. This indicates that the experts were satisfied with the production of all types of lac jewelry by the elderly at the highest level.

In detail, the results of expert evaluation of each prototype are shown in Tables 2 – 6.

Table 2 Expert evaluation of lac bracelet prototype

Items of evaluation	Mean	S.D.	Level of Satisfaction
Shapes and forms	4.33	0.52	High
Proportion and size	4.67	0.33	Highest
Harmony	4.41	0.51	High
Suitability of materials	4.49	0.50	High
Physical attractiveness	4.87	0.13	Highest
Total	4.55	0.55	Highest

Table 2 displays the overall mean scores and standard deviations of expert evaluations of lac bracelet prototype. The mean score was the highest ($\bar{X} = 4.55$, S.D.= 0.55). The mean scores were arranged as follows: physical attractiveness ($\bar{X} = 4.87$, S.D.= 0.13), bangles ($\bar{X} = 4.52$, S.D.= 0.48), necklaces ($\bar{X} = 4.59$, S.D.= 0.50), earrings ($\bar{X} = 4.47$, S.D.= 0.50), and

pendants ($\bar{X} = 4.47$, S.D.= 0.50) respectively. This indicates that the experts were satisfied with the lac bracelet prototype created by the elderly at the highest level.

Table 3 Expert evaluation of lac earring prototype

Items of evaluation	Mean	S.D.	Level of Satisfaction
Shapes and forms	4.45	0.51	High
Proportion and size	4.60	0.40	Highest
Harmony	4.70	0.30	Highest
Suitability of materials	4.45	0.51	High
Physical attractiveness	4.13	0.54	High
Total	4.47	0.50	High

Table 3 displays the overall mean scores and standard deviations of expert evaluations of lac earring prototype. The mean score was high ($\bar{X} = 4.47$, S.D.= 0.50). The mean scores were arranged as follows: harmony ($\bar{X} = 4.70$, S.D.= 0.30), Proportion and size ($\bar{X} = 4.60$, S.D.= 0.40), shapes and forms ($\bar{X} = 4.45$, S.D.= 0.51), suitability of materials ($\bar{X} = 4.45$, S.D.= 0.51), and physical attractiveness ($\bar{X} = 4.13$, S.D.= 0.54) respectively. This indicates that the experts were satisfied with the lac earring prototype created by the elderly at a high level.

Table 4 Expert evaluation of lac bangle prototype

Items of evaluation	Mean	S.D.	Level of Satisfaction
Shapes and forms	4.63	0.37	High
Proportion and size	4.55	0.45	Highest
Harmony	4.50	0.50	Highest
Suitability of materials	4.58	0.42	Highest
Physical attractiveness	4.33	0.52	High
Total	4.52	0.48	Highest

Table 4 displays the overall mean scores and standard deviations of expert evaluations of lac bangle prototype. The mean score was the highest ($\bar{X} = 4.52$, S.D.= 0.48). The mean scores were arranged as follows: shapes and forms ($\bar{X} = 4.63$, S.D.= 0.37), suitability of materials ($\bar{X} = 4.58$, S.D.= 0.42), Proportion and size ($\bar{X} = 4.55$, S.D.= 0.45), harmony ($\bar{X} = 4.50$, S.D.= 0.50), and physical attractiveness ($\bar{X} = 4.33$, S.D.= 0.52) respectively. This indicates that the experts were satisfied with the lac bangle prototype created by the elderly at the highest level.

Table 5 Expert evaluation of lac necklace prototype

Items of evaluation	Mean	S.D.	Level of Satisfaction
Shapes and forms	4.30	0.52	High
Proportion and size	4.70	0.30	Highest
Harmony	4.60	0.40	High
Suitability of materials	4.40	0.51	High
Physical attractiveness	4.45	0.50	High
Total	4.49	0.50	High

Table 5 displays the overall mean scores and standard deviations of expert evaluations of lac necklace prototype. The mean score was high ($\bar{X} = 4.49$, S.D.= 0.50). The mean scores were arranged as follows: proportion and size ($\bar{X} = 4.70$, S.D.= 0.30), harmony ($\bar{X} = 4.60$,

S.D.= 0.40), physical attractiveness (\bar{X} = 4.45, S.D.= 0.50), suitability of materials (\bar{X} = 4.40, S.D.= 0.51), and shapes and forms (\bar{X} = 4.30, S.D.= 0.52) respectively. This indicates that the experts were satisfied with the lac necklace prototype created by the elderly at a high level.

Table 6 Expert evaluation of lac pendant prototype

Items of evaluation	Mean	S.D.	Level of Satisfaction
Shapes and forms	4.45	0.51	High
Proportion and size	4.60	0.40	Highest
Harmony	4.70	0.30	Highest
Suitability of materials	4.45	0.51	High
Physical attractiveness	4.13	0.54	High
Total	4.47	0.50	High

Table 6 displays the overall mean scores and standard deviations of expert evaluations of lac pendant prototype. The mean score was high (\bar{X} = 4.47, S.D.= 0.50). The mean scores were arranged as follows: harmony (\bar{X} = 4.70, S.D.= 0.30), proportion and size (\bar{X} = 4.60, S.D.= 0.40), suitability of materials (\bar{X} = 4.45, S.D.= 0.50), shapes and forms (\bar{X} = 4.45, S.D.= 0.51), and physical attractiveness (\bar{X} = 4.13, S.D.= 0.54) respectively. This indicates that the experts were satisfied with the lac pendant prototype created by the elderly at a high level.

The expert perspectives were valuable. However, they were drawn from outsiders' perspectives. This study looked at how elderly amateur artists engage in art production for a variety of reasons. It is necessary to understand the evaluation of the insiders' perspectives on the products the artists developed from the prototypes evaluated by the experts as revealed in the results of RQ 3.

4.3 The self-evaluation of the lac jewelry products

In response to RQ3, the results were drawn from the questionnaire and in-depth interview as seen below.

Table 7 The elderly amateur artists' self-evaluation of their products

Items of evaluation	Mean	S.D.	Level of satisfaction
Design			
Proportion and size	4.00	0.46	High
Harmony	4.00	0.00	High
Colors	4.00	0.46	High
Textures and patterns	3.33	0.46	Moderate
Material suitability	3.33	0.46	Moderate
Attractiveness	4.00	0.46	High
Convenience and usefulness			
Easiness to hold	3.33	0.46	Moderate
Easiness to clean	3.67	0.00	High
Durability			
Strength	4.00	0.00	High
No harmful characteristics	4.00	0.00	High
Safety of materials	4.00	0.00	High
Satisfaction of the product			

Attractiveness	3.00	0.00	Moderate
Beauty	3.33	0.46	Moderate
Suitability for the elderly	3.33	0.46	Moderate
Total	3.66	0.20	High

Table 7 displays the mean scores and standard deviation of the elderly artists' attitudes towards the products they designed and produced themselves. The overall mean score was high ($\bar{X} = 3.66$, S.D.= 0.20). In detail, the mean scores of all evaluated items were as follows: In design, the mean scores of proportion and size, harmony, colors, and attractiveness were high ($\bar{X} = 4.00$, S.D.= 0.46) while the mean scores of textures and patterns, and material suitability were moderate ($\bar{X} = 3.33$, S.D.= 0.46). On convenience and usefulness, the mean score of easiness to clean was high ($\bar{X} = 3.67$, S.D.= 0.00) while the mean score of easiness to hold was moderate ($\bar{X} = 3.33$, S.D.= 0.46). On durability, the mean scores of strength, no harmful characteristics, and safety of materials were high ($\bar{X} = 4.00$, S.D.= 0.46). On satisfaction of the product, the mean scores of beauty and suitability for the elderly were moderate ($\bar{X} = 3.33$, S.D.= 0.46), and attractiveness ($\bar{X} = 3.00$, S.D.= 0.46). This shows that the older artists were happy with the high-level jewelry they made out of lac.

In-depth interviews gave more information to back up the results above, which are summarized below:

"We used the color of the original material or the combination of materials and used synthetic colors. The patterns were drawn from the surface of the material or a new creation, depending on the suitability of the product. The concept blended local identity and contemporary style consistent with the current environment, conservation, and cost-effective use of natural resources, such as bringing what is naturally occurring and common in the local contexts for the most benefits or the use of substitute materials. "For utility, the design took into account the usability of each type of product, such as strength, safety, practicality, comfort to use, and being easy to maintain."

[Elderly amateur artists no.1 - 3]

4.4 The evaluation of the lac jewelry products

In response to RQ 4, the results of the evaluation of the products by elderly community members were presented as shown in Table 8.

Table 8 The evaluation of the products by elderly community members

Items of evaluation	Mean	S.D.	Level of Satisfaction
Design			
Shape and form	4.33	0.46	High
Proportion of size	4.00	0.00	High
Harmony	3.33	0.46	Moderate
Textures and patterns	3.36	0.46	Highest
Colors	4.66	0.46	Highest
Attractiveness	4.66	0.46	High
Material suitability	3.66	0.46	
Convenience and usefulness			
Easiness to wear	3.66	0.46	High
Easiness to hold	4.00	0.00	High
Easiness to clean	3.33	0.46	Moderate
Durability			
Strength	4.00	0.00	High

No harmful characteristics	4.00	0.00	High
Material safety	4.00	0.00	High
Satisfaction of the product			
Attractiveness	4.00	0.00	High
Beauty	3.00	0.00	Moderate
Suitability for the elderly	3.66	0.46	High
Support hobbies for the elderly	4.00	0.00	High
Offer of additional incentive for the elderly	4.00	0.00	High
Total	3.90	0.20	High

Table 8 displays the mean score and standard deviation of the community elderly evaluation of the products. The overall mean score was high ($\bar{X} = 3.90$, S.D.= 0.20). On design, The mean scores were arranged as follows: colors ($\bar{X} = 4.66$, S.D.= 0.46), attractiveness ($\bar{X} = 4.66$, S.D.= 0.46), shape and form ($\bar{X} = 4.33$, S.D.= 0.20), proportion of size ($\bar{X} = 4.00$, S.D.= 0.00), textures and patterns ($\bar{X} = 3.66$, S.D.= 0.46), material suitability ($\bar{X} = 3.66$, S.D.= 0.46), and harmony ($\bar{X} = 3.33$, S.D.= 0.46). On durability, the mean scores were arranged as follows: easiness to hold ($\bar{X} = 4.00$, S.D.= 0.00), easiness to wear ($\bar{X} = 3.66$, S.D.= 0.46), and easiness to clean ($\bar{X} = 3.33$, S.D.= 0.46). On satisfaction of the product, the mean scores were as follows: attractiveness ($\bar{X} = 4.00$, S.D.= 0.00), support hobbies for the elderly ($\bar{X} = 4.00$, S.D.= 0.00), offer of additional incentive for the elderly ($\bar{X} = 4.00$, S.D.= 0.00), and suitability for the elderly ($\bar{X} = 3.66$, S.D.= 0.46). This indicates that the community members were satisfied with the lac jewelry at a high level.

4.5 Lac jewelry production's contribution

In response to RQ 5, the results of the in-depth interviews revealed that this art production and participation contribute to them in several ways, as detailed below.

Emotionally, elderly people's mental health is affected by retirement. In physical appearance, there are no distinctions between young and old age. People of all ages want to be happy and have fun in their lives, including the elderly. As a result, organizing activities for the elderly is part of achieving happiness at the end of life and convincing them that retirement is not always boring.

Affectively, involvement in leisure art activities helps foster a sense of fun by engaging creative hobbies (such as playing sports, listening to music, creating art, etc.) or favorite pastimes (such as dancing, aerobics, etc.) will also help the elderly unwind and reduce stress. Like the other activities, art participation and production in this activity made them relaxed and reduced their stress. Old people may suffer from loss or separation from close or loved ones, such as spouses, friends, or family members; feelings of sadness or concern about their impending death; feeling insecure in life due to inactivity, changes in financial circumstances, a lack of income, a loss of status and social roles; feeling like a burden to other family members; feeling introverted, isolated, or lonely; and suffering from chronic conditions, such as diabetes, heart disease, or stroke. Even worse, they may also suffer from mood swings, stress, anxiety, schizophrenia, dementia, and numerous bodily symptoms that don't have any actual pathology, as well as delusions that they "are" unwell, which are common mental health issues in the elderly.

Physically and mentally, participation in art activities can help them maintain good physical health and be able to respond effectively to their physical requirements while creating art. Ageing is a stage of life marked by physical and mental changes that can be problematic. However, if they are able to handle the situation well, the issues will be resolved and everyone

in the family will be happy. Such art activities aid in promoting the physical and mental health of the elderly. Art design and production help develop mental faculties and improve memory or brain function with art activities by practicing problem-solving and putting concepts in the right order. The activities also help the elderly improve their memory, planning, and problem-solving skills. This is done in a number of ways, such as by practicing learning new things and doing tasks with a hand other than the dominant one or by doing things they have never done before.

Psychologically, participation in art activities helps foster inner serenity by encouraging the elderly amateur artists to acknowledge and comprehend their own emotions and helping them understand how to manage their emotions, unwind, and let go. Participation enhances one's own worth by allowing the elderly to participate in art activities that are not overbearing and harmless, making them feel pleased and self-confident. This art project made the elderly feel comfortable and showed them they are still essential and useful.

Socially, to encourage elderly people to take pleasure in arts and crafts projects, they can complete it alone or with family members. It has produced works of art that are both lovely and useful, assisting the aged in growing in self-worth and in having good mental health, which leads to greater physical health and a higher standard of living. If the advantages are carefully considered, jewelry appears to be less useful but directly brings the artists and/or possessors beauty and enjoyment instead. Participants were able to shift their attention away from their crippling obsession with illness and toward pleasant life experiences thanks to creative activities. Making art increases self-worth and identity by giving opportunities to show consistency, challenge, and success. Participants were also able to preserve their social identity.

The senior participants in this study socially benefit from the activities in these ways. They had to take good care of their bodily and mental well-being while engaging in the activities in order to be ready for any difficulties that might arise. In order to organize what they would do and how to participate in the activities, they also needed to use their brains. They had to work together to participate in activities, which helped them forge stronger bonds with friends and neighbors who were also amateur artists as well as community members. These connections foster positive emotions, bind them together more closely, and consolidate social cohesion. Social cohesion was strengthened through social interaction by encouraging the elderly to get together with friends or people of their own age to converse and share ideas. The elderly benefited from this by feeling more at ease and experiencing fewer social isolation or introversion issues.

5. Conclusion and discussion

5.1 Conclusion of the study

Five conclusions could be drawn from the study.

First, on raw materials, the elderly amateur artists chose lac as it is abundant in their location, and they cooperatively worked on designing the drafts and developing the lac jewelry prototypes.

Second, on the prototypes, the experts were satisfied with the designs of the prototypes in key aspects (namely shapes and forms, proportion and size, harmony, suitability of materials, and physical attractiveness) at the highest and highest levels.

Third, on the products themselves, these products were evaluated by insiders' perspectives. The results of the elderly amateur artists' self-evaluation of their products were similar to those of the expert evaluation. The artists were satisfied with key aspects at a high level. The key aspects included design (namely proportion and size), harmony, color, textures and pattern, material suitability, and attractiveness), convenience and usefulness (namely easiness to hold and easiness to clean), durability (namely strength, no harmful characteristics, and safety of materials), and satisfaction of the product (namely attractiveness, beauty, and suitability for the elderly).

Fourth, the outsiders' perspectives, the lac jewelry products were also evaluated by the elderly community members as users. The results of their evaluation of the products were consistent with those of the artists' self-evaluation. The elderly community members were satisfied with key aspects at the high level. The key aspects included design (namely shape and form), proportion of size, harmony, textures and pattern, color, attractiveness, and material suitability), convenience and usefulness (namely easiness to wear, easiness to hold, and easiness to clean), durability (namely strength, no harmful characteristics, and material safety), and satisfaction of the products (namely attractiveness, beauty, suitability for the elderly, support hobbies for the elderly, and offer of additional incentive for the elderly).

Lastly, the lac art production contributed to the elderly artists' well-being emotionally, affectively, physically, mentally, psychologically, and socially.

5.2 Discussion of the study

The last one highlights the conclusion of the study, discussions of the research findings, limitations of the study, and implications of the study.

The findings of this study lend support to those of the prior study in these key aspects. Like the findings of several studies (e.g., Ateca-Amestoy et al., 2021; An et al., 2021; Sanz & Rodriguez-Labajos, 2021; van Leeuwen et al., 2022), living close to an artistic heritage site can render life satisfaction by participating in the tangible and intangible value of art. The artistic experience and artistic commercial products help enhance the well-being of the consumers by stimulating their sense of inspiration and their social brain when engaging with art.

Art engagement motivates creativity, as supported by several scholars [9, 13]. The artists in this study were engaged with the lac jewelry designing and producing process in both tangible and intangible dimensions. In addition, art engagement leads to successful social interaction and forms of artistic meaning-making, participation, and aesthetic evaluation. Like Adipa [14], artistic experience yields successful social interaction and forms artistic meaning-making and aesthetic evaluation. In this study, all of these things were used to design and make lac jewelry. Through their intuition, imagination, sense of beauty, creativity, and communication, they were able to get along well with others.

Like Farokhi [15], art has a healing quality, which Kim and Park [16] Kim and Park (2021) further explained by gaining a new viewpoint on the known self, comprehending others through self-defining, and growing the sense of *us* through coordination and compromise. The findings of this present study revealed that these art activities shifted the elderly artists from their boring retirement life to lac jewelry making, which they used to do for sale, to leisure art activities as hobbies. They were allowed to initiate their own designs as an approach to defining themselves and evaluate their own products as an approach to understanding themselves. In the designing and production process, in which they cooperatively and closely worked with other artists and community members, family members, and local leaders, they helped them understand others, which broadened their perspectives of themselves and others.

This broadens understanding and new perspectives have a healing role in helping the elderly artists as well as community members. The findings of this study were consistent with those of several scholars [17-19];

[11, 23-28, 30]. The findings of this study indicated that lac jewelry art production yields tremendous emotional, affective, physical, mental, psychological, and social contributions to the well-being of elderly artists, and that this individual well-being positively benefits social well-being.

However, this study was limited to the participants of an area, specific features of the participants, and the nature of the community. It is necessary to verify the findings of this study in other areas.

References

- RAVID-HORESH, R.H., "“A Temporary Guest”: The Use Of Art Therapy In Life Review With An Elderly Woman", *The Arts In Psychotherapy*, Vol.31, N°5, 2004, Pp.303-319, <https://doi.org/10.1016/j.aip.2004.07.001>.
- MANGIONE, G., "Access To What? Alzheimer's Disease And Esthetic Sense-Making In The Contemporary Art Museum", *Poetics*, Vol.41, N°1, 2013, Pp.27-47, <https://doi.org/10.1016/j.poetic.2012.11.004>.
- REYNOLDS, F. & K.H. LIM, "Contribution Of Visual Art-Making To The Subjective Well-Being Of Women Living With Cancer: A Qualitative Study", *The Arts In Psychotherapy*, Vol.34, N°1, 2007, Pp.1-10, <https://doi.org/10.1016/j.aip.2006.09.005>.
- MCEWAN, C., L. SZABLEWSKA, K.V. LEWIS & L.M. NABULIME, "Public-Making In A Pandemic: The Role Of Street Art In East African Countries", *Political Geography*, Vol.98, 2022, 102692, <https://doi.org/10.1016/j.polgeo.2022.102692>.
- BAKER, M. & B.B. BLAAGAARD, "Reconceptualizing Citizen Media: A Preliminary Charting Of A Complex Domain", Pp.1-22 In: Routledge, 2016, Pp. 1-22.

- SIU, N.Y.-M., T.J.-F. ZHANG, C.K.-Y. HO & H.-Y. KWAN, "Cultural Consumption And Consumer Well-Being: Implications From The Self-Determination Theory," In 2013 Fifth International Conference On Service Science And Innovation, 2013: Ieee, Pp. 1-4, Doi: <https://doi.org/10.1109/Icssi.2013.11>.
- SIU, N.Y.-M., H.-Y. KWAN, T.J.-F. ZHANG & C.K.-Y. HO, "Arts Consumption, Customer Satisfaction And Personal Well-Being: A Study Of Performing Arts In Hong Kong", Journal Of International Consumer Marketing, Vol.28, N°2, 2016, Pp.77-91, <https://doi.org/10.1080/08961530.2015.1089806>.
- Christensen, J.F. & A. Gomila, "Introduction: Art And The Brain: From Pleasure To Well-Being," Vol. 237, Ed: Elsevier, 2018, Pp. Xxvii-Xlvi.
- ATECA-AMESTOY, V., A. VILLARROYA & A.J. WIESAND, "Heritage Engagement And Subjective Well-Being In The European Union", Sustainability, Vol.13, N°17, 2021, 9623, <https://doi.org/10.3390/Su13179623>.
- AN, D., B.R. JEONG & N. YOUN, "Effects Of Art Consumption On Consumer Well-Being", Journal Of Consumer Affairs, Vol.56, N°2, 2022, Pp.685-702, <https://doi.org/10.1111/Joca.12429>.
- SANZ, T. & B. RODRIGUEZ-LABAJOS, "Does Artistic Activism Change Anything? Strategic And Transformative Effects Of Arts In Anti-Coal Struggles In Oakland, Ca", Geoforum, Vol.122, 2021, Pp.41-54, <https://doi.org/10.1016/J.Geoforum.2021.03.010>.
- VAN LEEUWEN, J.E., J. BOOMGAARD, D. BZDOK, S.J. CRUTCH & J.D. WARREN, "More Than Meets The Eye: Art Engages The Social Brain", Frontiers In Neuroscience, Vol.16, 2022, <https://doi.org/10.3389%2FFNINS.2022.738865>.
- ATECA-AMESTOY, V., A. GOROSTIAGA & M. ROSSI, "Motivations And Barriers To Heritage Engagement In Latin America: Tangible And Intangible Dimensions", Journal Of Cultural Economics, Vol.44, N°3, 2020, Pp.397-423, <https://doi.org/10.1007/S10824-019-09366-Z>.
- ADIPA, P., "Talking Events: How Social Interaction And Discourse Shape Cultural Participation, Aesthetic Evaluation, And Meaning-Making", Poetics, Vol.77, 2019, 101381, <https://doi.org/10.1016/J.Poetic.2019.101381>.
- FAROKHI, M., "Art Therapy In Humanistic Psychiatry", Procedia-Social And Behavioral Sciences, Vol.30, 2011, Pp.2088-2092, <https://doi.org/10.1016/J.Sbspro.2011.10.406>.
- KIM, Y. & S. PARK, "Community-Based Art Therapy For The Coexistence Of South Korean Youth And North Korean Youth Defectors: A Phenomenological Study", The Arts In Psychotherapy, Vol.76, 2021, 101860, <https://doi.org/10.1016/J.Aip.2021.101860>.
- GEORGE, T.D. & G.-J. VAN DER HEIDEN, The Gadamerian Mind. Routledge, 2022.
- VAN MAANEN, H., How To Study Art Worlds: On The Societal Functioning Of Aesthetic Values. Amsterdam University Press, 2009.
- NUSSBAUM, M.C., From Disgust To Humanity: Sexual Orientation And Constitutional Law. Oxford University Press, 2010.
- VAN DE VALL, R., "Interactivity As Performative Articulation", 2008. <https://www.narcis.nl/publication/Recordid/Oai:Cris.Maastrichtuniversity.Nl:Publications%2F688A6DE9-8510-4E90-A530-Da3f43693fe3>.
- EOM, Y.S. & J.H. HONG, "Measuring The Economic Benefits Of An Environmental Monitoring Satellite Project: The Value Of Information Approach", Space Policy, Vol.29, N°3, 2013, Pp.203-209, <https://doi.org/10.1016/J.Spacepol.2013.06.003>.
- GREEN, A., G. JANMAAT & H. CHENG, "Social Cohesion: Converging And Diverging Trends", National Institute Economic Review, Vol.215, 2011, Pp.R6-R22, <https://doi.org/10.1177/0027950111401140>.

- OTTE, H., "Bonding Or Bridging? On Art Participation And Social Cohesion In A Rural Region Of The Netherlands", *Poetics*, Vol.76, 2019, 101355, <https://doi.org/10.1016/j.poetic.2019.02.006>.
- FONSECA, X., S. LUKOSCH & F. BRAZIER, "Social Cohesion Revisited: A New Definition And How To Characterize It", *Innovation: The European Journal Of Social Science Research*, Vol.32, N°2, 2019, Pp.231-253, <https://doi.org/10.1080/13511610.2018.1497480>.
- BELFIORE, E. & O. BENNETT, "Beyond The "Toolkit Approach": Arts Impact Evaluation Research And The Realities Of Cultural Policy-Making", *Journal For Cultural Research*, Vol.14, N°2, 2010, Pp.121-142, <https://doi.org/10.1080/14797580903481280>.
- BELFIORE, E. & O. BENNETT, "Rethinking The Social Impacts Of The Arts", *International Journal Of Cultural Policy*, Vol.13, N°2, 2007, Pp.135-151, <https://doi.org/10.1080/10286630701342741>.
- JERMYN, H., *The Arts And Social Exclusion: A Review Prepared For The Arts Council Of England*. Arts Council Of England London, 2001.
- BROOKS, A., "What Is Art Really Worth?", *The Journal Of Arts Management, Law, And Society*, Vol.34, N°3, 2004, Pp.163-165, <https://doi.org/10.3200/Jaml.34.3.163-165>.
- MERLI, P., "Evaluating The Social Impact Of Participation In Arts Activities", *International Journal Of Cultural Policy*, Vol.8, N°1, 2002, Pp.107-118, <https://doi.org/10.1080/10286630290032477>.
- WHITE, T.R. & A.-M. HEDE, "Using Narrative Inquiry To Explore The Impact Of Art On Individuals", *The Journal Of Arts Management, Law, And Society*, Vol.38, N°1, 2008, Pp.19-36, <https://doi.org/10.3200/Jaml.38.1.19-36>.