

Access this article online

Quick Response Code:



Website:

www.jehp.net

DOI:

10.4103/jehp.jehp_532_23

Bridging the gaps in patient education through aesthetic-based education: A concept analysis study

Elham Khooshab, Parvaneh Khorasani¹, Mahnaz Rakhshan², Ahmadreza Yazdannik³, Hasanali BakhtiyarNasrabadi⁴

Department of Community Health and Geriatric Nursing, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran, ¹Nursing and Midwifery Care Research Center, Department of Community Health and Geriatric Nursing, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran, ²Community Based Psychiatric Care Research Center, School of Nursing and Midwifery, Shiraz University of Medical Sciences, Shiraz, Iran, ³Department of Critical Care, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran, ⁴Department of Philosophy of Education, School of Educational Sciences, Isfahan University, Isfahan, Iran

Address for correspondence:

Dr. Parvaneh Khorasani, Nursing and Midwifery Care Research Center, Department of Community Health and Geriatric Nursing, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Postal Code - 8174683461, Hezarjarib Bulvar, Isfahan, Iran.
E-mail: Khorasanip@nm.mui.ac.ir
Dr. Mahnaz Rakhshan, Community Based Psychiatric Care Research Center, Department of Medical Surgical Nursing, School of Nursing and Midwifery, Shiraz University of Medical Sciences, Next to Namazi Hospital, Postal Code - 71936-13119, Zand St. Shiraz, Iran.
E-mail: mzrakhshan@gmail.com

Received: 18-04-2023

Accepted: 31-05-2023

Published: 29-04-2024

Abstract:

BACKGROUND: Aesthetics is a branch of philosophy that has been entered into the philosophy of education for a long time. Reviewing the concept of aesthetics in education, we can see the components that can cover a number of challenges in the field of patient education. Focusing on the conceptual dimensions obtained from the analysis of this concept, the aim is matching the resulting conceptual categories with the gaps in the field of patient education.

MATERIALS AND METHODS: Using a scoping review, we reviewed the literature dealt with different dimensions of aesthetic-based education. Walker and Avant's concept analysis approach was used to inductively analyze the content obtained from the review of literature. The data were divided into three general groups of antecedents, attributes, and consequences of the aesthetic-based education concept, and the final conceptual model was defined. Interdisciplinary comparisons between educational and medical sciences were made to match the concept of aesthetic education with the field of patient education to cover its issues. During the scope review process of the texts, after screening the articles, 17 articles selected to enter the concept analysis stage.

RESULT: Concept analysis phase showed that the main conceptual categories of antecedents of aesthetic-based education are aesthetic-based intrapersonal competencies and aesthetic capacities of educational setting. The attributes include aesthetic-based educational content and teaching methods including unity in diversity, combination with art and being based on empathy. The consequences include subliminal learning and constraint-free learning. These conceptual dimensions can cover four important issues in patient education including patient satisfaction, pedagogical competences of health educators, patient centeredness, and empathetic relationship.

CONCLUSION: Applying aesthetic concept in the patient education process can bridge part of the gaps in this process. So, this study can be an introduction to future innovative models based on aesthetic paradigm in the field of patient education.

Keywords:

Aesthetics, concept formation, literature review, patient education

Background

Philosophical essays related to aesthetics have long affected education. The origin of the word aesthetics comes from the Greek word – aisthētikos – which means the ability of a person to understand through their senses and is the opposite of the word anesthesia, which means unconsciousness.^[1]

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

Today, this word is limited to the human ability to understand art and beauty and it refers to individuals' taste. However, aesthetic is an internal ability that is related to awareness, presence and inner sensory perception.^[2] It deals with sensory, spiritual, metaphysical and even moral issues. It refers to a specific way of knowing and is related to all the experiences gained through the interaction of the senses with

How to cite this article: Khooshab E, Khorasani P, Rakhshan M, Yazdannik A, BakhtiyarNasrabadi H. Bridging the gaps in patient education through aesthetic-based education: A concept analysis study. J Edu Health Promot 2024;13:153.

the surrounding world.^[3,4] The term “aesthetic teaching” relates to a pedagogical approach. It is believed that human beings can learn more easily through an aesthetic experience.^[1,5] The term entered into the education area after emergence of Dewey’s view (1896), which described the whole life as an aesthetic experience.^[6] Maxine Green (1986), Pinar, *et al.* (1995), Blumenfeld (1997), and Eliot Eisner (1998) are among the experts who have paid attention to the importance of using aesthetics in education.^[7-10] Reviewing the literature published in the last 5 years, we found that many studies have addressed the concept of aesthetic-based education from various perspectives with different terms that reached its positive consequences; for example, it can improve mental and emotional development of the students, stimulate students’ learning desire, increase problem solving ability of students, and develop effective teaching performance.^[11-15] Taking a look at the common aspects between some challenges raised in patient education and the results obtained from researching the consequences of “aesthetic-based education,” it comes to mind that the use of the aesthetic paradigm in the process of patient education can be considered a key to solve some problems mentioned in this field. This study has been conducted with the aim of investigating the conceptual dimensions of aesthetic education to adapt to the issues of patient education including patient satisfaction, pedagogical competences of health educators, patient centeredness, and empathetic relationship.

Materials and Methods

The current study with the aim of analyzing the concept of aesthetic-based education is designed in two phases of literature review and concept analysis.

Scoping review methodology

This stage was performed in a time frame of 4 months from December 2022 to March 2023. Considering the large and scattered amount of information available regarding the concept of aesthetic education, scoping review was used as a suitable method to reach the main research question. The scoping review studies are usually used to identify different types of evidence existing in a specific field, clarify key concepts or definitions in relevant literature in a specific field, and determine the main characteristics or factors associated with a specific concept. The design

of this phase of the study was guided by the instructions of Arksey and O’Malley (2005).^[16] In accordance with the recommendations provided by JBI,^[17] we used the PCC (population, concept, and context) framework as a guide to frame the search strategy [Table 1]. JBI, formerly known as the Joanna Briggs Institute, is an international research organization, which develops and delivers evidence-based information, software, education, and training designed to improve healthcare practice and health outcomes. The PCC framework (population, concept, and context) is recommended as a guide to construct clear and meaningful objectives and eligibility criteria for a scoping review, which is recommended by JBI to identify the main concepts in the search strategy and primary review questions.

Seven electronic databases related to the research subject were identified that were accessible through the digital library of Isfahan University of Medical Sciences. Medline (PubMed), Scopus, ProQuest (ERIC), Web of Science, JSTOR, PsycINFO (Ovid), and Wiley online library databases were selected due to their coverage of education-oriented research. Using the reference lists of articles, items that were not retrieved during the initial search were identified. In this step, Google Scholar search engine was used to retrieve the articles related to the reference list.

Inclusion/exclusion criteria

The research team used following criteria to select relevant articles:

- English articles without time limitation;
- Articles in peer-reviewed journals, conference articles, original book chapters, PhD theses;
- Articles related to the concept of aesthetic-based education or those that examined the relationship between education and aesthetics.
- Qualitative, quantitative, and mixed-method studies containing at least one of the components in the mentioned search strategy concerning the article’s title, keyword, or abstract;
- Access to the full texts.

Selection of studies

One of the authors (EKH) provided the search strategy presented in Table 1, screened titles and abstracts, and retrieved the full texts of articles that met the inclusion

Table 1: Logical network of terms describing population, concept, and context according to the research question

Population	Concept	Context
Learner (Learner OR student OR collegian OR pupil OR apprentice) OR Educator (educator OR teacher OR professor OR instructor OR lecturer)	Aesthetic (Aesthetic* OR esthetic*) AND Education (educat* OR instruct* OR learn* OR know* OR train* OR teach*)	Educational setting ("educational setting" OR school OR university OR classroom OR class)

criteria. The full texts of the articles, ambiguous in the title and abstract, were retrieved as “uncertain.” Then, another author who was more skilled in the field of education (H.BN) clarified uncertain articles. Finally, all retrieved texts were imported into Endnote X8. After removing duplicates, four members of the research team (EKH, PKH, MR, and AY) separately studied all texts and reached a consensus to exclude articles not meeting the inclusion criteria. After reading the list of relevant references, the four mentioned research team members included new studies that met the inclusion criteria. The final studies were analyzed conceptually by all the research team members.

Concept analysis methodology

Walker and Avant’s^[18] concept analysis approach (2018) was used to analyze the data obtained from the literature review. By dividing a concept into its constituent elements, it is easier to determine its internal structure. Walker and Avant (2018)^[18] believe that concept analysis is useful when propositions related to the concept are already scattered in the texts, but we want to find them and get a complete understanding of the concept. Walker and Avant’s^[18] approach to concept analysis was performed in eight stages: choosing a concept, determining the purpose of analysis, identifying all uses of the concept, defining attributes, identifying a model case, identifying borderline, related, and contrary cases, identifying antecedents and consequences. In this regard, the antecedents, attributes, and consequences of the concept should be extracted from the texts and get divided into general conceptual classes. First, three researchers (EKH, MR, and PKH) studied each article carefully and highlighted the parts related to the antecedent, attribute, or consequence of the concept of aesthetic-based education. Then, in the two separate meetings where all research team members were present, one or more codes were assigned to each sentence and some tags were changed. Primary codes were merged, and subcategories and main categories were extracted based on existing similarities and differences. All the texts were analyzed in different terms of antecedents, attributes, and consequences. A pedagogic expert reviewed the analysis process to ensure the study validity, reach the ethical principles, and avoid bias. Finally, a conceptual framework was designed for aesthetic-based education concept and at last it adapted to the field of patient education.

Results

Literature review

At first, 461 texts retrieved from different databases [Table 2]. Among them, 425 texts were excluded due to not meeting the inclusion criteria. After careful study, 25 texts were removed because of failure to recover

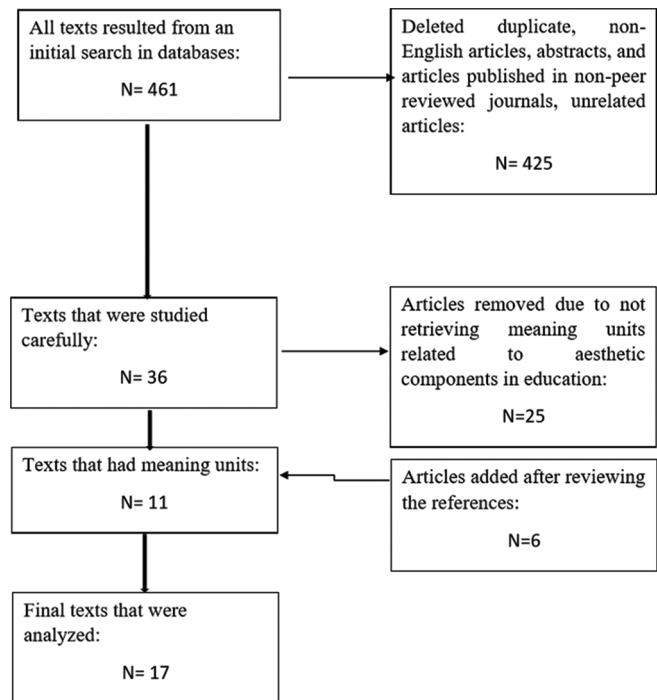


Figure 1: PRISMA diagram

the semantic units regarding aesthetic components in education. From the reference list of the remaining texts, six new texts were added, and finally, 17 articles made it to the final analysis stage [Figure 1].

Data analysis Findings

After studying and coding the texts, through inductive content analysis, we obtained 514 codes, 15 subcategories, and five main categories. They were placed under three main themes of antecedents, attributes, and consequences of the aesthetic-based education [Table 3].

Antecedents

Antecedents are the preliminary conditions that are necessary for the emergence of a concept and must exist before its occurrence.^[18] We obtained two main antecedents for aesthetic-based education in this study.

Aesthetic-based intrapersonal competencies

Thirteen texts referred to the aesthetic-based intrapersonal competencies, meaning the potential aesthetic capabilities of teacher-learner before the educational process. These capabilities include imagination,^[3,12,14,19-23] which means the mind ability to rearrange mental images or ideas; appreciation,^[12,14,19,20,22,24,25] which is someone reacts to beauty, elegance and neatness, and taste^[12,14,15,20,24-27] that is a person’s liking for particular flavors.

Aesthetic capacities of educational setting

Eight texts referred to the aesthetic environmental and human capacities of educational setting for the realization of aesthetic-based education. These capacities include

Table 2: The number of articles retrieved in the first stage in terms of their databases and search lines on December 18, 2022

Database	Search line	Number of articles
PubMed	("Learner"[Title/Abstract] OR "student"[Title/Abstract] OR "collegian"[Title/Abstract] OR "pupil"[Title/Abstract] OR "apprentice"[Title/Abstract] OR ("educator"[Title/Abstract] OR "teacher"[Title/Abstract] OR "professor"[Title/Abstract] OR "instructor"[Title/Abstract] OR "lecturer"[Title/Abstract])) AND ("aesthetic"[Title/Abstract] OR "esthetic"[Title/Abstract]) AND ("educat*"[Title/Abstract] OR "instruct*"[Title/Abstract] OR "learn*"[Title/Abstract] OR "know*"[Title/Abstract] OR "train*"[Title/Abstract] OR "teach*"[Title/Abstract]) AND ("educational setting"[Title/Abstract] OR "school"[Title/Abstract] OR "university"[Title/Abstract] OR "classroom"[Title/Abstract] OR "class"[Title/Abstract])	74
Scopus	TITLE (learner OR student OR collegian OR pupil OR apprentice OR educator OR teacher OR professor OR instructor OR lecturer) AND TITLE (aesthetic* OR esthetic*) AND TITLE (educat* OR instruct* OR learn* OR know* OR train* OR teach*) AND TITLE ("educational setting" OR school OR university OR classroom OR class)	18
ERIC	TITLE (learner OR student OR collegian OR pupil OR apprentice OR educator OR teacher OR professor OR instructor OR lecturer) AND TITLE (aesthetic* OR esthetic*) AND TITLE (educat* OR instruct* OR learn* OR know* OR train* OR teach*) AND TITLE ("educational setting" OR school OR university OR classroom OR class)	174
Web of Science	Learner OR student OR collegial OR pupil OR apprentice OR educator OR teacher OR professor OR instructor OR lecturer (Title) and Aesthetic* OR esthetic* (Title) and educat* OR instruct* OR learn* OR know* OR train* OR teach* (Title) and "educational setting" OR school OR university OR classroom OR class (Title)	51
JSTOR	Learner OR student OR collegial OR pupil OR apprentice OR educator OR teacher OR professor OR instructor OR lecturer (Title) and Aesthetic* OR esthetic* (Title) and educat* OR instruct* OR learn* OR know* OR train* OR teach* (Title) and "educational setting" OR school OR university OR classroom OR class (Title)	44
Wiley online library	"Learner OR student OR collegian OR pupil OR apprentice OR educator OR teacher OR professor OR instructor OR lecturer" in Title and "Aesthetic* OR esthetic*" in Title and "educat* OR instruct* OR learn* OR know* OR train* OR teach*" in Title and ""educational setting" OR school OR university OR classroom OR class" anywhere	100

Table 3: Categorization of the aesthetic-based education concept

Antecedents		Attributes		Consequences	
Main categories	Subcategories	Main category	Subcategories	Main categories	Subcategories
Aesthetic-based intrapersonal competencies	Imagination	Aesthetic-based educational content and teaching methods	Unity in Diversity	Subliminal learning	Cognitive learning
	Appreciation		Combined with Art		Social-Emotional Learning
	Taste			Based on Empathy	Constraint-free learning
Aesthetic capacities of educational setting	Stimulating environment	Aesthetic-based educational content and teaching methods including Unity in Diversity, which means using various perceptions in such a way that divergent components tend to become a meaningful whole of content and awareness ^[3,5,12,14,15,19,20,22,24,25] ; combined with art, like the use of imaginary, visualization, animation, and storytelling; ^[1,3,5,12,14,15,19,20,27,29] and based on empathy, which is a deep connection between the learner and teacher. ^[1,3,5,11,12,14,15,19,20,22,24,25,27,28]	Constraint-free learning		Aesthetic Pleasure
	artistic tools				Based on Empathy
	Art teacher participation				Emotional openness

the Stimulating environment^[3,14,20,26] that is the setting arousing an aesthetic sense that refers to the physical, emotional, psychological, and social atmosphere of the place of education; artistic tools, such as tools used in drawing, painting,^[12,15,20,28] and Art teacher participation, in which the main educator and the aesthetic consultant work collaboratively as a team.^[5,20]

Attributes

Attributes are constituent elements that form a concept and lead to a deep understanding of the concept and its differentiation from other concepts.^[18] In this study, these characteristics referred to the educational methods and contents based on aesthetics.

Aesthetic-based educational content and teaching methods

Among the 15 texts that mentioned attributes, we found three main features related to aesthetic-based

educational content and teaching methods including Unity in Diversity, which means using various perceptions in such a way that divergent components tend to become a meaningful whole of content and awareness^[3,5,12,14,15,19,20,22,24,25]; combined with art, like the use of imaginary, visualization, animation, and storytelling;^[1,3,5,12,14,15,19,20,27,29] and based on empathy, which is a deep connection between the learner and teacher.^[1,3,5,11,12,14,15,19,20,22,24,25,27,28]

Consequences

Consequences include incidents and events that occur following a concept and as a result of it.^[18] In this study, the consequences of aesthetic-based education were divided into two main categories: "subliminal learning" and "Constraint-free learning."

Subliminal learning

Subliminal learning is an ideal learning through which

people achieve different levels of learning, semi-consciously and effortlessly, during the training course.^[30] Reviewing the literature showed that aestheticizing education process can indirectly and unconsciously lead to the increase of cognitive,^[3,11,12,14,15,19,20,24-27] social-emotional,^[3,5,12,14,19,20,22,24-27,31] and skill^[3,15,19,20,24] level of learning.

Constraint-free learning

Constraint-free learning refers to a type of learning in which learners learn in an enjoyable atmosphere full of freedom, instead of the soulless and paternalistic transfer of content. In this category, there are three main concepts including aesthetic pleasure, which is a pleasurable subjective experience that is achieved by understanding the beauty,^[12,14,20,22,24,26,27] open mindedness, which is a tendency to be receptive to new ideas and information,^[11,14,15,19,24,26] and emotional openness, which relates to the experience one's own feelings to the fullest extent.^[3,12,15,19,20,22,27]

Discussion

This study was conducted with the aim of clarifying the conceptual dimensions of aesthetic-based education to facilitate its application in patient education. We will present the discussion of this article in two parts. In the first part, we will discuss about the subcategories obtained from the analysis of the concept of aesthetic education. In the second part, we will discuss about the main patient education gaps and discuss how the application of aesthetics in the process of patient education can cover those gaps.

What distinguishes an aesthetic-based education from other types of educational approaches is its characteristics or attributes. Sotiropoulou-Zormpala^[3] (2016) has directly mentioned the indicators of aesthetic presence in teaching including multimodality/use of aesthetic modes, emergence, holistic approach, control by learners, flow/activation, creativity/divergent approach, and differentiated results. In this study, we achieved conceptual dimensions, which are consistent with the mentioned indicators.

Unity in diversity is one of the distinctive features of aesthetic-based education. In this approach, content should use various perceptions to create aesthetic awareness. They are perceptions other than logical and linguistic perception such as musical related to sound, bodily kinesthetic related to movement control, and emotional understanding related to inter- and intrapersonal feelings, attitudes and emotions.^[5,20] At the same time, considering the diversity in the forms of representation, paying attention to coherence and integrity of content is significant. In an education, based on aesthetic experience, the meaning-making

process should be formed in such a way that divergent components tend to become a meaningful whole.^[15,25]

Although education through art does not solely represent an aesthetic-based education, *combination of teaching with art* is one of the most obvious components of the aesthetic-based education. Arts have a great power in evoking the aesthetic sense of people. The use of imaginary visualization, animation, storytelling, theater and performance, rhythm, and music are some examples in this regard.^[3,5,15,19,20,27,29]

The empathetic relationship between learners and teachers has always been considered since John Dewey's era as a necessary principle for starting an aesthetic education. He believed that in order to achieve an aesthetic experience, the creator of an aesthetic work and their audience should come to a common understanding, so he called it empathy.^[23] The aesthetic-based education should make a deep connection between its content and audience and connect the content to their everyday life. Learner's exposure to a personal experience and linking it to the educational content can be a kind of aesthetic experience.^[6] It is necessary to focus on individual differences of learners, including different educational needs, learners' learning style, interests, attitude, and abilities.^[14,28]

Dewey believes that aesthetic teaching is "a set of conditions and actions that seek to allow, facilitate, promote, improve, or enrich the aesthetic experiences".^[27] Aesthetic experience in education is a satisfying, lasting, and integrated experience, which brings us to a deeper level of understanding.^[22] In this study, we found that readiness for aesthetic experience can be achieved through some prerequisites or antecedents, which are aesthetic-based intrapersonal competencies and aesthetic capacities of educational setting.

Aesthetic-based intrapersonal competencies are imagination, appreciation, and taste. Green^[32] (1995) believes that "a key element in creating multiple ways of understanding a content lies in the ability to imagine. So, There is a need to consider the imagination and its powerful function in awakening and revealing the ordinarily unseen, unheard, and unexpected things". Kim (2016)^[22], inspired by the ideas of Dewey (1987), believes that imagination is necessary for aesthetic experiences. Imagination increases our capacity to accept things that contradict our beliefs, cause uncertainty and fear, inhibit our ability to learn, and are new, different, and difficult to understand.^[22] *Appreciation* is an acquired ability that refers to the mental perception of aesthetic qualities.^[2] Kim^[22] (2016) believes that appreciation is a powerful tool that takes us to a deeper level of understanding and leads to a pleasurable aesthetic experience. Such

an appreciation must exist in both the trainer and the trainee to have a successful aesthetic-based education.^[19] *Taste* is a natural intrapersonal competency. It is one of the most suitable words to describe the cause of aesthetic experience or feeling of beauty.^[2] It can be used to judge beautiful things, which is called aesthetic judgment. Maivorsdotter^[25] (2014) Inspired by the ideas of Wickman^[33] (2006) believes that aesthetic judgments deal with the taste evaluations of people and are not defined as the quality of the object itself. Sinclair^[34] (2009) believes that taste is one of the unique and important factors that should be taken into account during education. Li^[26] (2010) also states that one of the basic conditions for applying aesthetics in education is to cultivate students' taste.

To achieve aesthetic experience in education, we found that in addition to internal capabilities, there must be a series of external capabilities and capacities. We named this essential category as aesthetic capacities of educational setting. *Stimulating environment* is the setting arousing an aesthetic sense that refers to the physical, emotional, psychological, and social atmosphere of the place of education. It should be happy, consider individuals' emotions, and avoid fear and punishment.^[26] Sotiropoulou-Zormpala (2012)^[5] quotes from Broudy (1994) "the aesthetic scanning of the environment has a positive impact on cognition".^[20] Dolapçioğlu et al.^[14] (2019) believe that the educational environment, based on aesthetic, should be designed in a way that arouses the aesthetic feeling of the learners and creates a kind of aesthetic awareness in them.

Artistic tools such as tools used in drawing, painting, music, storytelling, performance, animation, etc., are among the requirements of applying aesthetics in the education process.^[12,15,20] The important point, which must be taken into consideration, is the complementarity of the tool and the meaning to be conveyed to the learner. Ganger^[28] (2006) quoted from Dewey:

"Even the most instrumental of educational activities at some phase of its development should possess, what is for the individual concerned with it, an aesthetic quality. In other words, instrumental and intrinsic meaning must complement each other in a genuinely educative experience"

Art teacher participation in educational process leads to the use of aesthetic literacy. It enables the educator to coordinate their educational activities in a more effective way according to the aesthetic level of the learners.^[5,20]

Based on the findings of this study, what is expected from an aesthetic education is divided into two general

conceptual categories which we named them subliminal learning and constraint-free learning. Maxine Green believes that the encounter of art and aesthetics with education restores a lost spontaneity in a person. In this way, meaning creation will be achieved in a semi-conscious and spontaneous way.^[19] We call it *subliminal learning* which can happen in all three cognitive, emotional, and skill levels. In *constraint-free learning*, the other main consequence category, there are concepts such as the joy of understanding a beautiful content, having the spirit of the learning environment, avoiding the prejudices and limitations of traditional education, and the creativity and emotional freedom of the learners.

For the final distinction of aesthetic-based education with other types of education, we point out the opposite cases, that is, what this type of education is not. Pike^[1] (2004) believes that education based on aesthetics is not a mere transfer of contents. Even if we only use a series of diagrams and figures, it cannot be said that we have benefited from aesthetics in education. An atmosphere of fear and punishment is in conflict with education based on aesthetics. In aesthetic education, a teacher is more than a transmitter of information, and the learner is not considered as an object. Teaching through the arts, as a borderline case, sometimes seems to be replaced by aesthetic-based education. This research showed that teaching through the arts is a subset of education based on aesthetics and the most important difference between the two is that education through art is a product-oriented process, while education based on aesthetics is process-oriented and far more complex and complete.^[3]

Aesthetic-based education may help fill the gaps in the patient education process. Four important issues in the field of patient education including patient satisfaction, pedagogical competences of health educators, patient centeredness, and empathetic relationship are discussed in this section.

Patient satisfaction is an important and valuable indicator that is usually used to measure the quality of health care, including patient education. One of the gaps in patient education is the low satisfaction of patients with the quality of this education. This lack of satisfaction is mostly attributed to the failure to follow the principles of proper communication with patients.^[35-37] In education based on aesthetics, combining art with education, paying attention to people's taste, using a stimulating environment as well as artistic tools, and especially empathetic relationship with patients take away the aridity of contents and fulfil the satisfaction of the patient.

Another important issue is the low educational effectiveness due to the insufficient pedagogical skills of health educators.^[38] Today, paying attention to the levels of learning including cognitive (knowledge), emotional (attitude), and psychomotor (performance) is considered essential in the process of patient education.^[39] Despite the many educational contents and good settings in patient education, less attention has been paid to the way of conveying the contents to the patient in all the three mentioned aspects.^[40] In an aestheticized education, the principle is to use all the senses and capabilities of the audience to learn, which we mentioned at the beginning of the discussion under the title of Unity in Diversity. The correct application of this principle can help improve the pedagogical skills of health educators.

Another and the most important current challenge in patient education is the insufficient attention of the health team to the patient-centeredness.^[41] The real-life environment of the patient, the usual routines of the family, and the economic and social conditions governing the person's life are very effective on the health behavior of the person.^[42] Therefore, there should be a model so that patient educators can take a special look at the individual differences and tastes of patients during the design of different stages of the educational process.

One of the most central features of aesthetic-based education is that the learner should be in the center of attention and activity, and all teaching activities should be based on their actions and reactions which Sotiropoulou-Zormpala^[3] (2016) refers to as "control by the learner".

Finally, the weakness in reaching a common understanding and decision-making between the health educator and the patient, as well as the presence of the domineering and controlling view of the health team toward the patient, are among the other problems in the effectiveness of patient education.^[43] Therefore, components such as empathy, reaching joint decision-making, and mutual understanding are essential features of successful patient education, which should be presented in a general framework to be used in practice. As stated in the first part of the discussion, empathic communication is an underlying principle in aesthetic education. Aesthetic experience does not happen until the teacher and their audience have reached a connection point in understanding the meaning. Therefore, in this sense, it can be said that using aesthetics can be effective in the process of patient education. For the limitation of this study, we can say that the findings of this study do not guarantee that any type of aesthetic-based patient education can be effective for every population. In

other words, the findings of this study should be used by various clinical trial researches to strengthen this newly born concept in patient education and to develop theories that help expand the boundaries of knowledge in this field.

Conclusion

The results of this study revealed that the new and innovative paradigm of aesthetics could be used to design practical models of patient education according to the overlapping issues of aesthetic-based education and patient education gaps.

Acknowledgments

This article was a part of findings of a doctoral dissertation in nursing with the code of ethics of IR.MUI.NUREMA.REC.1400.074, and the grant number of 3400353, In the form of a branched study, that was approved by the Research Ethics Committee at the Isfahan University of Medical Sciences (Code: IR.MUI.NUREMA.REC.1402.021). Researchers need to be grateful to all professors and experts who collaborated in this study, as well as the authorities of the Isfahan University of Medical Sciences for financial support (grant number: 2401311).

Financial support and sponsorship

This study was partially supported by the financial aid of Isfahan University of Medical Sciences grant number is 2401311 available in the web page:

<https://ethics.research.ac.ir/EthicsProposalView.php?and code=IR.MUI.NUREMA.REC.1402.021>.

Conflicts of interest

There are no conflicts of interest.

References

1. Pike MA. Aesthetic teaching. *J Aesthet Educ* 2004;38:20-37.
2. Townsend D. Historical Dictionary of Aesthetics. Historical Dictionaries of Religions, Philosophies, and Movements, No. 72. 2006.
3. Sotiropoulou-Zormpala M. Seeking a higher level of arts integration across the curriculum. *Arts Educ Policy Rev* 2016;117:43-54.
4. Mirarefin FS, Mehrmohammadi M, Ali Asgari M, Haji'hossein'nejad G. Designing and validating an "aesthetic approach to teaching" course for teacher education program. *J Curriculum Stud* 2019;14:79-116.
5. Sotiropoulou-Zormpala M. Aesthetic teaching: Seeking a balance between teaching arts and teaching through the arts. *Arts Educ Policy Rev* 2012;113:123-8.
6. English A, Doddington C. Dewey, aesthetic experience and education for humanity. *The Oxford Handbook of Dewey*. 2019, Oxford University Press p. 411-44.
7. Javidi Kalateh Jafarabadi T, Abdoli A. Aesthetics and art from maxine Greene's view and its educational implications. *New Educ Approaches* 2018;12:21-45.
8. Pinar WF, Reynolds WM, Slattery P, Taubman PM. Chapter 11:

- Understanding curriculum as aesthetic text. *Counterpoints* 1995;17:567-605.
9. Blumenfeld-Jones D. Aesthetic experience, hermeneutics, and curriculum. *Philosophy of Education Archive* 1997:313-21.
 10. Eisner EW. *The Kind of Schools We Need: Personal Essays*. Heinemann, 361 Hanover Street, Portsmouth, NH 03801-3912; ERIC; 1998.
 11. Martin BH. The artistry of innovation. *Can J Educ* 2019;42:576-604.
 12. Eslamian H, Jafari SEM, Neyestani MR. Investigating the effect of teaching aesthetic skills to faculty members on development of their effective teaching performance. *J Teach Educ Sustain* 2017;19:90-106.
 13. Schlaack N, Steele JS. The collaborative residency project: The influence of co-teaching on professional development in arts integration. *Int J Educ Arts* 2018;19:1-28.
 14. Dolapçioğlu S, Gürkan B, Karakuş M. Aesthetics and aesthetic creativity in social studies. *Pegem Eğitim ve Öğretim Dergisi* 2019;9:913-44.
 15. Ulvik M. Promoting aesthetical values to education. *Frontiers in Education*. Frontiers Media SA; 2020;5:34-42.
 16. Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol* 2005;8:19-32.
 17. Aromataris E, Munn Z, editor. *JBIManual for Evidence Synthesis*. JBI; 2020. Available from: <https://guides.library.unisa.edu.au/ScopingReviews/ApplyPCC>.
 18. Walker LO, Avant KC. *Strategies for Theory Construction in Nursing*. 6th ed, vol. 4. Upper Saddle River, NJ: Pearson/Prentice Hall; 2018.
 19. Pinhasi-Vittorio L, Vernola S. The arts to encourage multiple perspectives and promote social justice. *J Lang Lit Educ* 2013;9:54-72.
 20. Sotiropoulou-Zormpala M. Reflections on aesthetic teaching. *Art Educ* 2012;65:6-10.
 21. Ulvik M. Promoting aesthetical values to education. *Frontiers in Education*. Vol. 5. Frontiers Media SA; 2020. p. 34.
 22. Kim J. Living drawing: Aesthetic teaching for moral artists. *J Moral Educ* 2016;45:465-80.
 23. English AR. John Dewey and the role of the teacher in a globalized world: Imagination, empathy, and 'third voice'. *Educ Philos Theory* 2016;48:1046-64.
 24. Hobbs L. Examining the aesthetic dimensions of teaching: Relationships between teacher knowledge, identity and passion. *Teach Teach Educ* 2012;28:718-27.
 25. Maivorsdotter N, Lundvall S, Quennerstedt M. Being a competent athlete or a competent teacher? Aesthetic experiences in physical education teacher education. *Eur Phys Educ Rev* 2014;20:407-22.
 26. Li H. Application of science aesthetics in the teaching of electrostatics. *Int Educ Stud* 2010;3:130-3.
 27. Mejía A, Montoya SE. On the meeting of the moral and the aesthetic in literary education. *J Philos Educ* 2017;51:370-86.
 28. Ganger DA. Teaching aesthetics and aesthetic teaching: Toward a Deweyan perspective. *J Aesthet Educ*, 2006;1:45-66.
 29. Murphy AF. Integrating aesthetics into professional development for teachers of English learners. *Tesol J* 2014;5:82-104.
 30. Drigas A, Mitsa E, Skianis C. Subliminal training techniques for cognitive, emotional and behavioral balance. The role of emerging technologies. *Technium Soc Sci J* 2022;33:164.
 31. Granger DA. Teaching aesthetics and aesthetic teaching: Toward a Deweyan perspective. *J Aesthet Educ*, 2006;40:45-66.
 32. Greene M. *Releasing the Imagination: Essays on Education, the Arts and Social Change*. San Francisco: Josey-Bass. Inc. Publishers; 1995.
 33. Wickman PO. *Aesthetic Experience in Science Education: Learning and Meaning-Making as Situated Talk and Action*. Routledge; Wiley Online Library, 2006.
 34. Sinclair N. Aesthetics as a liberating force in mathematics education? *ZDM* 2009;41:45-60.
 35. Azizi F, Hanifi N, Siahkhalil SR, Haghani S. Investigating the factors affecting the triple dimensions of patients' satisfaction of those referred to the emergency department in-Zanjan, Iran in 2017. *J Mil Med* 2018;20:538-45.
 36. Mousavi MS, Adib-Hajibagheri M, Azizi-Fini I, Izadi-Avanji FS. The satisfaction of ischemic heart disease patients with nursing care in emergency department. *J Client-Centered Nurs Care* 2019;5:203-10.
 37. Toulabi T, Mohammadipour F. Effects of HIS-based intervention on patient education process and patient satisfaction with nurses' education. *BMC Res Notes* 2022;15:1-6. doi: 10.1186/s13104-022-06046-8.
 38. Sørensen K, Skirbekk H, Kvarstein G, Wøien H. Home administration of needle injections for children with rheumatic diseases: A qualitative study on nurses' perception of their educational role. *J Pediatr Nurs* 2022;66:e137-44.
 39. Khorasani P, Rassouli M, Zagheri-Tafreshi M, Parvizy S, Nasr Esfahani M. Development and evaluation of "Patient Education Record" for structured documentation of patient education process. *J Health Promot Manag*, 2014;3:1-16.
 40. Thompson DL, May EJ, Leach M, Smith CP, Fereday J. The invisible nature of learning: Patient education in nursing. *Collegian*. 2021;28:341-5.
 41. Siebinga VY, Driever EM, Stiggelbout AM, Brand PLP. Shared decision making, patient-centered communication and patient satisfaction—A cross-sectional analysis. *Patient Educ Couns* 2022;105:2145-50.
 42. Hoving C, Visser A, Mullen PD, van den Borne B. A history of patient education by health professionals in Europe and North America: From authority to shared decision making education. *Patient Educ Couns* 2010;78:275-81.
 43. Yeh MY, Wu SC, Tung TH. The relation between patient education, patient empowerment and patient satisfaction: A cross-sectional-comparison study. *Appl Nurs Res* 2018;39:11-7.