

Metaphorical Perceptions of Preservice Teachers Enrolled in Different Departments About the Concept of “Art”: The Case of Bartın University, Faculty of Education

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Abstract

The purpose of this study is to identify, using metaphors, the perceptions of preservice teachers, who study in different departments at the Faculty of Education of Bartın University, about the concept of “art”. The study is based on the case study model, which is one of the qualitative research methods, and the study group consists of 198 preservice teachers who are enrolled in the programs of Turkish Language Education, Social Sciences Education, Psychological Counselling and Guidance (PCG), Science Education, Elementary Mathematics Education, Foreign Language Education, and Primary Education at Bartın University, Faculty of Education. The research data were obtained through the “Art Metaphor Survey Form” and analysed using the content analysis method. Based on the research results, the metaphors for the concept of art were grouped under 9 categories including “art as born and enhanced under difficulties and pressure”, “art as a complex structure”, “art as the fruits of labour”, “art as reflective and expressive”, “art as relaxing”, “art as immersive”, “art as a vital need”, “art as liberating” and “art as radiant and supportive”. The results also revealed that preservice teachers enrolled in different programs interpreted art considering different semantic properties. In this context, it was observed that preservice teachers in Turkish Language and Social Sciences Education Programs mainly described art as “liberating”, those in PCG as “reflective and expressive”, those in Science Education as “relaxing”, and those in Elementary Mathematics Education as “a vital need”. On the other hand, preservice teachers in Foreign Language Education Program focused on two different categories and described art as “complex” and “reflective and expressive”, whereas those in Primary Education mostly characterised art as “reflective and expressive”.

Keywords: Metaphor, metaphorical perception, art, faculty of education, preservice teacher

Farklı Bölümlerde Öğrenim Gören Öğretmen Adaylarının “Sanat” Kavramına İlişkin Metaforik Algıları: Bartın Üniversitesi Eğitim Fakültesi Örneği

Öz

Bu araştırmanın amacı, Bartın Üniversitesi Eğitim Fakültesinde farklı bölümlerde öğrenim gören öğretmen adaylarının “Sanat” kavramına ilişkin algılarının metaforlar yolu ile belirlenmesidir. Nitel araştırma yöntemlerinden durum çalışması modeli ile yürütülen araştırmanın çalışma grubunu Bartın Üniversitesi Eğitim Fakültesi’nde Türkçe Öğretmenliği, Sosyal Bilgiler Öğretmenliği, Psikolojik Danışmanlık ve Rehberlik (PDR), Fen Bilgisi Öğretmenliği, İlköğretim Matematik Öğretmenliği, İngilizce Öğretmenliği ve Sınıf Öğretmenliği Programlarında öğrenim gören ve geleceğin öğretmenleri olacak olan 198 öğretmen adayı oluşturmaktadır. Araştırmanın verileri “Sanat Metaforu Araştırma Formu” aracılığıyla elde edilmiş ve içerik analizi yöntemi ile çözümlenmiştir. Araştırma sonuçlarına göre, sanat kavramına yönelik metaforların “zorluk ve baskı karşısında doğan ve gelişen olarak sanat”, “karmaşık bir yapıya sahip olarak sanat”, “emek verilerek ortaya çıkan olarak sanat”, “yansıtıcı ve dışavurumcu olarak sanat”, “rahatlatıcı olarak sanat”, “sürükleyici olarak sanat”, “hayati bir ihtiyaç olarak sanat”, “özümlenirici olarak sanat” ve “enerji saçan ve destekçi olarak sanat” olmak üzere 9 kategori altında toplandığı tespit edilmiştir. Öte yandan farklı bölümlerde okuyan öğretmen adaylarının sanatı farklı anlamsal niteliklerle yorumladığı ortaya konmuştur. Bu kapsamda, Türkçe Öğretmenliği ve Sosyal Bilgiler Öğretmenliği Programlarında okuyan öğretmen adaylarının sanatı ağırlıklı olarak “özümlenirici”, PDR Programı Öğretmen adaylarının “yansıtıcı ve dışavurumcu”, Fen Bilgisi Öğretmenliği Programında eğitim alan öğretmen adaylarının “rahatlatıcı”, İlköğretim Matematik Öğretmenliği Programında okuyan öğretmen adaylarının ise sanatı “hayati bir ihtiyaç” olarak nitelediği görülmüştür. Bununla beraber, İngilizce Öğretmenliği Programında okuyan öğretmen adaylarının iki farklı kategori üzerinde yoğunlaştığı ve sanatı “karmaşık” ve “yansıtıcı ve dışavurumcu” olarak betimlediği, Sınıf Öğretmenliği Programında eğitim alan öğretmen adaylarının ise sanatı genel olarak “yansıtıcı ve dışavurumcu” olarak tanımladığı tespit edilmiştir.

Anahtar Kelimeler: Metafor, metaforik algı, sanat, eğitim fakültesi, öğretmen adayı.

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INTRODUCTION

Art education should not be considered as a field in which only technical and artistic knowledge is delivered to train artists. Art education is crucial at every level of education for individuals of all ages to express themselves better, to acquire an aesthetic sensitivity and perspective, to be more sensitive to nature and humanity in their lives, and to make sure that art exists in every stage and area of their lives. Not only art teachers, such as visual arts and music teachers, but also all subject matter teachers can make use of artistic activities. In this way, more effective and permanent learning will be provided, and an important step will be taken in raising individuals who are sensitive to art and have an aesthetic perspective.

Education and art have appeared as fields expressing continuity throughout the history of humanity. Depending on the course of evolution, the dimensions of the relationship between the history of art and the history of education have changed constantly. Art and art education have largely maintained their originality, continuity and role in the lives of individuals and the society with their metaphorical indicators. The interest in the metaphorical indicators today, ranging from everyday life to the scientific field, makes the existence of metaphors more significant at every stage of the educational processes.

Metaphor

Metaphor is defined as “the art of expressing a literal meaning by referring to something with similar features, and conveying the meaning of a word or a name provisionally by making use of analogies”. In another way, metaphor is defined as words or concepts that are assigned meanings different from their literal meaning based on a relevance or a similarity (Lakoff & Johnson, 2015). According to Woodgate et al. (2021), metaphors can be used both visually and verbally as a communicative tool to facilitate the dissemination and interpretation of information. Moreover, Skrefsrud (2020) notes that a good metaphor can make it easier to understand a concept or a subject.

Furthermore, metaphors have an insightful psychological aspect with their conceptual structures. They serve as a tool in modelling the whole of intangible things, including the cultural language in use (İflazoğlu Saban & Erden Özcan, 2022; Stampoulidis & Bolognesi, 2023).

Art and Art Education

Art is a phenomenon that has existed since the beginning of humanity, and that has been changed and enhanced by humans. Art means accessing the world of beauty (Hye & Ja, 2017). It has a role as a document and proof of events, historical developments, and various cultures (Goldberg, 2021; Morphy, 2020). Art affects human behaviour and gives meaning to experiences due to its social structure (Acord & DeNora, 2008). It surrounds people in the course of life and enables them to balance with the world they live in. When art reaches a dead end, people lose their balance (Fischer, 2010). It is also effective in increasing the academic achievement of students with daily life and social life skills. Art can help students with higher-level social skills express themselves in the academic field, which also increases self-confidence.

With a general definition, art education refers to in-school and out-of-school art instructions including all fields and forms of fine arts, and in a narrow sense, it covers the art-related lessons delivered in the relevant departments and classes in schools (San, 2010). Fundamentally, the purpose and the necessity of art education pursue to glorify the human spirit, to satisfy the spiritual needs of individuals, and to build a balanced, modern, and sensitive society (Artut, 2013). With a widespread misconception, art education is considered as an education only for talented students (Yılmaz, 2005). It is, however, necessary for the spiritual satisfaction and perceptual development of individuals of all ages.

Art education provided in educational institutions contributes to students' recognition of different cultures and various visual worlds. By increasing the level of sensitivity, it encourages individuals to develop a relationship with their environment. Art promotes the individual's social-emotional development starting from the school ages, and what matters here is that schools need art education (Dickenson, 2017). Art education is an important tool in acquiring critical thinking skills in young children (Santn & Torruella, 2017). Students who are deprived of art education are likely to have difficulties in accessing different cultural heritages and diversity, and in being in social harmony with their surroundings (Ilić, 2017).

When the profession of teaching is viewed from the perspective of art-based education, the field of art can easily be integrated into every discipline of the field of education. This approach provides important advantages in increasing the quality of education, and it is also highlighted in contemporary education (Ilić, 2017). Studies on the subject have revealed results that support this situation (Hausman, 1967; Perry & Edwards, 2021; Shockley & Krakaur, 2021).

As emphasised by previous research, the need for art education in teacher training programs is an indisputable fact. However, when the undergraduate programs of the Faculties of Education in Türkiye are examined, it is observed that the respective programs lack art courses. They are only offered as elective or low-credit courses in these programs, which constitutes a disadvantage considering the artistic development and some interdisciplinary teaching skills of preservice teachers.

Metaphor and Art Education

Metaphors are highly important at every stage of teaching processes and in teacher training. It is one of the resources that educators should refer to in explaining themselves, conveying their experiences or exemplifying subjects. They also play an essential role in teaching and teacher training (Craig, 2018; Bahadır, 2021; MacDonald et al., 2017). They can help educators make sense of their own language and convey it to the other side. Therefore, use of metaphors in education should be valued and adopted in practice (Fenech et al., 2020; Gallagher & Lindgren, 2015).

Metaphors have both aesthetic and epistemic values. The functionality of metaphors in featuring creativity in science cannot be ignored. Considering all these facts, metaphors can be considered aesthetically pleasing in different fields and can make abstract concepts more recognizable in a tangible way (Veit & Ney, 2021; Gonigroszek & Szmigiero, 2023). It is observed that metaphors are used effectively in the field of design and art (Casakin & Kreitler, 2017). It is thus possible to consider metaphor not only as an abstract functionality, but also as a tangible practice of understanding-explaining in the artistic and scientific sense (Ware, 2023).

Considering the literature review, it is remarkable that there are many metaphor studies conducted on different subjects around the world and in Türkiye. It is also observed that the studies in Türkiye are mostly in the field of education and on educational concepts (Balcı, 2001; Saban, 2004; Saban et al., 2006; Taşdemir & Taşdemir, 2011; Pesen et al., 2015; Toker Gökçe & Bülbül, 2014; Umuzdaş & Işıldak, 2018), and that the studies in the field of art are generally limited to those presenting the views of preservice teachers or secondary school students about the visual arts course (Kalyoncu, 2012; Kalyoncu & Liman, 2013; Fidan & Fidan, 2016; Dilmaç & İnanç, 2015).

Metaphor studies on preservice teachers’ perceptions of art are encountered in the literature, albeit in limited numbers. Among these studies, “*A study of trainee visual arts teachers’ metaphorical perception of the concept of ‘the teacher’ and ‘the artist’*” conducted by Yalçın Wells (2015) focuses on preservice visual arts teachers’ perceptions of art, and the study entitled “*Teacher candidates’ metaphors regarding art and creativity*” conducted by Nalinci and Yapıcı (2020) focuses on preservice primary education teachers’ perceptions of art. Similarly, in their study entitled “*Examining, through metaphors, the perceptions of the art term of the prospective teachers who take art education course*”, Hiçyılmaz and Adanır (2019) concentrates on the art perceptions of preservice teachers studying in primary and early childhood education programs. As observed in these studies, metaphor studies in which preservice teachers’ perceptions of the concept of art are evaluated have been conducted in a limited number of departments, yet there are no relevant studies carried out in other teacher training programs in faculties of education.

Future teachers’ metaphors for art provide insight into their opinions on art and thus their ability to teach their future students the love of art. From this point of view, this study aims to identify, through metaphors, the art perceptions of preservice teachers studying in different departments at the Faculty of Education of Bartın University. This aim is important in the sense that it contributes to the literature by revealing the perceptions and opinions of preservice teachers, who study in different programs, about the concept of art.

Purpose of the Study

The purpose of this study is to identify the metaphorical perceptions of art held by preservice teachers enrolled in different programs at the Faculty of Education of Bartın University. For this purpose, answers to the following questions were sought:

1. What are the conceptual categories under which preservice teachers’ metaphorical perceptions of the concept of “art” are grouped?
2. What are the metaphors created by the preservice teachers according to their programs?
3. Do the metaphors of preservice teachers differ by program?

METHOD

Study Design

This study, which aims to identify, through metaphors, the perceptions of art held by preservice teachers enrolled in the Faculty of Education of Bartın University, was conducted as a case study, one of the qualitative research methods. In simple terms, case study is defined as a thorough description and examination of a bounded system or situation (Merriam, 2018). In this study, the case study method was used in order to describe the preservice teachers' perceptions of the concept of "art" using metaphors and to establish a cause-and-effect relationship between the results, within the scope of the research questions addressed.

Study Group

The study group consists of 198 preservice teachers who are senior students enrolled in different programs at the Faculty of Education of Bartın University. The reason why senior students are preferred in determining the study group is that these students are about to complete their education and step into the profession of teaching in the near future. The programs of the preservice teachers involved in the study include Turkish Language Education, Social Sciences Education, Psychological Counselling and Guidance (PCG), Science Education, Elementary Mathematics Education, Foreign Language Education, and Primary Education. Even though the department of Fine Arts Education is actively present under the Faculty of Education of Bartın University, it is excluded from the study group since the students of this program study the field of art throughout their education life, and their readiness level for the concept of "art" is high. The purpose of this study is to identify the metaphorical perceptions of art held by preservice teachers whose major is not art education.

Demographic information of the study group is presented in Table 1.

Table 1. Demographic information of the study group

Program	Program Code	Female	Male	Unspecified	n
Turkish Language Education	TL	13	12	0	25
Social Sciences Education	SS	18	11	7	36
Psychological Counselling & Guidance	PC	26	13	2	41
Science Education	S	4	1	0	5
Elementary Mathematics Education	EM	15	14	2	31
Foreign Language Education	FL	12	9	0	21
Primary Education	P	32	6	1	39
Total		120	66	12	198

As can be observed in the table, the participants were assigned codes based on their programs during the reporting process of the study. In addition, codes for the gender difference were assigned following the program and sequence codes, including "F" for females and "M" for males, and "U" was used for those who did not prefer to specify gender while filling out the form. For example: "TL5F": Turkish Language Education, 5th participant, female; "P17U": Primary Education, 17th participant, gender unspecified.

Data Collection Tool

One of the most frequently used methods to obtain data in metaphor studies includes administering a form in which a written statement about the subject of study is given, and the participant is asked to write what they associate with this statement and the reason for this association. These forms are usually in the form of "X is like because". In this way, it is aimed to identify what the participant compares X with and what the relevant reason is. In this context, the "Art Metaphor Survey Form" was developed in order to identify the perceptions of art held by preservice teachers studying at Bartın University, Faculty of Education. The form consists of two parts. In the first part of the form, there are items including the demographic information of the participant, and in the second part, there is the item including sample metaphor expressions and the statement aimed at identifying the participant's perception of art. This part is structured as "Art is like because" so that the participants' metaphors regarding the concept of "art" will be revealed. During the development of the data collection tool, it was aimed to accurately identify the perception of the study subject, and it was also regarded that a statement that the participants could understand clearly without confusion would be selected.

Data Collection Process

The data of the study were collected during the fall semester of the 2022-2023 academic year upon approval of the authorities. The data collection process was carried out during lesson hours by obtaining permission from

the instructor of the relevant course so that the students were all together. The students were informed about the study before data collection, and it was highlighted that participation was on a voluntary basis and those who were unwilling to participate in the study did not have to fill out the form. The students were then distributed the forms and asked to review the sample statements provided and to fill out the form with expressions reflecting their own opinions. It was especially emphasised that they should not look at each other’s responses and influence others with their opinions while filling out the forms. It was also noted that the statements they would write on the forms would not affect their course assessments or the teacher’s attitude and that they should be free to write any opinion of theirs. They were given 15 minutes to fill out the form. Then, the forms were collected and reviewed, and the data to be analysed were obtained by eliminating the forms that lacked metaphors.

Data Analysis

The data obtained within the scope of the study were analysed using the content analysis method. Patton (2014) defines content analysis as an attempt of data reduction and interpretation to identify the basic consistencies and meanings in a volume of qualitative data. Similarly, Yıldırım and Şimşek (2011) state that “the main purpose in content analysis is to reach the concepts and relationships that can explain the collected data”. In qualitative data analysis, descriptive analysis and content analysis are often confused and used interchangeably. Basically, descriptive analysis is a method in which the conceptual structure is clearly determined beforehand and the analysis process is performed based on this framework, whereas content analysis is a method in which the collected data is analysed thoroughly with a view to revealing the themes and dimensions, which are previously unclear, based on an inductive approach (Yıldırım & Şimşek, 2011, p.223).

In this context, the data obtained at the end of the data collection process were examined preliminarily, and possible erroneous/incomplete data were eliminated. Following this process, the metaphors created by the preservice teachers were grouped according to their programs and read many times by two researchers who were experts in their fields, and the metaphors of similar nature were divided into general categories. This analysis performed by two different researchers at different times was then compared, and the categories were finalised. The metaphors organised under the final categories were presented in tables. Besides, direct quotations from the metaphors of the preservice teachers were presented in the text in order to increase the reliability of the study results.

Ethics

Ethical principles were followed in all processes of this study, which aims to identify the metaphorical art perceptions of preservice teachers who study at the Faculty of Education, and the approval of the ethics committee dated 18/01/2023 and numbered 2022-SBB-0690 was received from the Social and Human Sciences Ethics Committee of Bartın University.

FINDINGS

In this section, the findings obtained from the analysis of the metaphors used by the participating preservice teachers for the concept of “art” are presented in line with the sub-purposes of the study. The findings are itemised within the scope of the research questions.

What are the conceptual categories under which preservice teachers’ metaphorical perceptions about the concept of “art” are grouped?

The first sub-purpose of the study is expressed with the question: “*What are the conceptual categories under which preservice teachers’ metaphorical perceptions of the concept of “art” are grouped?*”. In line with this sub-purpose, all the metaphors created for the concept of art were analysed, and categories were formed by grouping the metaphors considered semantically similar. While forming these categories, the expression “*is like*” in the data collection tool was used to understand the connection between the subject and the source of the metaphor, and the conjunction “*because*” formed a rationale or a logical basis for the metaphors of the participants. The categories formed as a result of the analyses are presented in Table 2.

Table 2. Conceptual categories of the metaphors for the concept of art

Category 1: Art as born and enhanced under difficulties and pressure
Category 2: Art as a complex structure

Category 3: Art as the fruits of labour
Category 4: Art as reflective and expressive
Category 5: Art as relaxing
Category 6: Art as immersive
Category 7: Art as a vital need
Category 8: Art as liberating
Category 9: Art as radiant and supportive

What are the metaphors created by the preservice teachers according to their programs?

The second sub-purpose of the study is expressed with the question: “*What are the metaphors created by the preservice teachers according to their programs?*”. In line with this sub-purpose, the metaphors produced by the preservice teachers were analysed based on their programs, and the data obtained from the analysis were presented using tables and direct quotations.

Turkish Language Education Program

The metaphors of art created by 25 preservice teachers studying in the Turkish Language Education Program are presented in Table 3.

Table 3. Conceptual Categories and Metaphors Created by Preservice Teachers in Turkish Language Education Program

Conceptual categories	Metaphors created for art	n
1 Art as born and enhanced under difficulties and pressure	Questionnaire distributed in an exam (TL1M) Lesson (TL18M)	2
2 Art as a complex structure	Life (TL2M) Compass (TL19M)	2
3 Art as the fruits of labour	Soil (TL3M) Climbing the stairs (TL23M)	2
4 Art as reflective and expressive	Mirror (TL4M) Mirror (TL17M)	2
5 Art as relaxing	Meditation (TL5F) Coming of spring (TL7F) Having a conversation (TL8F) Tree (TL22M)	4
6 Art as immersive	Book (TL6F) Black hole (TL9F)	2
7 Art as a vital need	Eating (TL10M) Nourishment for the soul (TL11F) Water (TL12F)	3
8 Art as liberating	Freedom (TL13F) Unseen side of a mountain (TL14F) Stairs up to the sky (TL16F) Endless road (TL20M) Liberty (TL21M) Sky (TL24F)	6
9 Art as radiant and supportive	Sun (TL15F) Investment (TL25M)	2
	Total	25

The data in the table show that the preservice teachers studying in the Turkish Language Education Program have created metaphors in all 9 categories. The details and sample statements for these metaphors are presented below.

Category 1: Art as born and enhanced under difficulties and pressure

In this category, 2 participants describe art as born and enhanced under difficulties and pressure, using the metaphors of questionnaire distributed in an exam (TL1M) and lesson (TL18M). A sample statement regarding the category is as follows: “*Art is like a questionnaire distributed in an exam because it appears under pressure, builds up under pressure and becomes complete.*” (TL1M)

Category 2: Art as a complex structure

In this category, art is described as a complex structure by 2 participants. The metaphors used include life (TL2M) and compass (TL19M). Relevantly, one student states; “*Art is like life because it is very complex.*” (TL2M)

Category 3: Art as the fruits of labour

In this category, 2 participants refer to art as the fruits of labour. The relevant metaphors include soil (TL3M) and climbing the stairs (TL23M). A sample statement is as follows: “*Art is like soil because as you dig, water, dredge and maintain, you definitely gain something.*” (TL3M)

Category 4: Art as reflective and expressive

In this category, 2 participants consider art as reflective and expressive, using the metaphor of mirror (TL4M, TL17M). An example statement for the category is; “*Art is like a mirror because it allows us to express everything inside.*” (TL4M)

Category 5: Art as relaxing

In this category, 4 participants describe art as relaxing. The metaphors used include meditation (TL5F), the coming of spring (TL7F), having a conversation (TL8F), and tree (TL22M). As an example, one student states; “*Art is like meditation because it relaxes you.*” (TL5F)

Category 6: Art as immersive

In this category, 2 participants consider art as immersive, using the metaphors of book (TL6F) and black hole (TL9F). A sample statement in the category is as follows: “*Art is like a book because as long as you do not open it up, it is boring, but when you get curious and look inside, it engages you.*” (TL6F)

Category 7: Art as a vital need

In this category, 3 participants refer to art as a vital need. The metaphors they have created include eating (TL10M), nourishment for the soul (TL11F), and water (TL12F). A relevant student statement is as follows: “*Art is like nourishment for the soul because it is essential.*” (TL11F)

Category 8: Art as liberating

In this category, 6 participants define art as liberating. The metaphors used are freedom (TL13F), unseen side of a mountain (TL14F), stairs up to the sky (TL16F), endless road (TL20M), liberty (TL21M), and sky (TL24F). A sample student statement for the category is as follows: “*Art is like freedom because you only act on your own thoughts.*” (TL13F)

Category 9: Art as radiant and supportive

In this category, 2 participants describe art as radiant and supportive, using the metaphors of the sun (TL15F) and investment (TL25M). Relevantly, one student states; “*Art is like the sun because it radiates energy.*” (TL15F)

When the metaphors are examined, it is observed that the preservice teachers have developed 25 meaningful metaphors for the concept of “art”. Considering the distribution of these metaphors, there are expressions for all 9 conceptual categories. The percentage distribution of the categories is illustrated in Figure 1:

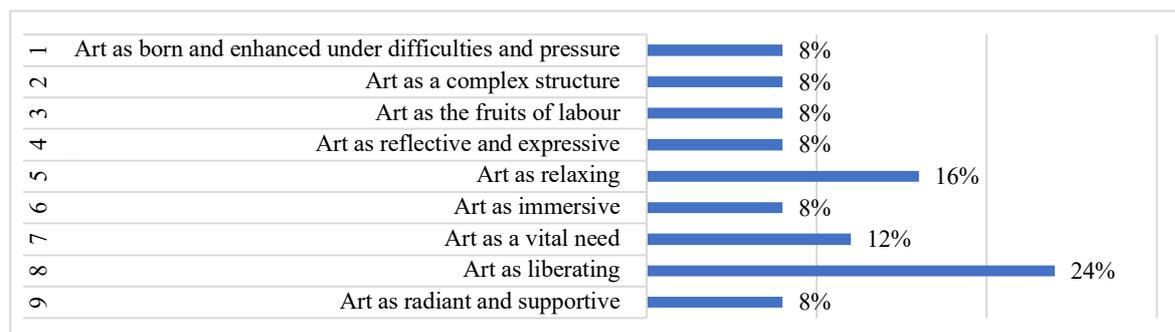


Figure 1. *The Percentage Distribution of the Conceptual Categories of Metaphors Created by the Preservice Teachers Studying in the Turkish Language Education Program***Social Sciences Education Program**

The metaphors produced for the concept of “art” by 36 preservice teachers studying in the Social Sciences Education Program are presented in Table 4.

Table 4. Conceptual Categories and Metaphors Created by Preservice Teachers in the Social Sciences Education Program

Conceptual categories	Metaphors created for art	n
2	Art as a complex structure Life (SS27F) Mind (SS26U) Religion (SS20F)	3
3	Art as the fruits of labour Human (SS37M) Bee (SS9F) Woman (SS4U) Being in love (SS3F)	4
4	Art as reflective and expressive Emotion (SS33M) Part of human emotions (SS32U) Mirror (SS22F) Speaking without words (SS16M) Mirror (SS11F)	5
5	Art as relaxing Love (SS34M) Love (SS30F) Smell of earth (SS24M) Chocolate (SS10F) Medicine (SS8M) Alcohol (SS7M) Mirror (SS2U)	7
6	Art as immersive Water (SS31F) Universe (SS23F) Time (SS14F)	3
7	Art as a vital need Furkan (SS35F) Sun (SS17F) Breath (SS5F)	3
8	Art as liberating Time machine (SS29M) Door (SS28F) Daydreaming (SS25F) Dream (SS19M) Infinite sky (SS18U) Colours (SS15F) Pen (SS12M) Ocean (SS6F)	8
9	Art as radiant and supportive Summer (SS36U) Sun (SS13F) Song (SS1U)	3
	Total	36

When the data in the table is examined, it is observed that the preservice teachers in the Social Sciences Education Program have created metaphors in 8 of 9 categories, excluding “*Category 1: Art as born and enhanced under difficulties and pressure*”. The relevant details and sample statements are presented below.

Category 2: Art as a complex structure

In this category, 3 participants describe art as a complex structure. The metaphors used include life (SS27M), mind (SS26U), and religion (SS20F). A sample student statement in the category is as follows: “*Art is like life because it changes.*” (SS27F)

Category 3: Art as the fruits of labour

In this category, 4 participants describe art as the fruits of labour. The metaphors used are human (SS37M), bee (SS9F), woman (SS4U), and being in love (SS3F). As an example, one student states; “*Art is like a bee because it creates its own work with its own efforts.*” (SS9F)

Category 4: Art as reflective and expressive

In this category, 5 participants consider art as reflective and expressive. The metaphors created include emotion (SS33M), part of human emotions (SS32U), mirror (SS22F, SS11F), and speaking without words (S16M). A sample student statement is as follows: “*Art is like a mirror because it is the reflection of the soul. Just as we look in the mirror and see the reflection of our mood, art is the expression of the illusions in our souls.*” (SS22F)

Category 5: Art as relaxing

In this category, 7 participants characterise art as relaxing. The relevant metaphors include love (SS34M, SS30F), the smell of earth (SS24M), chocolate (SS10F), medicine (SS8M), alcohol (SS7M), and mirror (SS2U). A sample student statement for the category is; “*Art is like the smell of earth because it gives people peace.*” (SS24M)

Category 6: Art as immersive

In this category, 2 participants describe art as immersive, using the metaphors of universe (SS23F) and time (SS14F). A sample statement is as follows: “*Art is like time because when we are engaged in art, we do not understand how it flows.*” (SS14F)

Category 7: Art as a vital need

In this category, 4 people describe art as a vital need. The metaphors produced include Furkan (SS35F), the sun (SS17F), breath (SS5F), and water (SS31F). As an example, one student states; “*Art is like breath because it provides the individual with the right to live.*” (SS5F)

Category 8: Art as liberating

In this category, 8 participants describe art as liberating. The metaphors used are time machine (SS29F), door (SS28F), daydreaming (SS25F), dream (SS19M), infinite sky (SS18U), colours (SS1F), pen (SS12M), and ocean (SS6F). A relevant statement is as follows: “*Art is like a time machine because it can make you travel to the past and the future.*” (SS29F)

Category 9: Art as radiant and supportive

In this category, 3 participants describe art as radiant and supportive using the metaphors of summer (SS36U), sun (SS13F), and song (SS1U). An example student statement in the category is; “*Art is like the summer season because there is excitement in both.*” (SS36U)

When the metaphors are examined, it is observed that the preservice teachers have created 36 meaningful metaphors for the concept of “art”. The distribution of these metaphors indicates that metaphors have been developed for 8 of 9 conceptual categories. The percentage distribution of the categories is illustrated in Figure 2.

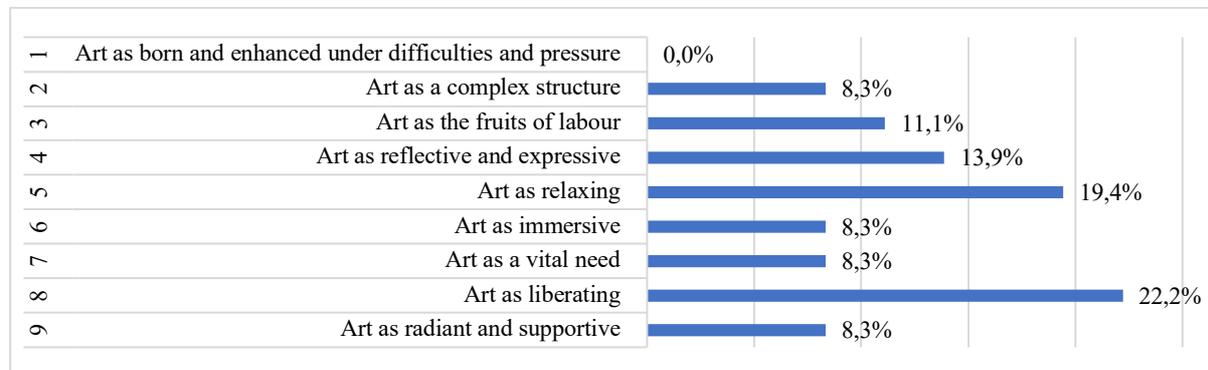


Figure 2. The Percentage Distribution of the Conceptual Categories of Metaphors Created by the Preservice Teachers Studying in the Social Sciences Education Program

Psychological Counselling and Guidance Program

The metaphors created for the concept of “art” by 41 preservice teachers in the PCG Program are presented in Table 5.

Table 5. Conceptual Categories and Metaphors Created by Preservice Teachers in the PCG Program

Conceptual categories	Metaphors created for art	n
1 Art as born and enhanced under difficulties and pressure	Love (PC8M)	1

2	Art as a complex structure	Life (PC40U) Reading a book (PC34M) Puzzle (PC24M) Life (PC11F) Soul (PC7F) Human (PC4M)	6
3	Art as the fruits of labour	Rose (PC20M) Human (PC14M)	2
4	Art as reflective and expressive	Loneliness (PC30F) Feeling of love (PC21U) Water (PC19M) Mirror (PC18F) Language of the soul (PC17F) Mirror (PC5M) Human soul (PC3F) Night abandoned by the Sun (PC2M) Reflection of dreams (PC1F)	9
5	Art as relaxing	Rainbow (PC39F) Sea (PC32F) Lying on a lush green river full of swans (PC29F) Therapy (PC28M) Resting hours (PC23U) Ability to produce something (PC12F) Sky (PC10F) Freshly washed bed linens (PC6F)	8
6	Art as immersive	Dream (PC15F)	1
7	Art as a vital need	Food (PC37M) Water (PC31F) Water (PC16F) Sun (PC13F)	4
8	Art as liberating	Ocean (PC38F) Eternity (PC36M) Ocean (PC33F) Outer space (PC26F) Giving a speech (PC25M) Sky (PC22F) Freedom (PC9F)	7
9	Art as radiant and supportive	Unopened gift (PC41F) Book (PC35F) Rainbow (PC27F)	3
		Total	41

When the data in the table are examined, it is observed that the preservice teachers studying in the PCG Program have created metaphors in all 9 categories. The details and sample expressions of these metaphors are presented below.

Category 1: Art as born and enhanced under difficulties and pressure

In this category, only 1 participant describes art as born and enhanced under difficulties and pressure, using the metaphor of love (PC8M). The relevant statement is: “*Art is like love because both are painful.*” (PC8M)

Category 2: Art as a complex structure

In this category, 6 participants refer to art as a complex structure. The metaphors used include life (PC40U, PC11F), reading a book (PC34M), puzzle (PC24M), soul (PC7F), and human (PC4M). A sample student statement in the category is as follows: “*Art is like life because it contains everything.*” (PC40U)

Category 3: Art as the fruits of labour

In this category, 2 participants describe art as the fruits of labour. The metaphors used are rose (PC20M) and human (PC14M). As an example, one student states; “*Art is like human because it wants to exist and strives to exist with good or bad, right or wrong.*” (PC14M)

Category 4: Art as reflective and expressive

In this category, 9 participants describe art as reflective and expressive. The metaphors used include loneliness (PC30F), the feeling of love (PC21U), water (PC19M), mirror (PC18F, PC5M), language of the soul (P17F), human soul (PC3F), the night abandoned by the sun (PC2M), and the reflection of dreams (PC1F). A sample student statement is as follows: “*Art is like water because just as water takes the shape of its container, art takes the shape of every human being and reflects it.*” (PC19M)

Category 5: Art as relaxing

In this category, 8 participants consider art as relaxing. The metaphors used include rainbow (PC39F), sea (PC32F), lying on a lush green river full of swans (PC29F), therapy (PC28M), resting hours (PC23U), the ability to produce something (PC12F), sky (PC10F), and freshly washed bed linens (PC6F). An example statement in the category is as follows: “*Art is like therapy because both the performer and the audience are relaxed.*” (PC28M)

Category 6: Art as immersive

In this category, only 1 person describes art as immersive, using the metaphor of dream (PC15F). The relevant statement is as follows: “*Art is like a dream because when we wake up, we wish to experience it very intensely again in order to feel its magic and peace.*” (PC15F)

Category 7: Art as a vital need

In this category, 4 participants refer to art as a vital need. The metaphors created include food (PC37M), water (PC31F, PC16F), and the sun (PC13F). Relevantly, one student states; “*Art is like water because we always need it in our life.*” (PC31F)

Category 8: Art as liberating

In this category, 7 participants describe art as liberating. The metaphors used are ocean (PC33F, PC38F), eternity (PC36M), outer space (PC26F), giving a speech (PC25M), sky (PC22F), and freedom (PC9F). An example student statement in the category is; “*Art is like giving a speech because we can freely express our own ideas in our area of talent.*” (PC25M)

Category 9: Art as radiant and supportive

In this category, 3 participants describe art as radiant and supportive, using the metaphors of unopened gift (PC41F), book (PC35F), and rainbow (PC27F). A sample statement in the category is as follows: “*Art is like a rainbow because it colours our lives with colourful works.*” (PC27F)

When the metaphors are examined, it is observed that the preservice teachers have developed 41 meaningful metaphors for the concept of “art”. The distribution of these metaphors demonstrates that there are expressions for all 9 conceptual categories. The percentage distribution of the categories is illustrated in Figure 3.

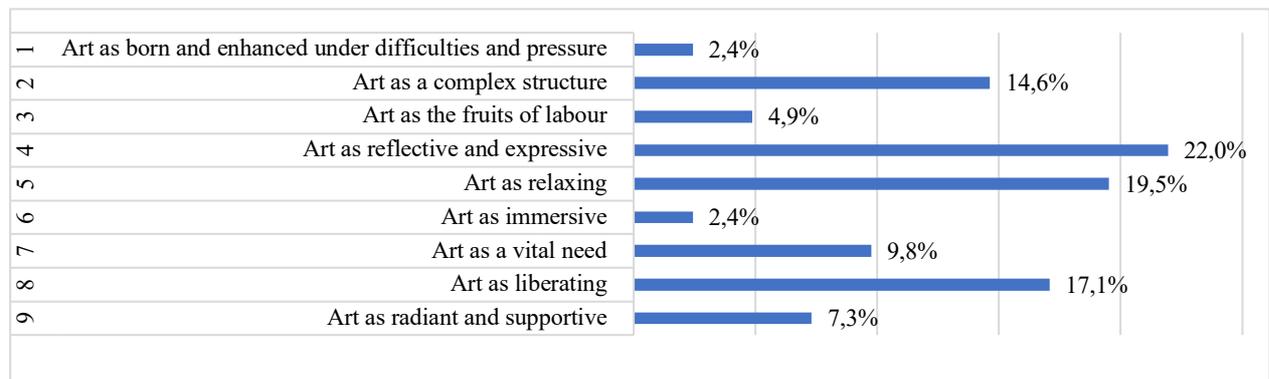


Figure 3. The Percentage Distribution of the Conceptual Categories of Metaphors Created by the Preservice Teachers Studying in the Psychological Counselling and Guidance Program

Science Education Program

The metaphors created for the concept of “art” by 5 preservice teachers in the Science Education Program are presented in Table 6.

Table 6. Conceptual Categories and Metaphors Created by Preservice Teachers in the Science Education Program

Conceptual categories	Metaphors created for art	n
2 Art as a complex structure	Formation of a garden or a swamp by raindrops (S5F)	1

4	Art as reflective and expressive	Door opening to thoughts (S2F)	1
5	Art as relaxing	Spring enriching the spirit (S1M) Psychologist (S4F)	2
9	Art as radiant and supportive	Sun (S3F)	1
Total			5

When the data in the table are examined, it is observed that the preservice teachers studying in the Science Education Program have created metaphors in 4 of 9 categories. There are no metaphors for “*Category 1: Art as born and enhanced under difficulties and pressure*”, “*Category 3: Art as the fruits of labour*”, “*Category 6: Art as immersive*”, “*Category 7: Art as a vital need*” and “*Category 8: Art as liberating*”. The relevant details and sample expressions are presented below.

Category 2: Art as a complex structure

In this category, 1 person describes art as a complex structure, using the metaphor of formation of a garden or a swamp by raindrops (S5F). The relevant statement is as follows: “*Art is like a raindrop because depending on where the raindrop falls, there forms either a garden or a swamp.*” (S5F)

Category 4: Art as reflective and expressive

In this category, 1 person describes art as reflective and expressive, using the metaphor of door opening to thoughts (S2F). The relevant statement is: “*Art is like a door because it allows you to open your thoughts so that you pour your ideas and feelings into your work.*” (S2F).

Category 5: Art as relaxing

In this category, 2 participants consider art as relaxing. The metaphors used include spring enriching the spirit (S1M) and psychologist (S4F). An example student statement in the category is as follows: “*Art is like a psychologist because it relieves distress and relaxes the mind.*” (S4F).

Category 9: Art as radiant and supportive

In this category, 1 person describes art as radiant and supportive, using the metaphor of the sun (S3F). The relevant statement is: “*Art is like the sunrise and sunset because when the sun rises, art rises, when the sun reaches the top, art rises to the top, and when the sun sets, art ends.*” (S3F)

When the metaphors are examined, it is observed that the preservice teachers have created 5 meaningful metaphors for the concept of “art”. The distribution of these metaphors shows that there are expressions for 4 of 9 conceptual categories. The percentage distribution of categories is illustrated in Figure 4.

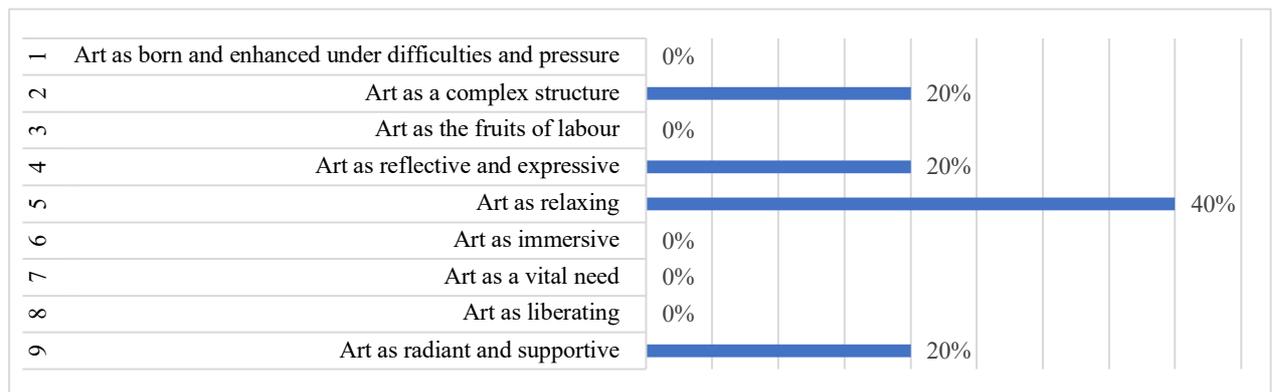


Figure 4. The Percentage Distribution of the Conceptual Categories of Metaphors Created by the Preservice Teachers Studying in the Science Education Program

3.2.5. Elementary Mathematics Education Program

The metaphors created for the concept of “art” by 31 preservice teachers in the Elementary Mathematics Education Program are presented in Table 7.

Table 7. Conceptual Categories and Metaphors Created by Preservice Teachers in the Elementary Mathematics Education Program

Conceptual categories	Metaphors created for art	n
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2	Art as a complex structure	Moon (EM1M) Fingerprint (EM2M) Math (EM3M) Woman (EM4F) Tree (EM5M)	5
3	Art as the fruits of labour	Rain (EM6M) Growing flowers (EM7M) Wine (EM8M)	3
4	Art as reflective and expressive	Ayran (EM9M) Peacock (EM10M) Song (EM11F)	3
5	Art as relaxing	Peace (EM12M) Sea (EM13U) Breeze (EM14F) Cotton (EM15F) Silence of the nature (M16M) Psychologist (EM17F)	6
6	Art as immersive	TV Series (EM19M)	1
7	Art as a vital need	Soul (EM20F) Soul (EM21U) Math (EM22F) Sun (EM23U) Eye (EM24M) Fruit tree (EM25F) Light (EM26F) Rice and beans (EM18M)	8
8	Art as liberating	Sky (EM27F) Stairs to the light (EM28F) Sky (EM29F) Infinity in Math (EM30F) Eternity (EM31F)	5
Total			31

When the data in the table are examined, it is observed that the preservice teachers studying the Elementary Mathematics Education Program have created metaphors in 7 of 9 categories. The categories for which no metaphors have been created include “*Category 1: Art as born and enhanced under difficulties and pressure*” and “*Category 9: Art as radiant and supportive*”. The details and sample expressions of the existing metaphors are presented below.

Category 2: Art as a complex structure

In this category, 5 participants describe art as a complex structure, using the metaphors of moon (EM1M), fingerprint (EM2M), math (EM3M), woman (EM4F), and tree (EM5M). A sample statement in the category is as follows: “*Art is like a tree because it has all sorts of branches and leaves.*” (EM5M)

Category 3: Art as the fruits of labour

In this category, 3 participants consider art as the fruits of labour. The relevant metaphors include rain (EM6M), growing flowers (EM7M), and wine (EM8M). An example statement in the category is as follows: “*Art is like growing flowers because watching it grow day by day enlightens one’s heart.*” (EM7M)

Category 4: Art as reflective and expressive

In this category, 3 participants describe art as reflective and expressive. The metaphors used are ayran (EM9M), peacock (EM10M), and song (EM11F). As an example, one student states; “*Art is like ayran because everybody has their own way of drinking it.*” (EM9M)

Category 5: Art as relaxing

In this category, 6 participants characterise art as relaxing. The metaphors created include peace (EM12M), sea (EM13U), breeze (EM14F), cotton (EM15F), silence of the nature (EM16M), and psychologist (EM17F). A sample statement is as follows: “*Art is like cotton because when you are engaged in art you feel the same feeling that touching the cotton gives you.*” (EM15F)

Category 6: Art as immersive

In this category, only 1 person describes art as immersive, using the metaphor of TV series (EM19M). The relevant statement regarding the category is as follows: “*Art is like TV series because it slowly drags you in.*” (EM19M)

Category 7: Art as a vital need

In this category, 8 participants consider art as a vital need. The metaphors used include the soul (EM20F, EM21U), math (EM22F), sun (EM23U), eye (EM24M), fruit tree (EM25F), light (EM26F), and rice and beans (EM18E). An example statement is; “*Art is like rice and beans because one remains plain without art.*” (EM18M)

Category 8: Art as liberating

In this category, 5 people describe art as liberating. The relevant metaphors are the sky (EM27F, EM29F), stairs to light (EM28F), infinity in math (EM30F), and eternity (EM31F). A sample statement in the category is as follows: “*Art is like the sky because it is immense, and imagination is used limitlessly.*” (EM27F)

When the metaphors are examined, it is observed that the preservice teachers have created 31 meaningful metaphors for the concept of “art”. The distribution of these metaphors shows that there are expressions for 7 of 9 conceptual categories. The percentage distribution of categories is illustrated in Figure 5.

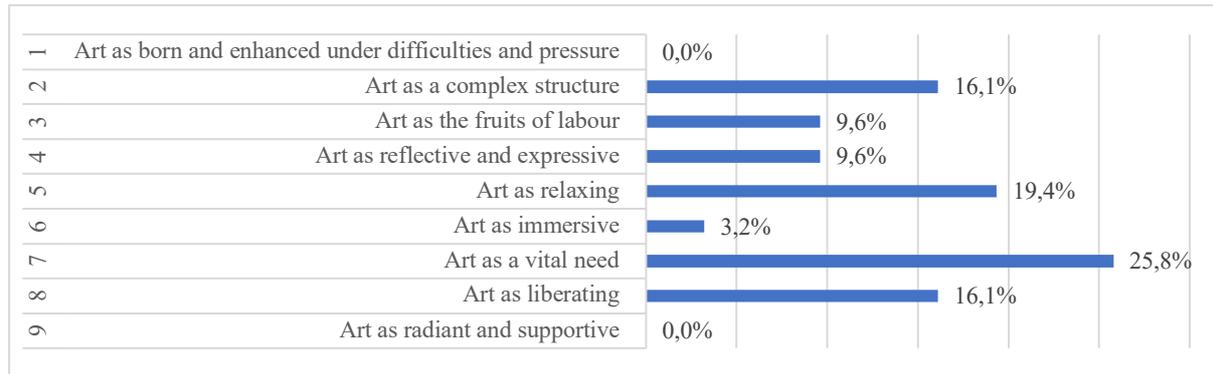


Figure 5. The Percentage Distribution of the Conceptual Categories of Metaphors Created by the Preservice Teachers Studying in the Elementary Mathematics Education Program

Foreign Language Education Program

The metaphors created for the concept of “art” by 22 preservice teachers in the Foreign Language Education Program are presented in Table 8.

Table 8. Conceptual Categories and Metaphors Created by Preservice Teachers in the Foreign Language Education Program

Conceptual categories	Metaphors created for art	n
2 Art as a complex structure	Breeze (FL21F)	6
	Religion (FL18M)	
	Soul (FL14M)	
	Couple in a long-distance relationship (FL8F)	
	Pearl (FL7F)	
4 Art as reflective and expressive	Incomplete life (FL6M)	6
	Life (FL3F)	
	Mirror (FL13M)	
	Reflection on the water (FL10F)	
	Bright eye (FL9M)	
5 Art as relaxing	Lecturing (FL2F)	5
	Woman (FL11F)	
	Guide (FL1F)	
	Faraway home (FL20M)	
	Hot coffee (FL19M)	
	Therapy (FL17F)	
	Window (FL15M)	

7	Art as a vital need	Love (FL12M)	1
8	Art as liberating	Soul (FL5F) Universe (FL4F)	2
9	Art as radiant and supportive	Face of the beloved one (FL16F)	1
Total			21

The data in the table show that the preservice teachers studying in the Foreign Language Education Program have created metaphors in 6 of 9 categories, excluding “*Category 1: Art as born and enhanced under difficulties and pressure*”, “*Category 3: Art as the fruits of labour*” and “*Category 6: Art as immersive*”. The relevant details and sample expressions are presented below.

Category 2: Art as a complex structure

In this category, 6 participants describe art as a complex structure. The metaphors used include breeze (FL21F), religion (FL18M), soul (FL14M), a couple in a long-distance relationship (FL8F), pearl (FL7F), and incomplete life (FL6M). A sample statement in the category is as follows: “*Art is like a religion because it is up to us to believe whether it will make our life better or not when we have faith.*” (FL18M)

Category 4: Art as reflective and expressive

In this category, 6 participants describe art as reflective and expressive. The relevant metaphors are life (FL3F), mirror (FL13M), reflection on the water (FL10F), bright eye (FL9M), lecturing (FL2F), and woman (FL11F). As an example, one student states; “*Art is like lecturing because we try to convey our feelings and thoughts in the best way, and we get help from many methods, techniques, etc. while doing this, just as we use certain methods while teaching a lesson. The most important point is that it makes you happy, as when the person who lectures is happy, the lesson becomes very productive, when the artist is pleased with his/her work, it becomes valuable.*” (FL2F)

Category 5: Art as relaxing

In this category, 5 participants describe art as relaxing. The metaphors used are guide (FL1F), faraway home (FL20M), hot coffee (FL19M), therapy (FL17F), and window (FL15M). A sample statement in the category is as follows: “*Art is like a faraway home because you always miss that home, and when you arrive there, you feel warm and safe.*” (FL20M)

Category 7: Art as a vital need

In this category, only 1 person refers to art as a vital need, using the metaphor of love (FL12M). The relevant statement is as follows: “*Art is like love because you cannot neglect it, you cannot give it up. When you give up, you become aimless and you become nothing.*” (FL12M)

Category 8: Art as liberating

In this category, 2 participants describe art as liberating, using the metaphors of soul (FL5F) and universe (FL4F). Relevantly, one student states; “*Art is like the universe because art has no boundaries like the universe.*” (FL4F)

Category 9: Art as radiant and supportive

In this category, only 1 person refers to art as radiant and supportive, using the metaphor of the face of the beloved one (FL16F). The relevant statement is as follows: “*Art is like the face of your beloved one because the more you look at it, the more you want to look, and you lose yourself in a different detail at each glance. You never get tired of looking at it, you take more pleasure each time.*” (FL16F)

When the metaphors are examined, it is observed that the preservice teachers have created 21 meaningful metaphors for the concept of “art”. The distribution of the metaphors indicates that there are expressions for 6 of 9 conceptual categories. The percentage distribution of the categories is illustrated in Figure 6.

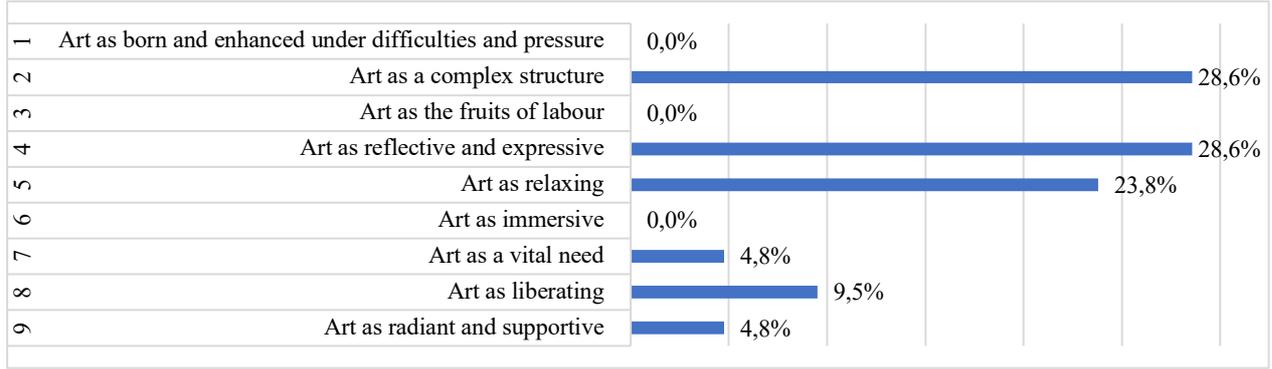


Figure 5. *The Percentage Distribution of the Conceptual Categories of Metaphors Created by the Preservice Teachers Studying in the Foreign Language Education Program*

Primary Education Program

The metaphors created for the concept of “art” by 39 preservice teachers in the Primary Education Program are presented in Table 9.

Table 9. Conceptual Categories and Metaphors Created by Preservice Teachers in the Primary Education Program

Conceptual categories	Metaphors created for art	n	
1	Art as born and enhanced under difficulties and pressure	Chain (P26M)	1
2	Art as a complex structure	Running (P38F) God (P34F) Trees growing without harming each other’s branches (P30F) Rainbow (P11F)	4
3	Art as the fruits of labour	Love (P10F) Gardening (P9F)	2
4	Art as reflective and expressive	Spring (P23F) Nature (P22M) What is felt while drinking coffee or smoking (P20U) Feeling (P14M) Life (P7M) Rainbow (P1M) Sincerity (P3F)	7
5	Art as relaxing	Meditation (P36F) Ship’s captain (P27F) Sibling/Pen (P24F) Favourite food (P17U) Air, water, family (P5F)	5
6	Art as immersive	Painting (P31F) Dream (P25M) Time (P16F) Discovering new places (P12F) Compass (P4F) Liberating and relaxing game (P6F)	6
7	Art as a vital need	Nature (P39F) Sun (P37F) Sun (P35F) Life (P32F) Food (P15F) Water (P19F)	6
8	Art as liberating	Dream (P2F) Sky (P13F) Music (P18F) Republic (P21F) Freedom (P28F) Blue sea (P29F)	6
U9	Art as radiant and supportive	Sun glitters (P33F) Candle (P8F)	2
Total		39	

The data in the table show that the preservice teachers studying in the Primary Education Program have created metaphors in all 9 categories. The details and sample expressions of these metaphors are presented below.

Category 1: Art as born and enhanced under difficulties and pressure

In this category, only 1 person describes art as born and enhanced under difficulties and pressure, using the metaphor of chain (P26M). The relevant statement is as follows: “*Art is like a chain because it connects people.*” (P26E).

Category 2: Art as a complex structure

In this category, 4 participants describe art as a complex structure. The metaphors used include running (P38F), God (P34F), trees growing without harming each other’s branches (P30F), and rainbow (P11F). A sample

statement in the category is as follows: “*Art is like a rainbow because art arises from differences like the colour differences in the rainbow. Both are rich with their differences.*” (P11F).

Category 3: Art as the fruits of labour

In this category, 2 participants consider art as the fruits of labour. The metaphors used are love (P10F) and gardening (P9F). Relevantly, one student states; “*Art is like gardening because the gardener takes care of the garden in his/her responsibility making the environment beautiful. Similarly, art make the environment beautiful as one is engaged in it.*” (P9F)

Category 4: Art as reflective and expressive

In this category, 7 participants characterise art as reflective and expressive. The relevant metaphors include spring (P23F), nature (P22M), what is felt while drinking coffee or smoking (P20U), feeling (P14M), life (P7M), rainbow (P1M), and sincerity (P3F). A sample statement in the category is as follows: “*Art is like what is felt while drinking coffee or smoking because one has the opportunity to think more deeply and listen to their innermost at these moments.*” (P20U)

Category 5: Art as relaxing

In this category, 5 participants describe art as relaxing. The metaphors used are meditation (P36F), ship’s captain (P27F), sibling/pen (P24F), favourite food (P17U), and air-water-family (P5F). An example for the student statements in the category is as follows: “*Art is like a sibling (1) and a pen (2) because 1: It shares one’s burden like a brother/sister. 2: We can move it as we wish like a pen*” (P24F) (Since the metaphor of pen falls under the reflective expressive category, it was considered that this data could fall under the relaxing/reflective category).

Category 6: Art as immersive

In this category, 6 participants describe art as immersive. The relevant metaphors include painting (P31F), dream (P25M), time (P16F), discovering new places (P12F), compass (P4F), and liberating and relaxing game (P6F). A sample statement in the category is as follows: “*Art is like a game that liberates and relaxes people because it arouses interest to the full extent and unites it at one single point.*” (P6F)

Category 7: Art as a vital need

In this category, 6 participants refer to art as a vital need. The metaphors produced are the nature (P39F, received art education), the sun (P37F, P35F), life (P32F), food (P15F), and water (P19F). An example for the student statements regarding the category is as follows: “*Art is like water because it is the basic need of life as is water.*” (P19F)

Category 8: Art as liberating

In this category, 6 participants describe art as liberating. The metaphors used include dream (P2F), sky (P13F), music (P18F), republic (P21F), freedom (P28F), and blue sea (P29F). A sample student statement in the category is as follows: “*Art is like a republic because the republic is freedom and hope, because both make human free and modern.*” (P21F)

Category 9: Art as radiant and supportive

In this category, 2 participants consider art as radiant and supportive, using the metaphors of sun glitters (P33F), and candle (P8F). A relevant statement is as follows: “*Art is like a candle because it radiates its surroundings.*” (P8F).

When the metaphors are examined, it is observed that the preservice teachers have created 39 meaningful metaphors for the concept of “art”. The distribution of these metaphors indicates that there are expressions for all 9 conceptual categories. The percentage distribution of the categories is illustrated in Figure 7.

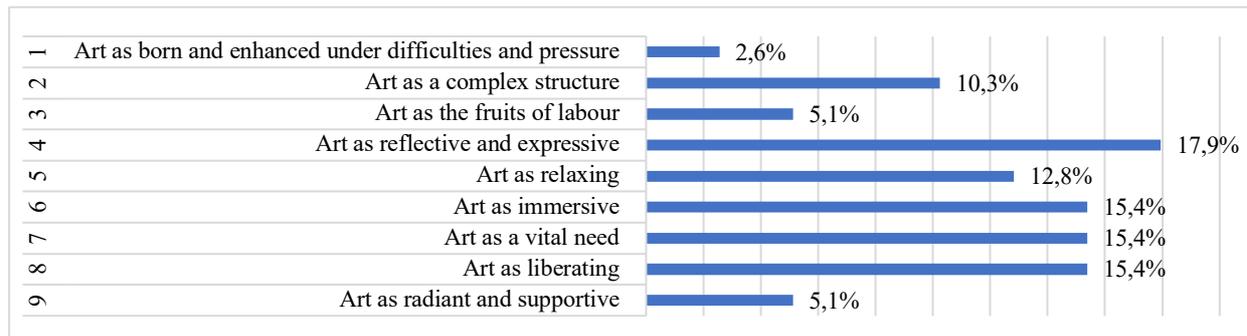


Figure 6. *The Percentage Distribution of the Conceptual Categories of Metaphors Created by the Preservice Teachers Studying in the Primary Education Program***Do the metaphors of preservice teachers differ by program?**

The third sub-purpose of the study is expressed with the question: “*Do the metaphors of preservice teachers differ by program?*”. In line with this sub-purpose, the metaphors created by the preservice teachers were first analysed based on their programs, and then the data obtained from the analysis were compared on the basis of all programs and presented in Table 10.

Table 10. The Percentage Distribution of Categories of Metaphors Created on the Basis of All Programs

	Turkish Language Education	Social Education	PCG	Science Education	E. Math. Education	Foreign Language Education	Primary Education
Category 1: Art as born and enhanced under difficulties and pressure	8%	-	2.4%	-	-	-	2.6%
Category 2: Art as a complex structure	8%	8.3%	14.6%	20%	16.1%	28.6%	10.3%
Category 3: Art as the fruits of labour	8%	11.1%	4.9%	-	9.6%	0.0%	5.1%
Category 4: Art as reflective and expressive	8%	13.9%	22.0%	20%	9.6%	28.6%	17.9%
Category 5: Art as relaxing	16%	19.4%	19.5%	40%	19.4%	23.8%	12.8%
Category 6: Art as immersive	8%	8.3%	2.4%	-	3.2%	-	15.4%
Category 7: Art as a vital need	12%	8.3%	9.8%	-	25.8%	4.8%	15.4%
Category 8: Art as liberating	24%	22.2%	17.1%	-	16.1%	9.5%	15.4%
Category 9: Art as radiant and supportive	8%	8.3%	7.3%	20%	-	4.8%	5.1%

As can be observed in the table, three programs perceive art as “reflective and expressive”, while two programs consider art as “liberating”. Even though it seems that these results can be generalised at a certain level, no opinion can be formed due to the lack of an adequately identifiable relationship between the categories and programs. Therefore, it can be suggested that the metaphors created differ from each other based on programs.

DISCUSSION AND CONCLUSION

The study has revealed that the art-related metaphors of the senior-year preservice teachers enrolled in different departments at the Faculty of Education of Bartın University generally reflect their positive emotional states. The result of these reflections evaluated under 9 categories also indicates that the perception of art metaphor is considered with regard to creativity. Based on their semantic structures, these categories are named as “*art as born and enhanced under difficulties and pressure*”, “*art as a complex structure*”, “*art as the fruits of labour*”, “*art as reflective and expressive*”, “*art as relaxing*”, “*art as immersive*”, “*art as a vital need*”, “*art as liberating*” and “*art as radiant and supportive*”. Similarly, Yalçın Wells (2015) came up with 9 categories in her research with preservice visual arts teachers, whereas Hiçyılmaz and Adanır (2019) determined 7 themes for the perceptions of art in their study with preservice teachers studying in primary education and early childhood education programs. When these results are compared, it can be stated that the reason for the relevant diversity in the study by Yalçın Wells (2015) is that the research was conducted with preservice visual arts teachers receiving art education. Since the preservice teachers in this department study art during their four-year education, their perceptions of art develop throughout this period. On the other hand, the reason for fewer themes in the study by Hiçyılmaz and Adanır (2019) is that the research was limited to primary education and early childhood education programs. Taking these into account, it can be concluded that 9 categories could be achieved in this study because teaching programs with different qualities were included.

The study has also revealed that the perspectives of art-related metaphors vary based on different programs, which constitute one of the original values of the research. In this context, the preservice teachers in Turkish Language Education and Social Sciences Education programs mainly describe art as “**liberating**” (24% and 22.2% respectively), those in PCG and Primary Education programs as “**reflective and expressive**” (22% and 17.9% respectively), those in Science Education program as “**relaxing**” (40%), those in Elementary Mathematics

Education program as “**a vital need**” (25.8%), and those in Foreign Language Education program as “**complex**” (28.6%) and “**reflective and expressive**” (28.6%).

It is noteworthy that these results differ from those obtained by Nalinci and Yapıcı (2020), when considered specifically for primary education. In their research, Nalinci and Yapıcı (2020) present that preservice teachers in primary education program describe art mostly in terms of beauty and admiration. This result is a remarkable example of the fact that perceptions of individuals may differ even if they go through the same educational processes, and that different results may be obtained in studies on human.

In the present study, the preservice teachers enrolled in different programs have come up with descriptions based on the dynamics and values of their field of study. For example, the reflective and expressive descriptions of PCG students are affected by their interest in psychology, and they are complementary to their ability to get to know and understand people in the broadest sense. The dominance of liberating description in the fields of Turkish language and social sciences can be associated with their need for creativity and unconventional teaching methods. The high number of relaxing descriptions in the field of science indicates the hope and tendency for the systematic structure of this field to become more understandable with metaphors of art. The reflective and expressive descriptions in the field of primary education can be considered as a reference to the practical environment where students are in childhood and the teacher can understand individual differences with reflective and expressive reactions. Art metaphors considered as a vital need in the field of mathematics imply that art education also plays a role in the systematic structure of mathematics and mathematics education. Even though the combination of complex and reflective-expressive descriptions in the field of foreign language does not lead to a significant result, it can be associated with the complex structure of language education.

The fact that different fields at the faculty of education have different perspectives of art metaphors reveals a basic necessity and similarity. Each field’s view of art metaphors and the metaphorical language they use while expressing this view indicate that art and art metaphors serve as an interdisciplinary teaching tool, and a facilitating and improving dynamic of learning and teaching stages. At this point, it is necessary to mention the difference between computational and linguistic fields considering their perspectives of art. Art is considered rather as a liberating and complementary discipline which is compulsory to get to know the student in the field of social sciences, whereas an intuitive relationship is established between the nature of metaphor and the nature of mathematical sciences even though rhetorical approaches are occasionally encountered in these fields.

It is necessary that preservice teachers in all departments receive art education or take interdisciplinary art courses during their undergraduate education and make their lessons more educational, instructive, enjoyable and permanent using art and artistic practices at all levels. In Faculties of Education, only Primary Education programs involve a course called Visual Arts Education. In other teacher training programs, students do not have the chance to establish a disciplinary contact with art, except for elective courses. However, all students in the fields of teaching can increase the quality of education using the opportunities provided by interdisciplinary practices including modernisation and STEAM activities. For this reason, the need for art and art education can be emphasised.

In addition, it should be noted that preservice teachers’ metaphors of art are important in that teachers as essential components to raise future generations and guide the development of the society have knowledge of art, deliver their lessons enriching with art, and raise creative students who have an enhanced aesthetic perspective, increased social sensitivity, and a different view to the environment and society.

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