

Do Natural Background Sounds Impact Artistic Production and the Attitudes Towards Art Education?

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Abstract

The aim of this study is to investigate whether there is any impact of natural sound backgrounds on artistic production and attitudes toward the art education curriculum among 120 female primary school students in Riyadh's international schools. This study adopted the experimental approach to design two groups (control and experimental) to test the effectiveness of the independent variable (listening to natural sounds in the art education classroom) on the dependent variables (artistic production and attitudes toward the art education curriculum), as indicated by the scores of the two tools.

The results showed a positive impact of natural sound backgrounds on some skills in artistic production and attitudes toward the art education curriculum. To achieve beautiful artwork, natural sound backgrounds can be added to classrooms and home environments while students do homework, play, practice arts, and pursue further studies at various levels such as high schools and universities. Additionally, other variables like creative thinking and different socio-economic backgrounds could be examined.

Keywords: Nature's Background Sounds, Auditory Arts, Visual Arts, Artistic Production, Attitudes Towards Subject..

Introduction:

We know that the sounds made in nature were the beginnings of tune; the earth has a tune for those who listen to and reach a plethora of cultures, languages, and groups. Throughout history, auditory art has supported people in telling stories, investigating the world around them, increasing their learning, and influencing or expressing moods. Nature's background sounds could prove an effective learning tool.

The influence of nature sounds on artworks and attitudes towards art education is a captivating topic that bridges the realms of sensory perception and pedagogical psychology. Art education at the elementary level lays the foundation for a lifelong appreciation of creativity and self-expression. This research paper seeks to delve into the pivotal role that art instruction plays. In the context of elementary education, art serves as a powerful tool for nurturing imagination, fostering fine motor skills, and enhancing visual-spatial understanding. Furthermore, the research paper explores the connections between visual arts and auditory art, recognizing the potential for interdisciplinary learning at the elementary level. Understanding how art contributes to a holistic educational experience can inform educators in optimizing their teaching methods to enhance student development. Through this exploration, we aspire to

underscore the significance of art education in shaping the foundational years of a child's academic journey, emphasizing its role in fostering creativity and a lifelong appreciation for the arts.

This paper aims to explore the potential impact of nature's sounds on artistic creations and the overall attitudes students hold toward art education. As we delve into this inquiry, we seek to unravel the intricate relationship between auditory stimuli from nature and the creative process. Additionally, we aspire to understand how exposure to these sounds may shape the perspectives and engagement of students in the context of art education. This study aligns with broader discussions on the sensory aspects of learning and the integration of diverse stimuli into educational settings.

By examining the interplay between nature's sounds, artistic expression, and attitudes toward art education, we aim to contribute valuable insights to the field. Through meticulous research, we can gain a deeper understanding of how environmental factors may influence the way individuals 'remove possessive approach and appreciate art, offering educators new perspectives to enhance their teaching methods and curriculum design. This investigation is poised to shed light on the potential transformative power of nature's sounds within the realm of art education,

enriching both the creative process and the educational experience. By examining successful practices, we seek to provide valuable insights for educators, curriculum developers, and policymakers striving to create enriching and comprehensive art education programs for young learners.

Literature Review

Nature's Background Sounds

The rhythms of mother nature can be heard through the rustle of leaves, the sound of rain falling and the wind blowing, a waterfall flowing, waves crashing on the beach and unfurling in the ocean, the calming sound of lake water, and the song of birds and buzzing or chirping of insects, which all form the vocabulary of nature. Nature's background sounds provide humans with a sense of place and a connection to nature, with these sounds playing a significant role in human health and wellbeing. Since ancient times, nature's sounds have been recognized to positively impact human health. The love of nature that the ancient Greeks had, is reflected in their mythology. They held the view that being near nature promotes harmony and balance and can improve the soul. So, tune in to nature's entrancing sounds and experience life's joy! (Eftaxia, 2021). The collection of sounds that are sensed in space includes sounds that are produced from biological sources such as bird vocalizations, geophysical sounds such as wind and rain, and human sounds such as noise from air and road traffic (Pijanowski et al., 2011).

The positive impact of natural sounds on human health and wellbeing can be attributed to various specific aspects. The rhythmic and soothing qualities of natural sounds contribute to stress reduction. Nature's sounds provide a gentle stimulus that allows the brain to rest and recover from mental fatigue. This exposure could contribute to a sense of comfort and well-being. Humans often find natural sounds aesthetically pleasing. This enjoyment can lead to positive emotions, contributing to a more positive mental state and improved mood. Furthermore, nature itself is, without a doubt, the best medicine. The colors, life, and noises of nature are abundant. These sounds are only a small sample of the lovely noises that nature provides as a priceless gift to people. People experience peace when they are exposed to these noises.

According to the study's findings, Nishida and Oyama-Higa (2013), listening to environmental sounds encourages people to view circumstances more broadly and place them in their proper context. Personal perceptions are widened in this way. Thus, deepening humanity's connection to nature and its noises makes us aware of its distinct advantages for human health, particularly for mental health.

Buxton, Pearson, Allou, Frstrup, and Wittemyer (2021) confirmed that natural noises have been shown by researchers to reduce anxiety and improve

the nervous system's operation as well as behavior. Contact with nature and its distinctive sounds has a relaxing impact that lessens anger and violence while promoting mental tranquility. As a result, people become more sociable and are assisted in relieving tension brought on by the strains of daily life, making nature a source of mental serenity (Chen & Kang, 2023). Additionally, studies have demonstrated that exposure to outdoor noises helps people remember things better and promotes coordinated brain performance. Being in tune with natural noises enhances focus and productivity. As a result, this relationship is particularly crucial for a person's healthy emotional growth (Fisher, 1999; Eftaxia, 2021).

In 2017, Moore conducted a study with the primary aim of investigating the impact of incorporating nature's background sounds into traditional teaching methods on student performance. An additional objective was to explore potential differences in the effects of these sounds on academic outcomes among different genders. The research involved 35 students enrolled in an eighth-grade English Language Arts class. The study employed a quasi-experimental design, with half of the instructional unit delivered without the inclusion of nature sounds, followed by testing on that portion. The second half of the unit was taught using nature's background sounds, and subsequent assessments were conducted. The findings revealed a statistically significant difference in student scores when comparing the use of background nature sounds to the traditional teaching method. However, no significant differences were observed between genders in response to the use of nature's sounds. The study concludes by suggesting the necessity for further research to explore whether different outcomes may emerge under varied conditions or with a larger and more diverse sample. This implies a call for continued investigation to deepen the understanding of the potential benefits and nuances associated with integrating nature's sounds into the educational environment.

Finally, Alawad's (2012) research, examines how nature's background sounds affected the creative abilities in Saudi Arabia's Jeddah intermediate school students. It discusses the advantages of including the outdoors in the art classroom to inspire students' artistic performance. The production of recommendations for all participants working in and associated with the field of education, particularly in art education, to encourage the use of natural sound in the classroom as a learning tool and a method of promoting creativity will be the study's contribution to new knowledge. As a result, the current study puts Alawad's (2012) study advice into practice. This study aligned with recent research (country and dependent variables) but differed from it (student level and independent variables). Due to the lack of studies on the impact of natural sounds on teaching

and learning visual arts and art education, auditory arts studies have been used as a broader field of auditory studies.

Relationship between Auditory and Visual Art

Auditory arts have different kinds of sounds, one of which is natural sounds. Many auditory arts composers from various times, such as Handel, Haydn, Vivaldi, Beethoven, Schubert, and Debussy, have been inspired by the beauty of nature. The idea that nature is a reflection of the soul was widely held, particularly during the Romantic era (1798–1837). The truth is that during periods of intense musical exploration, theorists, and composers consistently looked to nature and its noises for inspiration, fresh approaches, and ultimately, fresh sounds (Eftaxia, 2021). Many composers used natural sound patterns as inspiration.

Throughout history, auditory stimuli have served as catalysts and wellsprings of inspiration for countless painters and visual artists. These artists skillfully translate the essence of sound onto canvas, resulting in a pure and transcendent metamorphosis. This phenomenon takes place both in a figurative and literal sense, giving rise to a concept known as synesthesia, where the blending of the senses occurs. This concept suggests that the sensory perception of one form can manifest itself as a sensory encounter with another.

Auditory arts and the visual arts share an intricate and mutually beneficial relationship. This interconnection between these two artistic mediums mirrors the way each medium influences the other. The transformation from one art form to the other occurs seamlessly, demonstrating a fluid interchange. Auditory arts, much like visual arts, possess a universal quality that transcends languages and cultures, rendering them accessible to a diverse array of people. Numerous research studies have been done to examine how auditory arts affect students for different variables. According to some research, such as those by McKnight (1998), Linde (1999), Ivanov & Geake (2003), Riddoch & Waugh (2003), and Gur (2009), these effects are overstated, while other studies, such as those by Smith & Davidson (1991), Hallam (2000), Fioranelli (2001), and Crnec, Wilson, & Prior (2006), contend that they don't exist at all.

Some of these were not significant: Crnec, Wilson, and Prior (2006) tested the Mozart effect in children and discovered no evidence of the Mozart effect. Studies show that short-term exposure to auditory art has positive impacts, but longer exposure is needed to identify if there is a difference in a child's behavior. Fioranelli (2001) found no significant difference in mathematics problem-solving skills between third-grade students who listened to auditory art and those who did not. Hallam (2000) found no significant difference in spatial reasoning between 8,120

children exposed to Mozart, popular music, or a scientific discussion. Smith and Davidson (1991) found no significant differences in academic achievement among students studying the earth-sun relationship with different background music.

Some of these are significant, such as Gur's (2009) research investigating how auditory arts affect children's artwork' cognitive content, supporting the premise of this study. 84 students, 6-year-olds from private kindergartens in Ankara, Turkey, were in the sample with higher socioeconomic status. The sample was used to create three groups: Group 1 participated in a free drawing program while listening to classical music; group 2 participated in a free drawing program; and group 3 served as the control group. According to the findings, classical music had a beneficial impact on the cognitive content of the drawings made by children.

Riddoch and Waugh (2003) found that there were no noteworthy interactions. Compared to pictorial simple and pictorial with rock music, pictorial with classical music had a significant primary instructional impact. Regular students were preferred over exceptional students in both the pictorial only and pictorial with classical music conditions and this main impact was statistically significant.

McKnight (1998) discovered that children's on-task behavior during independent writing was positively impacted by slow-tempo auditory arts. Using auditory art as a background, Forrai (1997) found that children displayed an increased frequency of vocalizations, rhythmic movements, initiations of social contact, and positive emotional reactions in studies. In a passive listening situation where the children were not required to pay attention to the music, this effect was observed.

Khoja and Fadag (2021) study the effects of transdisciplinary art, and auditory art on the skills development of the hearing-impaired group. The study's findings demonstrated the appearance of a development in this group's capacity to paint and draw while listening to auditory art and suggested further investigation into the advantages of using sensory connections to help hearing-impaired people develop their drawing and painting skills and express themselves through new forms of verbal language. All these studies have been done to examine how auditory arts impact variables, some of which are not significant, and confirmed these effects are overstated, while other studies contend that they do, some of which are significant. Understanding these specific aspects can help guide further research and practical applications, especially in fields related to art education and social science, where the intersection of nature, well-being, and human experience is of interest.

The problem's description

Arts education has played a relatively important role in elementary schools. Through the prior studies and the observations and information of the researcher during her work in the field of learning and teaching arts, and participation in the art curricula development processes by including four branches (visual arts, performing arts, auditory arts, and media arts), which aim to develop the learner's creativity and ability to imagine and innovate, appreciate beauty, and enable them to creatively produce and practice the arts in line with what Vision 2030 emphasized, and achieve global competition. However, we are in the beginning stage of applying four branches. Thus, this research helps to confirm the importance of integrating branches of arts.

Through perusal, the researcher found a lack of empirical studies and research on integrating sound effects and auditory art with visual arts, especially in this society. Gur (2009) recommended conducting additional studies with children from various socioeconomic backgrounds to assess the impact of background auditory art and sound effects. Also, the current study puts Alawad's (2012) and Moore's (2017) study advice into practice and examines integrating nature's sounds into the educational environment.

Furthermore, there is a strong connection between the visual and auditory arts. The interaction of visual and auditory arts in an atmosphere has a significant impact on our creative processes. Color, light, darkness, scent, and sound are just a few of the elements that could cause us to feel a variety of emotions and sensations. Observers and listeners can decode and feel these elements through our creative attempts and musical compositions. Art is a tribute to humanity's incredible talent in expressing emotions through art. Thus, this research tested if there is any influence of natural background sounds on artworks and the attitudes towards the art education subject of international elementary school students in Riyadh.

Questions

The study's objective was to evaluate the influence of nature's sounds effects on artistic production and attitudes towards the art subject of international elementary school students in Riyadh. The specific challenges of this study were as follows: Do natural background sounds impact artistic production and the attitudes towards art education? it can be divided as follows:

- (1) Is there a significant difference between students' artistic production with natural sound listeners and non-natural sound listeners?
- (2) Is there a significant difference between students' attitudes towards art education from natural sound listeners and non-natural sound listeners?

The study's significance

Theoretical significance:

- Empirical research can be used to enhance scientific research and support descriptive research conducted in arts education. It demonstrates with its procedures how to incorporate arts activities in learning the arts and measuring its impact on each other, especially in the study of visual art and auditory art.
- The current research supports the preparatory plans that seek to integrate visual and auditory arts activities into the learning process, to develop the curricula of school subjects in general, and art education curricula in particular, in the four branches: (visual arts, performing arts, auditory arts, and media arts).
- Enriching the educational literature with research that supports the development of study materials by integrating visual arts and auditory arts in their subjects to confirm their role in inculcating the values of the development of artworks and attitudes towards art education subjects.

Applied importance:

- Activating proposed activities that show how to integrate sound effects into visual arts, in particular, to develop the senses of integrating hearing with seeing at the same time for female students.
- The current research, with its experimental design, is a proactive step to measure the effect of activating auditory arts activities in the visual arts subject and measuring its impact on developing the students' attitudes towards the art education subject., and this was confirmed by the research in its findings and recommendations.
- Because all the auditory arts educational studies were conducted in different societies, the current study was done in Saudi schools to start studying the effect of auditory arts, especially while applying this kind of art in the art education curriculum in the 2023 academic year, which is an important addition to arts education.

Definitions of Concepts and Items

The definitions of concepts items in this research include:

- **Natural Background Sounds:** It refers to the natural background sounds present in a scene or location. Something that we can hear or that can be heard, including the noises made by humans, and animals, and natural phenomena. This could include sounds such as birds chirping or wind blowing. In this research, the natural sound effects operational definition is the different sounds produced by non-human organisms that are generated by natural, non-biological sources within their normal soundscape. The nature's background sounds were opened to upper elementary international school students (Experimental Group) while they were practicing visual art.

- *Artworks (Artistic production)*: the creation of beautiful or significant things. synonyms: art, artistic creation or a painting, sculpture, photograph, etc., that is created to be beautiful or to express an important idea or feeling (Britannica Dictionary, 2023). In this research, Artworks' (Artistic production) operational definition is the art production from painting, drawing, and other visual arts by upper elementary international school students in art education classrooms.

- *Attitudes towards the Subject*: student attitudes toward subjects from Thurstone's (1929) definition is a measure of students' positive and negative feelings toward the subject of the arts in terms of relevance and value, difficulty and self-efficacy, and the general impression toward the subject. In this research, attitudes towards the subject's operational definition are the upper elementary international school students' attitudes toward art education subjects as positive or negative feelings in terms of relevance and value, difficulty and self-efficacy, and the general impression toward the subject.

Methodology

The experimental approach was used to design the two groups (control and experimental) to test the effectiveness of the independent variable (listening for nature's background sounds) on the dependent variables (artistic production and students' attitudes towards the art education classroom) as indicated by the score of the two instruments. It includes leveraging previous studies and research to prepare the theoretical framework, instruments, and previous studies, as well as drawing conclusions, interpretations, and recommendations. The research hypothesis "Listening for nature's background sounds in art education classroom lessons will enhance art productions and attitude toward art education classroom," was converted to the null hypothesis to test for statistical significance. The null hypothesis for this research is, "Listening for natural background sounds in art education classroom lessons does not affect art productions and attitude toward art education classroom".

Population and Sample

The population of this study was confined to the upper elementary international school students in Saudi Arabia, with a total number of 2400 students. The researcher selected a random proportional sample of the students to collect the required data in the influence of nature's background sounds. The sample comprised 120 upper elementary international school students. The questionnaire was the research for collecting the data and it was distributed to the samples through direct contacts, and visits. The sample was divided into two groups, one with nature's background sounds (experimental group) while they were free drawing and painting, and the

other without nature's background sounds (control group).

Measurement

The primary objective of this study was to examine the correlation between preferences for nature's background sounds and visual art forms, along with art production and attitude toward art education subject in the classroom. To achieve this goal, participants were requested to complete instruments, including:

Attitudes Towards Art Education Subject:

After design instrument, the scale was presented in its initial form to 3 professors specializing in the art education field to ensure the clarity of the items and the affiliation of each team for the dimension that it measures, and the arbitrators agreed on the suitability of the scale at a rate of 78%. The items were adjusted based on their advice and considered the arbitrators' comments and suggestions on amending the wording of certain phrases. Although 5 phrases were deleted, the agreed rate is still high. The number of items decreased from 25 to 20.

Next, verifying the reliability and validity of the instruments: inapplicable paragraphs were removed, or the context prevented them from being adapted to the art subject. Means, standard deviation, and t-test were utilized to analyze data.

Art Production Rubric Assessment:

Art assessment from iRubric was used to evaluate the artworks to see the difference between the control and experimental groups. It included five items, which were elements and principles: Creativity/ Originality, Effort/ Perseverance, Craftsmanship/ Skill, and Attitude/ Responsibility. It had four level degrees: (12=Poor, 16=Fair, 18=Good, 20=Great). The artworks were evaluated according to this art rubric at the end of the period. The study used means, standard deviation, and t-test results of the experimental and control groups.

Study Procedures:

The procedures were implemented through the following actions:

1. Preparing the instruments of the research experiment, which include: the measure of attitude towards the art education classrooms, and the artistic production rubric instrument.
2. Preparing the audio clips of nature's background sounds suitable for the art units for the experimental group. The selections of nature's background sounds were chosen with the advice of Dr. Thamer Shakroun and Dr. Ayman Tayseer (Auditory Art experts).
3. Two groups were selected: 60 students for every experimental and control group, activating the application of teaching units for 10 weeks (20

- sessions, two times a week), each session took 45 minutes.
4. The experimental group practiced visual arts while the students were listening to nature's background sounds. They had a related art curriculum unit. In half of the sessions, they chose their topics freely and drew whatever they wanted, no specific topic was given. The nature's background sounds program included the rhythms of mother nature sound effects such as the rustle of leaves, the sound of rain, and wind, the sound of waterfall flowing, the sound of waves crashing on the beach and unfurling in the ocean, the calming sound of lake water, and the song of birds and sound of insects. They used different colors such as pastels, watercolor pens, and pencils while listening to nature's background sounds.
 5. The control group was practicing the art education class without listening. any sound effects.
 6. Application of instruments to measure and know the attitudes of students towards the subject at the

end of teaching the unit for each of the (experimental and control) groups.

7. Collecting artworks for all students of all stages, and evaluation of artworks under the artwork evaluation, using the art production Rubric assessment at the end of teaching for each of the (experimental and control) groups.
8. Analyzing the results of the measurement statistically to determine the effect of activating the audio arts activities on the student's attitude towards the course by using means, standard deviation, and t-test results.

Results

Validity and Reliability of the study

To extract the significance of the construct validity of the scale, the correlation coefficients of each item and the total score were calculated. The correlation coefficients of the items with the tool ranged between 0.41-0.84, which means it ranged between a moderate and strong uphill (positive) linear relationship. See Table (1) below shows that.

Table (1)

Correlation Coefficients between the Item and the Total Score

Items	R With Total Scores	Items	R With Total Scores
1	.87(**)	11	.82(**)
2	.58(**)	12	.73(**)
3	.65(**)	13	.70(**)
4	.84(**)	14	.81(**)
5	.63(**)	15	.61(**)
6	.63(**)	16	.73(**)
7	.76(**)	17	.52(**)
8	.41(*)	18	.69(**)
9	.47(**)	19	.75(**)
10	.52(**)	20	.78(**)

* Correlation is significant at the 0.05 level

** Correlation is significant at the 0.01 level

It is clear from the previous table that all correlation coefficients were acceptable and statistically significant - none of these items were deleted because correlation r is closest to +1. The reliability of the attitudes towards the instrument was ensured using test-retest. The researcher conducted a pilot study to verify the instrument's reliability. Thirty students were selected to participate in the pilot questionnaire before the distribution of data collection. This group had the characteristics of the whole sample of the study. However, the participants in the pilot study were not included in the main sample of the study. The pilot questionnaire was carried out in another elementary international school. Two weeks later, questionnaires were distributed to the same group. Then the Pearson Correlation Coefficient was calculated between their estimates both times. The

values of test-retest coefficients were 0.87 (See Table 2). In addition, Cronbach Alpha was utilized to test the reliability of the scale. Cronbach's alpha coefficient value was 0.84, These values were considered appropriate for this study.

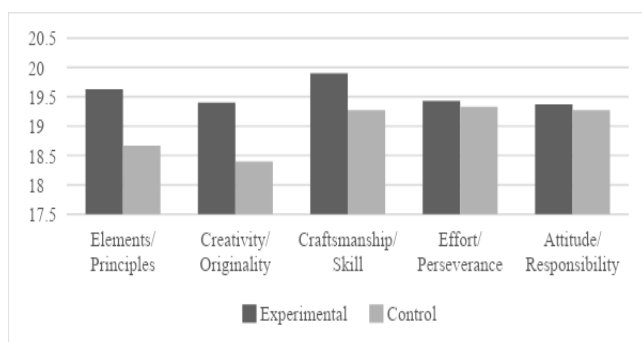
Table (2) Sample distribution.

Group	Frequency	Percent
Exp.	27	31.0
Con.	60	69.0
	87	100.0

For answering the first question (Is there a significant difference between students' artistic production with natural sound listeners and non-natural sound listeners?), means and standard deviations of experimental and control group artistic production were calculated, t-test was used to find out any significant differences between both groups, as shown in the table (3) below.

Table (3)**Means, Standard Deviation, and T-Test Results of the Experimental and Control Groups' Artistic Production.**

Items	Group	N	Means	Std. Deviation	t	D.F.	Sig. (2-tailed)
Elements/ Principles	Exp.	60	19.63	.863	4.137	118	.000
	Con.	60	18.67	1.591			
Creativity/ Originality	Exp.	60	19.40	1.182	3.454	118	.001
	Con.	60	18.40	1.906			
Craftsmanship/ Skill	Exp.	60	19.90	.440	4.133	118	.000
	Con.	60	19.27	1.103			
Effort/ Perseverance	Exp.	60	19.43	1.110	.486	118	.628
	Con.	60	19.33	1.145			
Attitude/ Responsibility	Exp.	60	19.37	1.134	.465	118	.643
	Con.	60	19.27	1.219			

**Figure (1)****Means of Total Results of Artistic Production**

In the Elements/Principles item, the mean score of the experimental group was 19.63 (SD=.863), and the mean score of the control group was 18.67 (SD=1.591). Total results indicated that there were significant differences between the groups with $T=4.137$. The mean of total score difference by groups is shown in Figure (1), which shows the experiment had the most effect. The mean difference between the two groups was statistically significant ($p=.000$). Additionally, in the Creativity/Originality item, the mean score of the experimental group was 19.40 (SD=1.182), and the mean score of the control group was 18.40 (SD=1.906). Total results indicated that there were significant differences between the groups with $T=3.454$. The means of total score by groups are shown in Figure (1), which shows the experiment had the most effect. The mean difference between the two groups was statistically significant ($p=.001$).

Also, in the Craftsmanship/ Skill item, the mean score of the experimental group was 19.90 (SD=.440), and the mean score of the control group was 19.27 (SD=1.103). Total results indicated that there were significant differences between the groups with $T=4.133$. The means of total score by groups are shown in Figure (1), which shows the experiment had the most effect. The mean difference

between the two groups was statistically significant ($p=.000$).

In the Effort/ Perseverance item, the mean score of the experimental group was 19.43 (SD=1.110), and the mean score of the control group was 19.33 (SD=1.145). Total results indicated that there were no significant differences between the groups with $T=.486$. The means of the total score by groups are shown in Figure (1), which shows the experiment had a slightly higher mean. The mean difference between the two groups was not statistically significant ($p=.628$).

Furthermore, in the Attitude/ Responsibility item, the mean score of the experimental group was 19.37 (SD=1.134), and the mean score of the control group was 19.27 (SD=1.219). Total results indicated that there were no significant differences between the groups with $T=.465$. The mean of the total score groups is shown in Figure (1), which shows the experimental group had a slightly higher mean. The mean difference between the two groups was not statistically significant ($p=.643$).

Lastly, results showed there were statistically significant differences in ($\alpha=0.05$) between the means of both groups in the Elements/Principles item, Creativity/ Originality, and Craftsmanship/ Skill item in favor of the experimental group. Despite this, it showed there were no statistically significant differences in ($\alpha=0.05$) between the means of both groups in Effort/ Perseverance, and Attitude/ Responsibility items (See Table 3).

For answering the second question (Is there a significant difference between students' attitudes towards art education from natural sound listeners and non-natural sound listeners?), means and standard deviations of experimental and control group attitudes towards the art subject were calculated, t-test was used to find out any significant differences between both groups, as shown in the table (4) below.

Table (4)
Means, Standard Deviation, And T-Test Results of the Experimental and Control Groups' Attitudes Toward the Art Subject

Group	N	Means	Std. Deviation	t	D.F.	Sig. (2-tailed)
Exp.	60	2.81	.092	9.163	118	.000
Con.	60	2.57	.178			

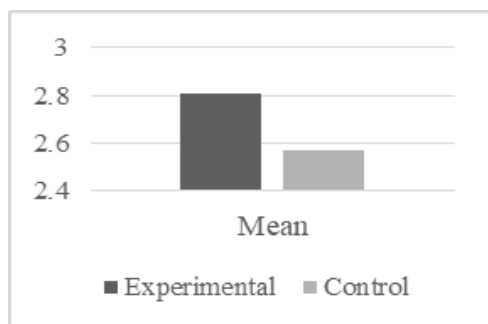


Figure (2)

Means of Total Results of Attitudes Towards the Art Subject

Table (4) shows there are statistically significant differences in ($\alpha = 0.05$) between the means of both groups in the attitudes toward the art subject in favor of the experimental group. The mean score of the experimental group was 2.81 (SD=.092), and the difference between the mean score of the control group was 2.57 (SD=.178) (See Table 4).

Results for the attitudes towards the art subject (total) indicated that there were significant differences between the groups with $T=9.163$ ($P=0.000$) (Table 4). The means of the total score by groups are shown in Figure (2), which shows the experimental group was the most effective. The mean difference between the two groups was statistically significant ($p=.000$).

Discussion

This study examined whether nature's background sounds have a positive effect on students practicing art. In general, the results showed that there was a significant difference in some items in artistic production and a significant difference in attitudes towards the art subject. The results of this study indicated that nature's background sounds have a positive effect on the high elementary international school students, in Riyadh.

The first item had a significant difference and positive effect on the Elements/Principles item. Listening to nature's background sounds while practicing art to increase the project planned carefully, shows a strong understanding, and outstanding composition, agreed with Gur (2009), which showed that auditory art had a beneficial impact on the cognitive content of the drawings made by children. The last item had a significant difference and positive impact on the Craftsmanship/ Skill item in favor of the experimental group which produced more artwork more carefully than the control group during the sessions. This result agreed with Alawad's

(2012) and Gur (2009) studies.

The experimental group added a lot of detailed work carefully and enjoyed practicing the arts. This may lead to less improvement in Effort/ Perseverance item tasks including just fair projects finished with maximum effort. Likewise, the experimental group was immersed in work with pleasure and enjoyment. This may lead to less improvement in Attitude/ Responsibility items including just working extremely hard, mentoring others, excellent preparation, and clean up.

In the context of the first question's findings, it is evident that exposure to nature's background sounds had a positive influence on students' attitudes toward the art subject. This outcome aligns with the conclusions drawn by Moore (2017), whose research similarly indicated that nature's background sounds played a motivational role in shaping attitudes towards specific subjects.

For the second question result, the highest significant difference was in the Creativity/ Originality item, which agreed with Alawad's (2012) research that nature's background sounds raise creativity in art education classrooms. It promotes the use of nature's background sounds in the art classroom as a learning aid and a means of promoting creativity, which shows the experiment had the most effect, the mean difference ($p=.001$).

The connection between Moore (2017) and this study suggests a consistent pattern wherein the inclusion of nature sounds contributes to a more favorable disposition among students. The notion that students feel a heightened sense of comfort is particularly noteworthy. This comfort, presumably fostered by the soothing and natural ambience provided by background nature sounds, may contribute to a more positive and receptive mindset towards the art subject. The parallel findings across studies strengthen the argument for the positive impact of incorporating nature sounds in an educational setting. This not only supports Moore's earlier research but also adds depth to the understanding of how such auditory stimuli can influence students' emotional and attitudinal responses, creating an environment conducive to enhanced learning experiences. Further exploration and validation of these findings could provide valuable insights for educators seeking to optimize the learning environment for improved student engagement and attitudes toward art subjects. During the art education classroom sessions with or without nature's background sounds, students made

free drawings, imagined shapes, dignitaries, and stories, and made predictions that agreed with Gur (2009): the positive effect of auditory art of free drawing and the desire of drawing. They did their drawings quietly and cheerfully which increased the students' desire to practice the arts experimental group. The result agreed with Khoja and Fadag (2021) in terms of developing communication skills, enhancing confidence, developing relationships, overcoming challenges, and gaining visual and sensory skills, which were observed during their work. Also, it developed their drawing and painting skills and allowed them to express themselves through new forms of verbal language.

The integration of different kinds of art and collaboration among diverse artistic disciplines stand at the forefront of a dynamic and interconnected cultural landscape. This research embarks on a journey to explore the synergies that arise when various art forms converge, investigating the collaborative processes that enrich creative expressions. In a world where perception is a multisensory experience, understanding how visual and auditory arts harmonize becomes paramount. This study delves into how visual art, such as painting, sculpture, or multimedia installations, interacts with auditory art, encompassing music, soundscapes, and spoken word.

By exploring successful collaborations and experimental projects, we aim to illuminate the unique qualities each art form brings to the collaborative process and the synergies that emerge from their fusion. By understanding the potential synergies, challenges, and transformative power of interdisciplinary collaboration, this research seeks to inspire artists, educators, and cultural stakeholders to explore new avenues for creative expression and cultural enrichment. The integration of visual art with auditory art represents a captivating convergence of sensory experiences, offering a multi-dimensional exploration of creativity and expression. This research embarks on an inquiry into the symbiotic relationship between visual and auditory elements, aiming to unravel the possibilities that arise when these two art forms intersect.

Conclusions and Recommendations

Lastly, lighting on nature's background sounds is being used as an artistic stimulus in teaching drawing and painting. Results show that listening to nature's background sounds while practicing art in art education classrooms improves Elements/Principles, Creativity/ Originality, Craftsmanship/ Skill items, and an attitude toward the art education subject.

Practicing visual arts accompanied by nature's background sounds with considered expression gives students the ability to concentrate more and develop new skills such as attitudes and producing cleaner, more carefully and beautifully created artwork.

Conducting additional studies could expand on how nature's sounds can be effectively integrated as an artistic stimulus in teaching drawing and painting, particularly when involving students from different levels such as high schools, undergraduate, and socioeconomic backgrounds to determine the effect of nature's background sounds. It can be used in classroom and home environments as background while students do homework, play, and practice arts such as drawing, painting, sculpture, pottery work, and puzzle-making.

This study result may benefit educators, students, curriculum designers, and policymakers in the field of art education. Also, it emphasizes the potential for interdisciplinary collaboration between the arts and other subject fields to contribute to a holistic educational experience. There could be practical applications of incorporating nature's background sounds in art education, not only in classrooms but also in home environments. This could include parents and caregivers to enhance the artistic activities of children at home.

References:

1. Alawad, A. (2012). Can We Bring the Natural Environment into The Art Classroom? Can Natural Sound Foster Creativity. *Educational Research and Reviews*, 7(28), 627.
2. The Britannica Dictionary. (2023). [Britannica.com/dictionary](https://www.britannica.com/dictionary).
3. Buxton, R. T., Pearson, A. L., Allou, C., Frstrup, K., & Wittemyer, G. (2021). A Synthesis of Health Benefits of Natural Sounds and Their Distribution in National Parks. *Proceedings of the National Academy of Sciences*, 118(14), e2013097118.
4. Chen, X., & Kang, J. (2023). Natural sounds can encourage social interactions in urban parks. *Landscape and Urban Planning*, 239, 104870.
5. Crnec, R., Wilson, S.J.& Prior, M. (2006). No Evidence for the Mozart Effect in Children. *Music Perception*, 23 (4), 305-317.
6. Eftaxia, G. (2021/1/ November). The Powerful effect of the sound of nature on human health. Musician and Ethnomusicologist (NKUA) in Athens – Greece.
7. Fisher, J. A. (1999). The Value of Natural Sounds. *Journal of Aesthetic Education*, 33(3), 26–42.
8. Fioranelli, D.I. (2001). The Effects of Background Classical Music on The Problem-Solving Skills of Third Graders in a Computer Lab Setting. (Doctoral Dissertation, The University of Mississippi). *Dissertation Abstracts International*, 62 (04), 1329A.
9. Forrai, K. (1997). The Influence of Music on the Development of Young Children: Music Research with Children between 6 and 40 Months. *Early Childhood Connections*, 3(1), 14-18.
10. Gur, C. (2009). Is There any Positive Effect of Classical Music on Cognitive Content of Drawings of Six-Year-Old Children in Turkey. *European Journal of Scientific Research*, 36(2), 251-259.
11. Hallam, S. (2000). The Effects of Listening to Music on Children's Spatial Task Performance. *British Psychological Society Education Review*, 25(2), 22–26.
12. Ivanov, V. K.& Geake, J. G. (2003). The Mozart Effect and Primary School Children. *Psychology of Music*, 31, (4)–413.
13. Khoja, L. & Fadag, E. (2021). Interdisciplinary Approach in Painting and Music for Hearing Impaired. *Arab Journal for Scientific Publishing*, 37(2)315-339.
14. Linde, C. (1999) The Relationship Between Play and Music in Early Childhood: Educational Insights. *Education*, 119 (4) 610-615.
15. McKnight, R. (1998). Does Listening to Slow Tempo Classical Music During Independent Writing Affect Children's on-Task Performance? ERIC ED430898.
16. Moore, M. (2017). Effects of Nature Sounds and Traditional Teaching Style on Students' Performance in an English Language Arts Classroom (Doctoral dissertation).
17. Nishida, K., & Oyama-Higa, M. (2013, September). The influence of listening to nature sounds on mental health. In *International Conference on Biomedical Informatics and Technology* (pp. 319-323).
18. Pijanowski, B. C., Villanueva-Rivera, L. J., Dumyahn, S. L., Farina, A., Krause, B. L., Napoletano, B. M., Gage, S. H., & Pieretti, N. (2011). Soundscape Ecology: The Science of Sound in the Landscape. *BioScience*, 61(3), 203-216.
19. Smith, B. A., & Davidson, C. W. (1991). Music and Achievement. *Journal of Social Studies Research*, 15(1).
20. Thurstone, L. L. (1929). Theory of Attitude Measurement. *Psychological review*, 36(3), 222.
21. Riddoch, J.V.& Waugh, R.F. (2003). Teaching Students with Severe Intellectual Disabilities Non-Representational Art Using a New Pictorial and Musical Program. *Journal of Intellectual & Developmental Disability*, 28(2), 145–162.

هل تؤثر خلفية الأصوات الطبيعية على الإنتاج الفني والاتجاهات نحو التربية الفنية؟

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المخلص:

تهدف الدراسة التعرف إلى تأثير خلفية أصوات الطبيعة على الأعمال الفنية والاتجاهات نحو مقرر التربية الفنية، لدى (120) طالبة من طالبات المرحلة الابتدائية العالمية بالرياض. وقد تم استخدام المنهج التجريبي لتصميم المجموعتين: (الضابطة والتجريبية)؛ لاختبار فاعلية المتغير المستقل: (الاستماع للأصوات الطبيعية -مع أو بدون- داخل صف التربية الفنية)، على المتغيرات التابعة: (الإنتاج الفني، والاتجاه نحو مقرر التربية الفنية)، كما يتبين من درجات الأدوات. وأظهرت النتائج أن هناك تأثيرًا إيجابيًا لخلفية الأصوات الطبيعية على بعض مهارات الإنتاج الفني والاتجاهات، نحو مقرر التربية الفنية، وللحصول على أعمال فنية جميلة، يمكن إضافة خلفية أصوات الطبيعة إلى الفصول الدراسية والبيئات المنزلية، بينما يقوم الطلبة بواجباتهم المنزلية، واللعب، وممارسة الفنون. وأوصت الدراسة بإجراء المزيد من الدراسات في مستويات مختلفة، مثل: المدارس الثانوية والجامعات، واختبار متغير آخر، مثل: التفكير الإبداعي، والخلفيات الاجتماعية، والاقتصادية المختلفة..

الكلمات المفتاحية: الأصوات الطبيعية، الفنون السمعية، الفنون البصرية، الإنتاج الفني، الاتجاه نحو المقرر.