

# The relationship between musical arts and adolescent emotional intelligence



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## ABSTRACT

This study delves into the profound realm of the art of music, exploring its multifaceted nature involving the creation of sounds, melodies, and forms. These elements, permeating through singing, playing, and auditory experiences, become a medium for emotional expression deeply rooted within human beings. The realization of this expressive potential necessitates positive support from art enthusiasts, recognizing its profound impact on emotional maturity. Focusing on the impact of music on the emotional intelligence of adolescents, this paper adopts a comprehensive research approach. Employing the interview method and questionnaire surveys, the study gathers data from respondents, subsequently subjecting it to rigorous analysis using the correlation method approach. The findings indicate a compelling relationship between musical art (X) and adolescent emotional intelligence (Y). Correlation test results, with the calculated value ( $r$  count) surpassing the table value ( $0.6726 > 0.3120$ ), highlight a statistically significant association. The t-test reinforces this conclusion, with a calculated t-value of 5.0631 exceeding the table value of 2.4285 ( $t$  count  $>$   $t$  table). This robust statistical evidence strengthens the assertion of a positive and substantial relationship between musical art and adolescent emotional intelligence. In conclusion, this study contributes valuable insights by establishing a clear and quantifiable link between the art of music and the emotional intelligence of adolescents. The implications of this research extend to educational and developmental contexts, emphasizing the role of musical engagement in fostering emotional intelligence among the youth.



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## 1. Introduction

In the contemporary era of information technology, an increasing number of individuals exhibit self-centeredness or a diminished sense of tolerance, politeness, and mutual assistance. This period significantly contributes to the complexity of human relationships, concurrent with the progression of individual activities, leading to heightened preoccupation with personal affairs. Humans undergo processes of physical and psychological development, with psychological development paralleling a person's physical growth. Adolescents, aged between 13 and 16 years, constitute the young generation, representing the largest demographic in Indonesia's population structure and a strategically vital intervention point for human resource development. During the developmental stages of adolescence, profound changes in thought patterns and attitudes exert substantial influence, presenting challenges in control due to the transitional nature of this period between childhood and youth. Adolescence is a distinctive phase marked by concurrent physical, social, biological, and psychological transformations [1]. Biological changes manifest in the growth and development of primary and secondary sexual characteristics, while psychological changes involve fluctuations in feelings, desires, and emotions, often characterized by instability and uncertainty. These changes may pose

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challenges if teenagers struggle to adapt to themselves and their environment, impacting their preparedness for the future [2]. Havighurst proposed that teenagers must comprehend their developmental tasks in social behavior. The tasks associated with adolescent development are intricately linked to the learning function. Essentially, in their developmental journey, humans must acquire an understanding of the norms governing life and culture within society to foster positive social relationships in reality. Attaining these developmental tasks necessitates adolescents to possess emotional intelligence [3].

Daniel Goleman's conception of emotional intelligence elucidates that intelligence encompasses the capability to articulate feelings, direct thoughts, and govern actions. Emotional intelligence is delineated as an individual's capacity to regulate their emotional life intelligently, sustaining emotional equilibrium and expression through self-awareness, self-control, self-motivation, empathy, and social skills [4]. Self-control, or the ability to regulate oneself, is intricately linked to an individual's emotional state. Those proficient in emotional management can effectively exercise self-control by expressing their emotions accurately and judiciously. In contrast, individuals struggling to control their emotions often exhibit excessive emotional expression, impoliteness, and a lack of assertiveness, particularly during their teenage [5]. Teenagers, in their role as students, are anticipated to cultivate benevolent behavior towards friends or anyone in need, irrespective of the degree of familiarity. The cultivation of robust empathy is pivotal in nurturing a sense of concern and compassion, thereby engendering helpful behavior in teenagers [6]. Adolescents who struggle to effectively manifest feelings of empathy may encounter issues that potentially impede their academic achievement. The absence of social skills, such as openness, can result in teenagers developing closed and individualistic personalities, affecting their ability to integrate into social environments.

One approach to enhancing emotional intelligence involves the utilization of the art of music [7]. McGinnis asserts that the art of music exerts a positive impact on the enhancement of emotional intelligence. Indeed, the association between the art of music and emotional intelligence merits consideration, as it can elicit positive emotions such as happiness, joy, cheerfulness, peace, and contentment. Positive emotions, characterized as those capable of eliciting favorable feelings in individuals, whether experienced individually or collectively, hold significant importance [8]. The utilization of the art of music in advancing emotional intelligence is further evident in the selection of musical instruments and choirs tailored to the preferences of each audience, aiming to enhance the emotions of individuals. The art of music serves as a means to motivate teenagers in both social and emotional aspects. This article endeavors to establish the veracity of the positive impact of the art of music on the augmentation of emotional intelligence. To substantiate this claim, research was conducted in one of the music arts classes involving Choir and musical instrument playing at SMA Negeri 1 Fakfak. Music serves as an extracurricular activity at the school, with teenagers actively participating in arts and cultural activities at both the school and district levels, earning multiple awards in the field of music. This study focuses on investigating the correlation between the art of music and the emotional intelligence of adolescents.

## 2. Method

This quantitative research investigates the correlation between musical engagement and emotional intelligence among teenagers aged 15–16. The study population is drawn from both genders, including boys and girls, enrolled in music classes spanning grades X to XII. The sample size comprises 40 respondents, selected to represent a diverse range of participants within the defined age group. The research utilizes a combination of primary and secondary data, with data collection methods employing structured questionnaires and documentation observation techniques [9]. The data analysis follows a systematic approach, encompassing multiple stages to ensure robust findings. Initial stages involve testing the prerequisites for analysis, validating the collected data, and ensuring its reliability. Subsequently, the research proceeds to hypothesis testing, a critical step to explore the potential correlation between musical engagement and emotional intelligence in teenagers. This methodological framework ensures a comprehensive exploration of the research objectives, contributing valuable insights into the nuanced relationship between music and emotional intelligence in the adolescent demographic.

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### 3. Results and Discussion

#### 3.1. Music Art Concept

Art is an integral facet of human life and a foundational element of culture, originating from human interactions within their social environment. Interpretations of art vary based on the underlying concept or theoretical perspective. With a broad scope, art encompasses various aspects analogous to the tale of a blind man attempting to comprehend an elephant. It embodies diverse forms of beauty crafted by humans, reflecting a collective effort to produce aesthetic entities that bring enjoyment [10]. The term "art" derives from the Sanskrit word "Sani," signifying worship, offering, and service [11]. Art is defined as the skillful creation of refined and beautiful works [12]. Consequently, it refers to creations crafted with exceptional skill, such as dance, painting, and carving—works emanating from artistic endeavors [13]. Arya characterizes art as a spiritual activity reflecting reality in a work capable of evoking specific experiences in the recipient's spiritual realm [14]. Silvia posits that art serves as a human-made tool to elicit psychological effects on observers, encompassing responses like observation, recognition, and rational and emotional imagination [15]. Sirois shares a similar perspective, viewing art as inner manifestations and aesthetic experiences using planes, lines, colors, textures, volumes, and light and darkness as mediums. Art transcends mere craftsmanship; it evolves into an inner being capable of giving birth to beautiful experiences through various artistic media [16]. In summary, experts concur that art is the outcome of human endeavors to express feelings, spirituality, and physical conditions through diverse artistic media. It represents the embodiment of human potential, encompassing abilities, creativity, and the expression of feelings that carry aesthetic value. Art is also defined as a portrayal of natural beauty produced by an artist.

According to Hamilton, musical arts are categorized within the auditory arts and are divided into two parts: the art of hearing with tones and the art of hearing with words [17]. This encompasses (1) notes from a single instrument, such as the violin or piano, and other instruments; (2) notes from compound instruments, including the symphony orchestra and band; (3) rhythm with words, representing the art of poetry; and (4) without rhyme with words, reflecting prose art. It pertains to elements of art that are independent of interpretation or significance. Fine art is an art form that plays a pivotal role in human life. Music is defined as the science or art of arranging tones or sounds in sequences, combinations, and temporal relationships to produce sound compositions characterized by unity and continuity. Alternatively, music is described as tones or sounds arranged to include rhythm, song, and harmony, especially when employing instruments capable of producing sound [18]. The term "Music" can also be defined as the art of organizing a collection of notes into a sound with meaning. Music holds a profound connection to life, as individuals are introduced to the "Art of Music" from infancy through simple songs or chants facilitated by their mothers [19]. Kamtini interprets music as an integral part of life and the development of the human spirit, emphasizing its role as a basic force effective in calming and inspiring individuals. Baidah defines music as the arrangement of notes with a certain rhythm, contributing to the formation of learning patterns, alleviating boredom, and blocking out external noise [20]. Maratos explains that music is a creative work involving sounds or voices with rhythm and harmony. When played as an integrated and continuous composition, music can influence emotions and cognition [21]. According to Joseph Machlis in Carol & Barbara, music is considered a language of emotions and a means of communication [20].

The conclusion drawn from the various theories outlined above regarding the meaning of musical art is that human creations manifest in the form of sounds or tones with pitch and rhythm, encapsulating the emotional language of human life. Music can profoundly influence feelings of joy and peace, transforming into a medium for communicating the realities experienced and absorbed in life. With advancements in technology and numerous studies by experts emphasizing the psychological benefits of music, particularly in the emotional realm, music can be considered as an alternative to aid students in developing emotional intelligence skills. Furthermore, music's therapeutic potential is increasingly recognized in the field of psychology. Research conducted by Chang, Chen, & Huang indicates that music therapy can effectively reduce anxiety, stress, and depression in an individual's psyche [22]. Subsequent

research by Maratos, Gold, Wang, & Crawford demonstrates that music therapy is impactful in enhancing the quality of life [23]. Another study by Labbe Schmidt, Babin, & Pharr expounds on the benefits of listening to classical music after exposure to stress, revealing a significant reduction in negative emotions based on individual preferences for different types of music [24].

Another advantage of listening to music, as suggested by Saarikallio & Erkkilä, is that it is considered a means of regulating effective effects, reducing psychological pressure, and altering energy levels within an individual. When someone feels sad, they may choose to listen to fast-paced music with major chords, a choice proven to uplift their mood [25]. Interestingly, individuals not only turn to fast-paced music (indicative of happiness) to improve their mood but also may prefer sad music for this purpose. This demonstrates that both happy and sad music can influence an individual's affect. More specifically, sad music has the potential to improve an individual's mood [26]. In conclusion, music offers numerous benefits, and these advantages have been substantiated through various conducted studies. One notable benefit is the potential for music to serve as a psychological therapy, reducing stress and impacting mood levels, ultimately enhancing the overall quality of human life. Art comprises three main pillars: ideas, activities, and artifacts. Ideas refer to art as a complex of ideas, values, norms, and the like. Activities encompass a complex of human actions and patterned behaviors in the realm of art. Artifacts translate to art through the works produced by humans. When considering shape and dimensions, art manifests in both two-dimensional and three-dimensional art pieces [27].

### 3.2. Elements of Music and Choirs

To comprehend music, an understanding of its fundamental elements is essential. These include, first and foremost, melody. Turek defines a melody as "a succession of pitches in rhythm," with these pitches typically organized into one or more substantial units. Thus, pitch, rhythm, and form constitute the core elements of most melodies [28]. From another perspective, Roederer describes a melody as a sequence of tones and sounds with regular vibrations, presented sequentially and rhythmically to express an idea or thought [29]. According to Harrison, individuals must memorize the sound of a melody before being able to reproduce it, emphasizing that a melody is a sound captured, remembered, and produced through sound [30]. In summary, a melody can be defined as a sequence of notes arranged in rhythm, forming a rhythmic pattern that rises and falls, expressing an idea. The second vital element is rhythm. Rhythm involves the logical arrangement of sounds based on their duration within the music. Clarke describes rhythm as a series of movements constituting the fundamental elements of music [31]. Generally, rhythm encompasses all aspects of music related to time, specifically involving configurations of beat patterns associated with a certain tempo or sound [32]. According to Greenberg, music is an art form that communicates ideas and feelings through its tones and rhythms, fostering a sense of richness, fulfillment, and beauty [33]. Consequently, music, as an art form, expresses the soul's sentiments through tones and rhythm [34]. In conclusion, rhythm is defined as the arrangement of sounds within a specified time that can be felt and heard over various periods, forming a rhythmic pattern.

These musical elements can be performed in various forms, such as solo, group vocal, and choir. A choir, specifically, is a combination of diverse voices harmoniously arranged to create an engaging chorus for enjoyment. Bell assert that a choir consists of individuals who undergo specialized training and are considered proficient in performing songs at a professional level. This professionalism extends beyond vocal proficiency to encompass mastery of all elements related to singing [35]. Choirs, as a means of expressing music, have evolved over time in response to the changing landscape of the musical world. This evolution signifies that music serves not only spiritual or religious purposes but also as a form of entertainment. Choirs are tasked with addressing both technical and non-technical aspects. In the technical realm, choir members must possess good auditory skills, proper breathing techniques, knowledge of vocal techniques, understanding of music theory, familiarity with music analysis, knowledge of singing techniques, cooperation, high discipline, and a serious approach. On the non-technical front, choir organizations need to focus on management functions such as planning, implementation, and evaluation monitoring. Achieving harmony of sound in a choir involves controlling pitch, the first aspect of which is managing the movement of notes from high to low.

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A singer must excel in pitch control. The second aspect involves transitioning from a low note to a high note, requiring attention to the tone simulation technique, falsetto technique, and tendon tension technique. Harmonization with accompanying music holds significant importance for singers as producing aesthetically pleasing musical works requires close collaboration or harmonization between singers and musicians. The components requiring harmonization include basic tone, tempo, time, rhythm, and volume. Professionalism in singing necessitates mastery not only in the vocal domain but also in controlling the stage and understanding the supporting field.

### 3.3. Concept of Intelligence and Emotions

Intelligence, derived from the word "intelligent," denotes being smart, astute, quick to respond to problems, and rapid in understanding information. It represents an individual's capacity to solve the challenges they encounter, requiring the cognitive abilities of the mind, commonly referred to as intelligence. The term "intelligence" has Latin roots in "intelligere," signifying the connection or uniting of individuals (organizing, relating, binding together) [36]. Dusek elucidates that intelligence can be evaluated both quantitatively and qualitatively. Quantitatively, intelligence is viewed as a learning process for solving problems measurable through intelligence tests. Qualitatively, intelligence involves a way of thinking that constructs how to connect and manage information from the external environment in a personalized manner. According to Howard Gardner, intelligence is the ability to solve or create something of value within a particular culture [36]. Alfred Binet breaks down intelligence into three facets. First, it encompasses the ability to direct thoughts or actions, implying that individuals can set goals to achieve (goal setting). Second, it involves the ability to change the direction of action as necessary, demonstrating adaptability to different environments. Third, it includes the ability to engage in self-criticism, allowing individuals to make corrections to mistakes [37]. Raymond Bernard Cattell categorizes mental abilities into two types: fluid intelligence (gf) and crystallized intelligence (gc). Fluid intelligence is an innate ability originating from biological factors acquired at birth, independent of the influence of education and experience. Conversely, crystallized intelligence reflects the impact of experience, education, and culture on an individual. This type of intelligence increases with an individual's level of knowledge, experience, and skills [38].

The characteristics of fluid intelligence generally remain stable after the age of 14 or 15 years, while crystallized intelligence can continue to develop until the age of 30 to 40 years or beyond [39]. In summary, intelligence, on the one hand, refers to an individual's cognitive potential, an inherent capability present since birth. On the other hand, intelligence signifies the ability to confront and resolve problems encountered in the world. Etymologically, emotion originates from "E," denoting energy, and "Motion," signifying vibration. Emotions can be interpreted as energy that persists in movement and vibration. Terminologically, emotion is defined as any upheaval of thoughts, feelings, or passions arising from an intense or overwhelming mental state. Alternatively, emotion, deriving from the Latin "emovere," meaning moving away, refers to feelings linked to biological and psychological states manifested in actions. Nelson *et al.*, describe emotion as a feeling state involving physiological reactions based on experience, characterized by strong feelings and accompanying physiological changes that prepare the body for quick action [40]. These physiological changes are observable in variations in heart rate, respiratory rhythm, sweat production, and more. Psychologically, emotions are subjectively experienced as either highly pleasant or extremely unpleasant reactions, described using terms such as happiness or anger [41]. Emotions, together with cognitive (thinking power) and conative (psychomotor) aspects, play a crucial role in shaping attitudes representing predispositions to human behavior. Despite the recognized influence of emotions on attitudes, it was not until the emergence of Daniel Goleman that the emotional aspect became a central topic in his book. Emotional intelligence, while not a new concept, gained prominence with Goleman. As early as 1920, E.L. Thorndike introduced social intelligence, emphasizing the ability to manage interpersonal relationships as crucial for success in various aspects of life [42]. Various figures, including Descartes, have categorized emotions differently, with Descartes delineating desires, hatred, sorrow, astonishment, love, and joy. JB Watson proposed three primary emotions: fear, anger, and love. In summary, emotions are physiological states linked

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to biological and psychological conditions, manifesting in various expressions in human behavior according to several expert opinions.

### 3.4. Emotional Intelligence Concept

Goleman explains that emotional intelligence is the ability to recognize one's own feelings and those of others, the ability to motivate oneself, and the ability to manage emotions well in oneself and in relationships with others [43]. Salovey and Mayer define emotional intelligence as the ability to monitor and control one's own feelings and those of others, utilizing these emotions to guide thoughts and actions [44]. Howard Gardner further delineates emotional intelligence into two skills: intrapersonal intelligence and interpersonal intelligence. Intrapersonal intelligence, or intra-personal intelligence, pertains to a person's capacity to communicate, self-reflect (self-image), and exercise self-control. Individuals possessing high intrapersonal intelligence are often described as mature. On the other hand, interpersonal intelligence involves a person's ability to communicate with others, socialize, understand others (empathy), and respond sympathetically to others. Due to its focus on intrapersonal and interpersonal intelligence, emotional intelligence holds greater positive implications in a person's life. According to psychology experts Cooper and Sawaf, emotional intelligence is the ability to feel, understand, and selectively apply emotional power and sensitivity as a source of human energy and influence [45]. Howes and Herald assert that emotional intelligence is a component that makes someone adept at using their emotions. Given that human emotions are rooted in deep feelings, hidden instincts, and emotional sensations, emotional intelligence offers a deeper and more comprehensive understanding of oneself and others. In conclusion, emotional intelligence represents the level of character maturity related to various emotional sensations, enabling the recognition of one's identity through attitudes and actions in one's social environment.

### 3.5. Aspects of Emotional Intelligence

Unlike IQ, which has various measuring tools, emotional intelligence, or EQ, cannot be quantified with numbers. However, it can be assessed using aspects of emotional intelligence. The five fundamental emotional and social skills, according to Goleman, include:

- **Self-awareness:** Self-awareness is the ability to comprehend one's emotions, exercise judgment in decision-making, and maintain self-confidence. It represents a neutral mode that sustains self-reflection even amid emotional storms. Within this aspect of recognizing one's own emotions, three indicators exist: knowing and feeling one's emotions, understanding the causes of feelings, and recognizing the influence of emotions on actions.
- **Managing emotions:** This refers to a person's ability to control and handle their emotions in a manner that positively influences task execution, demonstrates sensitivity to one's conscience, enables the postponement of pleasure until goals are achieved, and facilitates recovery from emotional stress. The objective of managing emotions is to achieve emotional balance, not to suppress emotions. Aristotle framed it in terms of natural emotions, emphasizing harmony between feelings and the environment. Within this aspect of managing emotions, several indicators include: tolerance of frustration, improved control of anger, ability to manage aggressive behavior that could be harmful to oneself and others, harboring positive feelings about oneself and others, possessing the ability to cope with stress, and the capacity to alleviate feelings of loneliness and anxiety.
- **Motivate Yourself:** This pertains to emotional tendencies that guide or facilitate one in achieving goals. Individuals possessing this skill tend to exhibit higher productivity in their endeavors and demonstrate persistence in pursuing goals despite encountering obstacles and failures. This ability encompasses a drive for achievement, commitment, and optimism. A crucial concept in motivation theory is the intrinsic power within individuals. According to McClelland, individuals can be motivated if they genuinely desire to achieve better than others. In the realm of self-motivation, several indicators include the ability to control individual impulses, manage negative stimuli or temptations, maintain optimism, and concentrate on the task at hand [46].

- **Empathy:** Empathy involves an awareness of the feelings, needs, and interests of other people. Empathic individuals can sense what others feel, show heightened sensitivity to others' desires, understand different perspectives, build relationships based on mutual trust, and adapt to various types of relationships. In the aspect of recognizing other people's emotions, three indicators include the ability to accept other people's points of view, maintaining an attitude of empathy or sensitivity towards others, and the capacity to actively listen to others.
- **Social Skills:** This refers to the ability to establish social relationships and handle emotions effectively during social interactions. It includes the capability to carefully perceive situations and social networks, interact smoothly, and employ these skills for influencing, leading, deliberating, resolving disputes, and collaborating with a team. Building relationships is demonstrated through understanding the importance of establishing connections with others, resolving conflicts amicably, effective communication, maintaining a friendly and sociable attitude, being considerate, paying attention to others' interests without selfish motives, fostering harmony within groups, willingly sharing feelings and collaborating, and embracing democratic values. In summary, the aspects of emotional intelligence comprise self-awareness, self-regulation, self-motivation, empathy, and social skills.

### 3.6. Music Art (X)

Data on musical arts variables were collected through an interview consisting of eight statements, the validity and reliability of which were tested. Subsequently, a questionnaire was administered to 40 respondents for completion. Analysis of the research data revealed that the distribution of answer scores ranged from a low of 95 to a high of 129, and this information is presented in [Table 1](#).

**Table 1.** Frequency Distribution of Musical Art Variables (X)

Score Intervals	Variable X		
	<i>F<sub>Absolute</sub></i>	<i>F<sub>Relative (%)</sub></i>	<i>F<sub>Cumulative (%)</sub></i>
95 - 100	6	15	15
101 - 106	8	20	35
107 - 112	5	12.5	47.5
113 - 118	4	10	57.5
119 - 124	7	17.5	75
125 - 130	10	25	100
Total	40	100	

### 3.7. Emotional Intelligence (Y)

Data on the emotional intelligence variable were collected through an interview comprising eight statements, the validity and reliability of which were tested. Subsequently, a questionnaire was administered to 40 respondents for completion. Analysis of the research data revealed that the distribution of answer scores ranged from a low of 93 to a high of 138; this data is presented in [Table 2](#).

**Table 2.** Frequency Distribution of Emotional Intelligence Variables

Interval Skor	Variabel Y		
	<i>F<sub>Mutlak</sub></i>	<i>F<sub>Relatif (%)</sub></i>	<i>F<sub>Kumulatif (%)</sub></i>
93 - 100	7	17.5	17.5
101 - 108	9	22.5	40
109 - 116	6	15	55
117 - 124	8	20	75
125 - 132	2	5	80
133 - 140	8	20	100
Jumlah	40	100	

### 3.8. Test Requirements Analysis

#### 1) Normality Test

The Normality Test, as depicted in Table 3, is employed to ascertain whether the data population is normally distributed. The normality test was conducted using the EViews 10 application.

**Table 3.** Data Normality Test Value

Variable	X	Y
Mean	21.90000	20.45000
Median	22.00000	21.00000
Maximum	27.00000	25.00000
Minimum	17.00000	15.00000
Std. Dev.	2.362094	2.385318
Skewness	-0.399349	-0.327584
Kurtosis	3.003916	2.507680
<b>Jarque-Bera</b>	<b>1.063223</b>	<b>1.119376</b>
<b>Probability</b>	<b>0.587657</b>	<b>0.571387</b>
Sum	876.0000	818.0000
Sum Sq. Dev.	217.6000	221.9000
Observations	40	40

The conclusion from the above data processing is as follows: since the JB values with Probability = 0.587 (variable X) and 0.571 (variable Y) > 0.05, H0 is accepted, and Ha is rejected. Therefore, it can be concluded that variables X and Y have a NORMAL distribution.

#### 2) Hypothesis testing

Simple Correlation; based on Table 4. The results show that the calculated correlation coefficient (r) is greater than the tabulated correlation coefficient (0.6726 > 0.3120). Therefore, it can be concluded that the null hypothesis (H0) is rejected, and the alternative hypothesis (Ha) is accepted. Consequently, there is a positive and significant relationship between the art of music and teenagers' emotional intelligence.

**Table 4.** Pearson Correlation Coefficient Test

Variable	X	Y
X	1	<b>0.6726146734199864</b>
Y	<b>0.6726146734199864</b>	1

Significance Test: The significance test is conducted using the t-test formula. From the t-test results, the t-value is obtained and compared with the t-table. Referring to Table 5, it is evident that the t-value (5.6031) is greater than the critical t-table value (2.4285). Therefore, the alternative hypothesis (Ha) is accepted. Consequently, it can be concluded that there is a positive and significant relationship between the art of music and teenagers' emotional intelligence. Y is the dependent variable, and the least squares method is applied. The data were collected on August 11, 2022, with a sample size of 40, including the subjects under observation.

**Table 5.** t test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	<b>5.574908</b>	2.669797	2.088139	0.0435
X	<b>0.679228</b>	0.121223	<b>5.603128</b>	0.0000
R-squared	<b>0.452410</b>	Mean dependent var		20.45000
Adjusted R-squared	<b>0.438000</b>	S.D. dependent var		2.385318
S.E. of regression	1.788193	Akaike info criterion		4.048995
Sum squared resid	121.5101	Schwarz criterion		4.133439
Log likelihood	-78.97990	Hannan-Quinn criter.		4.079527
F-statistic	31.39505	Durbin-Watson stat		2.534723
Prob(F-statistic)	0.000002			

Coefficient of Determination ( $r^2$ ); determining the extent of influence the independent variable has on the dependent variable is indicated by the size of the coefficient of determination. According to the output, the  $r^2$  value reveals a figure of 45.24%, signifying that the percentage contribution of musical arts (Variable X) to emotional intelligence (Variable Y) is 45.24%. In conclusion, the relationship between variable X (Music Arts) and variable Y (Emotional Intelligence) contributes to 45.24%. The research analysis results provide insights into the relationship between the art of music and emotional intelligence in teenagers at SMA Negeri 1 Fakfak. The research indicates that music contributes 45.24% to emotional intelligence. Therefore, variable X (musical art) exhibits a positive and significant relationship with variable Y (emotional intelligence).

#### 4. Conclusion

Based on the results of research analysis concerning the relationship between the art of music (X) and adolescent intelligence (Y), a conclusion can be drawn: there is a positive and significant relationship between the art of music (X) and the emotional intelligence of adolescents (Y). The results of the simple correlation test calculations indicate that the  $r$  count  $>$   $r$  table ( $0.6726 > 0.3120$ ), concluding that the relationship is positive, and further confirmed by a significant test. The significance test, conducted using the  $t$ -test, yielded a result of  $t = 5.6031$ . Meanwhile,  $t$  table = 2.4285 ( $t$  count  $>$   $t$  table), leading to the conclusion that there is a positive and significant relationship between musical arts (X) and adolescent emotional intelligence (Y). Based on this explanation, it is concluded that the hypothesis in this research is accepted.

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