



## **NURTURING THE MUSIC SKILLS INCREASE THE SCHOOL READINESS OF STUDENTS WITH AUTISM**

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### **Abstract:**

This study explored the relationship between music ability and school readiness in Indian children. Music ability is described as children's music ability, while school readiness is defined as a situation in which a child is expected to enter formal education. This study proposes the hypothesis that music interest is associated with school readiness. This is a correlation research study of 17 children aged 5–6 years ( $M = 6.10$ ,  $SD = 0.33$ ) enrolled in a kindergarten school in Ajmer, Rajasthan. The music merit scores were obtained from the Principal Scales of Music Audit, while the School Readiness Score was obtained from the Sushisen methods Readiness Assessment III edition. The data were analyzed using Pearson correlations. Consequently, there was no association between music ability and school readiness ( $r = 0.196$ ,  $p = 0.452$ ). Approaches to the discussions, Sushisen methods activities and cultures included in the results. Further study is recommended to establish a link between music ability and school readiness.

**Index Terms:** Readiness Assessment, Music Skill, Principal Activities of Music Audition, School Readiness

### **1. Introduction:**

The transition from kindergarten to primary school is one of the most important periods in children's lives. A study has shown that children who lack the skills to adapt to change may face problems with education, social skills, and attainment [1]. Therefore, for children to be successful in this transition, they must have some skills.

To prevent these problems, children need to be prepared while moving from kindergarten to primary school. School readiness is defined as a child entering the formal education system, such as primary school [2] as a result of interactions between children and their environment [3]. There are four main types of school readiness; Physical and mental health, cognitive skills, socio-emotional skills and pre-academic skills [3]. In the physical and mental health category, children are expected to have gross and fine motor skills that correspond to their developmental milestones. Witty Skills are the skills required for basic functioning, such as focusing on and focusing on a task. Community

Emotional skills include skill sharing and listening to other people. An example of pre-education skills is the rise of literacy and emerging numbers. School readiness is essential because it predicts later achievements [4]. Therefore, one must work in kindergarten to prepare his students for their school readiness. However, not all education systems require children to enter kindergarten. India is one of the world's education systems, in which children are not required to enter kindergarten before formal schooling.

Music can be a great tool to prepare for children who are not in or out of kindergarten. It was hoped that music would benefit the cognitive and educational aspects of humans. Some research studies have attempted to examine the effect of music on educational achievement [5] - [7], with the assumption that children who read music instruments have better academic achievement than other children who have played music. Have not read the instrument. Some studies have investigated the benefits of music in special educational skills such as reading ability [8] - [10] and mathematics [9], [11], [12] and cognitive ability such as attention [13], [14], and intelligence [15].

The skills described in the above study are considered as a fundamental component of school readiness. Thus, it can be assumed that there is an indirect relationship between the components of music skills and school readiness. As mentioned earlier, music ties in with some pre-education skills that are considered a component of school readiness. However, only a few studies have evaluated the relationship between music and school readiness. Typically, these studies measure small aspects of school readiness (such as music and beginner skills, a small part of pre-academic skills), or use of music as a test condition to improve school readiness. Let's focus on doing. It is necessary to examine it in depth Relationship between music and school readiness components. Therefore, the present study investigates the relationship between music and pre-academic skills as one of the components of school readiness.

In summary, the purpose of this study is to investigate the relationship between music ability and pre-school skills in kindergarten children between the ages of 5 and 6 in Jakarta, India. Music aptitude, described










as children's music ability [16], was chosen with the assumption that children between the ages of 5 and 6 had no music abilities or music achievements. Objective evaluation can be done. Again, the establishment of music is considered an appropriate framework for use in this study. Since pre-school skills are still considered an important indicator of a child's readiness in the context of India, pre-school skills were selected to represent school readiness.

The current study is a correlational study, where music scores are obtained using primary measures of music ability, school readiness scores are obtained using the Sushisen methods, and a set of music abilities and school score data are combined to accommodate disability. The study also evaluated differences in the relationship between music ability and school readiness based on gender, socio-economic and extra-education class. Recent studies suggest that music is associated with components of school readiness. Therefore, the present study assumes that there is a significant relationship between music ability and school readiness in Indian children 5 to 6 years of age.

**2. Research Works:**

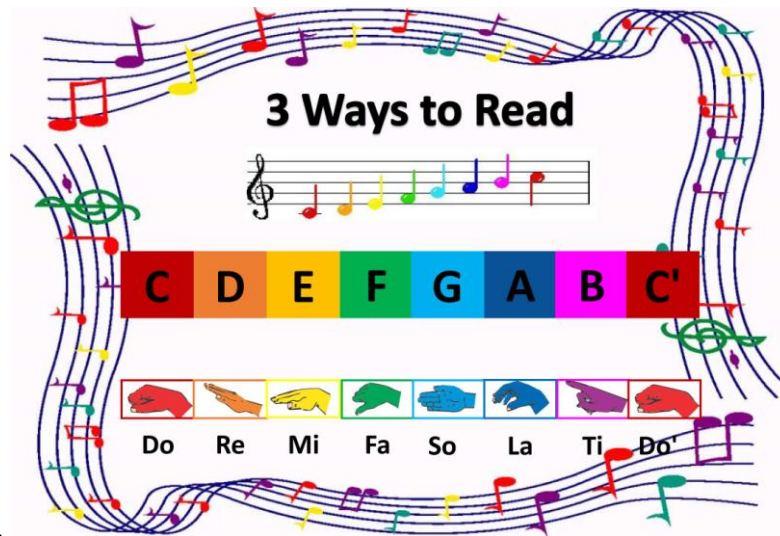
**A. The Participants:** Participants were 17 (9 female and 11 male), ages 5 years 4 months to 6 years 8 months (M = 6.1, SD = 0.33). The participants are students from kindergarten schools located in Tamil Nadu in Madurai, India. 52% of the participants were of low to medium socio-economic status. All participants had never taken any personal music lessons before. However, two participants took additional lessons during data collection to help with their educational studies.

**B. Music Censorship is the Primary Activity:** The main activities of the Music Audition (music therapy) measure children's learning ability from kindergarten to grade 3 [17]. It uses short music phrases, where participants are asked to identify whether the pattern of music phrases is the same or different. There are two subtypes of music therapy, Tanwala and Tal [18]. Assessment of tonal subgroups is the ability to identify a participant's tonal paradigms, while rhythmic subtypes assess the participant's rhythmic patterns. These subtypes should be administered on two different days with an interval of one week. Each sub-category consists of practical samples and 40 test questions, which take 32 minutes to complete. The maximum score for each sub-genre is 40, while the maximum score for music ability is 80.

<b>MUSIC PRACTICE BINGO</b> <small>simplykierste.com</small>				
	sharp	half note		treble clef
dynamics		time signature	forte	
whole note	piano		tempo	#
	music	sixteenth note		bass clef
eighth note			quarter note	flat

Anbagam school of Madurai covering pre-academic skills including color, letter, number / number, size / comparison and form. Measuring.

**C. Process:** After obtaining informed consent, data collection began with a building-relationship session with children in the classroom, followed by evaluation, music therapy and ASD. The Autism therapies subgroups were administered on a weekly basis on two separate days. For example, the Tanwala sub-class was held on Thursday and the Taal subtraction was held on Wednesday. Each subtype lasts 30 - 40 minutes. Both tests are presented to all participants in the class in partnership with their classroom teachers. BSR-3 was conducted separately for each participant in a separate room in kindergarten. The evaluation lasted 15 to 20 minutes.



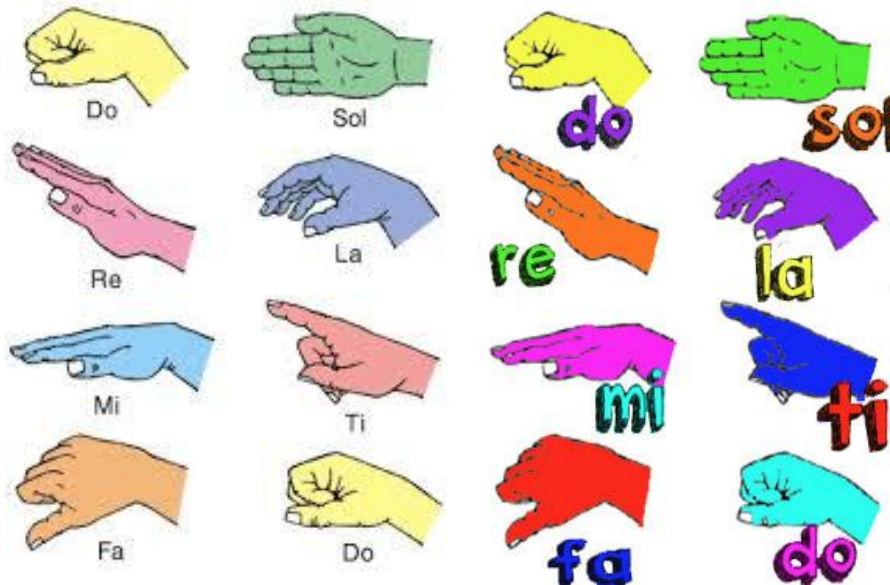
### 3. Results:

In this research, the participants' Donovola ( $M = 25.24$ ,  $SD = 3.49$ ) and Rhythm ( $M = 24.06$ ,  $SD = 3.86$ ) scores belonged to the average group. Results of scores on music ability were also found in the mean group ( $M = 49.19$ ,  $SD = 6.07$ ).

This study found no significant effect of music on gender ( $t(15) = 36.362$ ,  $p = 0.72$ ) and socio-economic status ( $F(2, 14) = 1.76$ ,  $p = 0.20$ ). These results indicate that there is no significant difference in music ability scores between gender and socio-economic status. The school's average readiness score in this study. Subgroup of characters, 94% mastery / number combination, 82% mastery / comparative subtype, and 70% level composite

The study included gender ( $t(15) = 3.48$ ,  $p = 0.08$ ), socioeconomic status score ( $F(2, 14) = 0.735$ ,  $p = 0.497$ ) and additional educational lessons ( $t(15) = 0.94$ ,  $p = 0.34$ ). About school readiness. These results indicate that there is no significant difference in school readiness scores between gender, socio-economic status and extra-academic subjects.

Pearson's two-year correlation showed no relationship between music ability and school readiness ( $r = 0.196$ ,  $p = 0.452$ ), indicating that an increase in school readiness score was not associated with music ability score. Further analysis evaluating the relationship between subscales of music ability and school readiness found that there was no correlation between the subscale of PSMA-3 and the subscale of PSMA. This indicates that the increase in the subunit of music therapy was not associated with an increase in the subunit of PSMA-3. Therefore, these results do not support the hypothesis of this study.



The relationship between the tonal subtype of music therapy and the number / number of PSR-3 was significant ( $R = 0.51$ ,  $p = 0.03$ ). This is a much stronger correlation than other subcategories. The second strongest correlation is the cadence subunit of the music therapy and the PSR-3 variants. However, there was no significant relationship between the two subgroups, indicating that the relationship was likely due to chance.

#### 4. Discussion:

There was no statistical correlation between music ability and school readiness in this study, so the null hypothesis was adopted. Children with high music scores do not need to be in school readiness and vice versa. As a result, a 1986 study by Gordon [19] found that Autism therapies was not associated with school readiness, gender, and children's achievement. The present study proposed two assumptions based on this conclusion.

The first assumption is that music qualification only plays the role of a music ship. When the music ship is exposed to a variety of music activities, it fills music energies, which are created and transformed into music talents. Therefore, this particular energy has nothing to do with other non-music skills, in this case, pre-academic skills, as long as the opportunities are practiced.

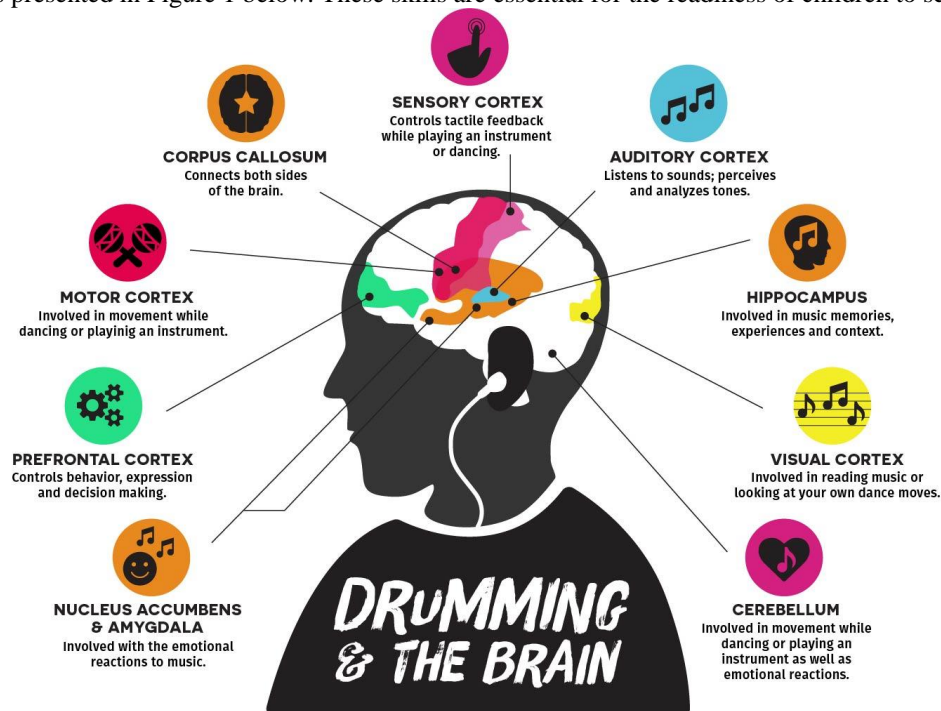
However, there is another explanation for the fact that music precedes music [20]. This explanation assumes that children with high music interests are more attracted to different music activities, which indirectly improves their music abilities, however, more work is needed to explore this relationship. .

The first assumption is that music shipping is a skill that can only be embraced when it is properly expressed at the right time. This assumption leads to the next suggestion that perhaps the music learning process is related to school readiness and other non-music skills. This suggestion can be explained by the role of the transfer effect in the relationship between music and non-music skills. The transfer effect is the process by which the skills used in a given environment can be applied to other cognitive abilities. Previous research has suggested that music training influences progress in the non-music domain, for example mathematics [12], [21]. Children who study music will develop and improve their music ability. At the same time, there is a transformative effect, so as a result of music training there are not only music skills but also non-music skills. Therefore, it can be concluded that music talent is not directly related to non-music skills. However, this is a process of music practice that is directly related to non-music practices.

It should be noted that research on the transfer effect shows very inconsistent results. It is not clear whether the transfer effect is possible. Further investigation is recommended to compare music learners with non-music skills and non-music skills.

Additionally, Schellenberg explained that music training gives children different qualities in their experiences than other children who do not practice music [22]. These experiences include having enough discipline to practice regularly, focusing on practice, educating oneself to decode visual icons, and changing gynecological systems to play music. The skills gained from these experiences can be automated and unknowingly carried out in other tasks.

The transfer process relies on the similarity of the cognitive process involved in two different tasks [8] [9]. This process depends on how arbitrary and how much automatic capabilities can be applied to other domains. If this process can be done automatically and spontaneously, it is called pass transfer ability. However, if it requires constant processing, reflection, and intentionally adopting similar skills to use another task, it is called telecommunication skills. A summary of the near and far transfer skills of music training by Mindlarzewska and Trost [25] is presented in Figure 1 below. These skills are essential for the readiness of children to school.





Based on the above discussion, it is assumed that there may be an indirect relationship between music ability and school readiness (Figure 2). The connection begins with the music ability to predict music participation, where children who are more interested in music are naturally attracted to more music activities. Exposure to music activity will enhance and enhance their music abilities. During this process, there are transfer effects, where children can transfer their learning skills to other domains such as music.

On the other hand, fewer children are not as attracted to music activities as their peers. Exposure to music activity may hinder the development of their music abilities. Therefore, the probability of the transfer effect is low. This view suggests that music expression may play an important role in the relationship between music performance and school readiness. In addition, there is an indirect relationship between school readiness and music readiness Investigation is recommended.

In this study there is a medium power between tonal verse and number / number. This is an interesting finding as rhythm skills are generally associated with mathematical concepts [12], [21]. Future research is recommended to examine the relationship between tonal and number / number perception in 5–6 year olds.

#### **View of the Activities:**

In view of the measures, there are four important points related to music therapy and Autism therapies. First, music therapy not only assesses specific skills, but also requires a combination of skills to complete tasks. For tasks in the music therapy, children need to recognize the auditory system in their hearing or rhythm. However, children need the ability to decode audio information as visual icons by looping the answer in response. When a child identifies a different form and writes the wrong answer, his or her marks will be deducted and the score will be lower, meaning that the scores do not reflect his actual music ability. This is one of the problems with the measurement of music ability, where sub-modules not only measure a specific task but also require a combination of different skills to complete the test [26].

For future research, we need to make sure that the music therapy only assesses music-related skills. Additional steps have been suggested to ensure that the activity accurately records the participants' music ability. Additional steps will ensure that participants are actively engaged, displaying their comprehension, and following the sounds with gestures (such as applause) rather than actively listening to stimuli.

Second, this test is administered jointly by the music therapy because the test can be administered individually or as a group [17]. In practice, however, the music therapy administration did not perform as expected. It is very important to wait for complete silence during administration. But in the region, some children threw ideas out there, which reduced the overall silence of the administration and alienated the participants. This situation disturbed other participants and could affect their performance in music therapy. Learning from this experience, it is recommended that the music therapy be done individually for kindergarten children and create an environment conducive to the attention of the participants.

The third is the lack of music ability measurement for 5-6 year olds. At the beginning of the study, participants chose this framework with the assumption that they did not acquire measurable music skills. As a result, however, there is no relationship between music ability and school readiness, which provides us with another suggestion that music skills may be related to school readiness. To the author's best knowledge, standardized music skills activities for children aged 5-6 are not yet available.

Differentiating the way music is measured or the ability of music in kindergarten is a challenge. The limitations of the two concepts are still unclear, to what extent evidence is classified as a music genius, and to what extent evidence is considered a music genius. Further study of these two constructs in kindergarten children should provide a realistic foundation for the development of music skills and music ability metrics in the future.

Regarding Autism therapies, participants were found to be unfamiliar with certain items. The researcher had to explain some items to the participants, which led to non-standard management. In addition, ninety-nine percent of the participants had unanswered form. This implies two conditions. First, there may be some items that are not understood by the participants because the term choice does not fit their age, and second, there are items that are not commonly used in Indian culture. This indicates that the complexity affected the school's readiness score and, as a result, did not indicate the participant's actual status. If the optimization process of ASD is fully followed, the problem can be assessed; Post-translation ensures compatibility with the newly translated version of the source, further analysis of items requiring cultural adaptation, involving experts, running a model with participant-like characteristics, and validity-validation tests [27]. However, this study only performed certain stages of cultural adaptation, such as translation and counseling processes. This minimum optimization is not sufficient to minimize translation problems. Future Integrations the comprehensive adaptation of ASD to Indian culture.

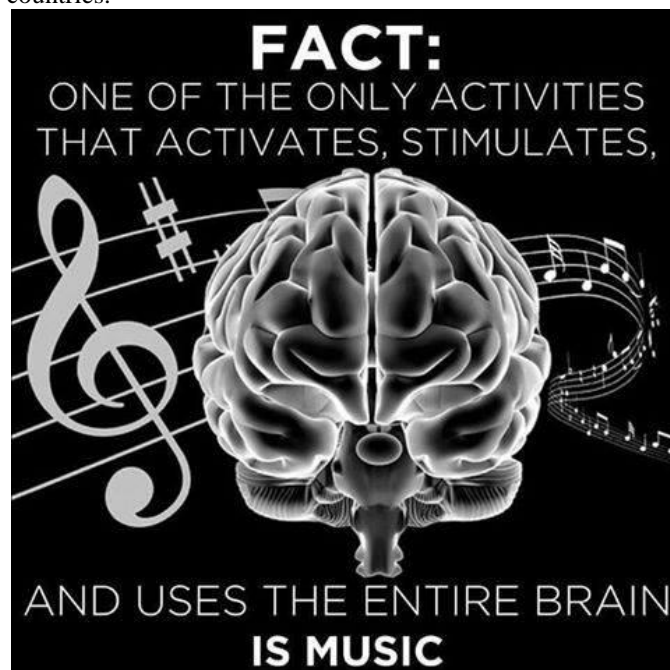
#### **Perspectives Related to Culture:**

The present study also reflects the cultural differences between the western population and Indian population. Music behaviour is considered to be universal, but the interpretation and structure will be different depending on the cultures [28]. These differences are reflected in the variety of music definition and structure, music activities, music functions, and many others. The present study acknowledges that there may be intangible

cultural differences that have impacts on the study results.

Studies about music aptitude and school readiness are still western-oriented generating results that are seemingly 'western culture oriented'. Most studies recruited Western participants who were brought up in a culture that is different from Indian culture. The differences in background of participants may have impacts on the study results. For example, a comparison, which the author will use to analyse the aspect of music structure in both cultures. In Bali, India, the structure of music consists of irregular rhythm and 'stretched' tones that give the impressions of out-of-tune, which is commonly perceived as unpleasant and avoided in Western music [28]. In terms of the music function, music in India has been used as part of a ritual to achieve Sakti or divine power whereas in western culture music is more of a part of maintaining the social connection. Is there a significant difference raised from this condition? The present study cannot yet answer this question. However, the differences in music forms and functionality between Indian culture and other cultures require deeper understanding through further studies.

Moreover, the differences in socio-economic between India and western cultures may have impacts on the results of the present study. Socio-economic status is related to and becomes a basis for many factors such as the educational background of parents as well as access and exposure to music. A review concluded that the educational background of parents has a significant impact on children's music engagement[29]. Children who engaged in a music activity are more likely to have more educated parents and vice versa. Furthermore, it was also mentioned that socio-economic background also influences the music exposure of the children. Children with better socio-economic background may have better music exposure because their parents can afford it. From the perspective of access and exposure to music through the internet, the Indian population has less access to music compared to the population in Western countries. This is because internet access in India is only available to less than approximately fifty percent of the population [30] and most of the internet users are people living in urban areas of India. Therefore, if Indian and western cultures are compared based on the socio-economic status, then there is a significant difference since India is considered as a developing country and most of the western countries are known as developed countries.

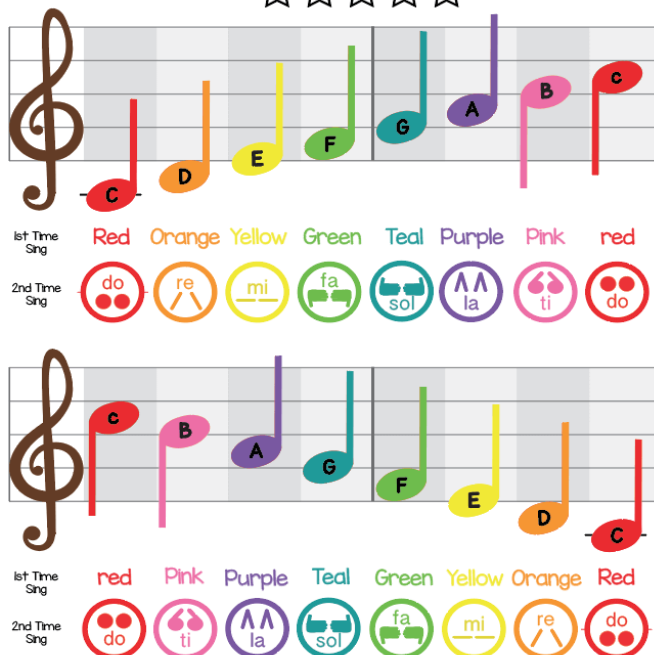


Furthermore, the standardised measures are mostly from western culture, including the measures in the present study which are music therapy and ASD. Although efforts have been made, such as cultural adaptation, to ensure that these Suitable for measures used in the Indian population, the present study addressed culture-related challenges.

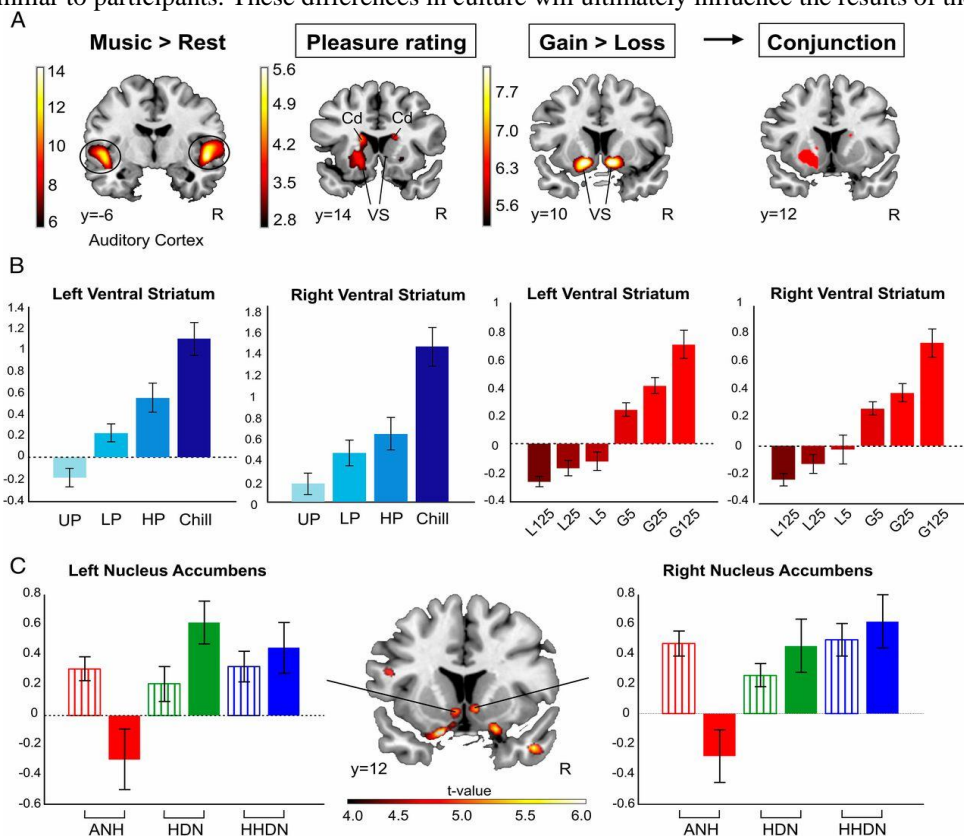
Music is called the 'universal language'. However, research shows that, with language skills, people prefer a certain amount of music based on the conditions and circumstances that they have created [31]. Born into a family of Indian culture, no one knows, admires or loves India-based songs that showcase Indian music. If he is exposed to songs with a different setting, he may find the songs obnoxious and may need time to learn or change it before composing the song. This is because she does not know the system and / or wants songs of Indian culture. A 2008 study by Iverson, Patel and Okushi found that native language affects people's perception of music and, most importantly, rhythm.

# C Major Scale

Lesson 2.6



In this study, the music therapy is designed from the Western culture, which creates a belief that Indian participants are familiar with the Javanese paleoc melody [31]. This may indicate a cultural barrier, where children who have too much music but are unable to perform well because they do not know the composition of the raga or rhythm. Future Studies In the future study of Indian culture should be established to what extent it is used to establish adequate music skill levels. Another example is the items in the subset of the ASD form, which includes items unfamiliar to participants. These differences in culture will ultimately influence the results of the study.



## 5. Conclusion:

The fact that there is no relationship between music ability and school readiness in the present study indicates that music is regulated by transfer effects in accordance with the above results. However, the role of the transfer effect on the function of music in this current study has not been further evaluated. Therefore, additional research is needed to examine the effectiveness of music in increasing school readiness in children. In addition, it is important that future studies evaluate all aspects of school-related readiness, such as cognitive abilities, socio-emotional skills, and pre-learning skills to gain a deeper understanding of music-related variation.

The results of the present study indicate that a child's music ability does not predict his school readiness. Results suggest that children with any music ability can be trained or educated to acquire adequate school readiness skills. Numerous experimental studies [13], [15], [33] suggest that music is suitable for teaching elements of school readiness skills such as cognitive skills, pre-school skills, and social-emotional skills for older children. Considered the 'sushisen method'. 5-6 years old. Music is also considered a universal digital device that is accessible for children with different music abilities to plan for developing school readiness skills.

Music ability is a predictor of music participation, which indirectly affects music ability and, by extension, the transmission effect of non-music domains, is being studied in the future. Transfer effect. In addition, there should be comparative studies that attempt to examine the relationship between music ability and school readiness and music skills and school readiness.

In terms of measurement, there should be a variation of music therapy considering the type of rhythm and rhythm familiar to Indians. In addition, there should be studies that focus specifically on developing music metrics using the criteria of Asian cultures. A comprehensive ASD adaptation is recommended to replace culturally inappropriate items for use in Indian children.

The increasing emphasis on cultural diversity can lead to interesting conclusions about the role of culture in children's music interest. The role of these indicators, which are perceived as universal, 2) factors influencing one's culture and surroundings, and 3) a music experience, can influence children's music interest. And synthesizing music. They become adults because they are recognized. Furthermore, it is recommended to use an adequate sample size in the context of power analysis to obtain valid, reliable and general results for all future research studies.

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