

A Comparison between Suzuki Method and Traditional Piano Method on Children with Autism Spectrum Disorder: Case Study

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Abstract

Autism Spectrum Disorder is a neurological disorder that has a growing diagnostic rate among children. Children with ASD first show signs during infancy or childhood, and the progression varies greatly between individuals. An increasing number of parents decide to engage their children in artistic development, with piano being a popular choice. Though observational studies have noted the heightened sensitivity to sound and enhanced recall abilities of children with autism when learning instruments, there is little consensus on which piano teaching method is the most effective in developing musical skills. The goal of this study is to assess the effects of two piano-instruction methods on an autistic child's music performance, which is assessed by categories, including tone quality, technique, interpretation and artistry. This paper presents the case of a 9-year-old child diagnosed with autistic disorder living in New Jersey. The Suzuki method and the traditional method are utilized to improve the piano abilities of this child. The different results in piano performance following the application of the two teaching methods in a three-year-period (2017/1-2019/12) may suggest the modality of different teaching methods on this child. This study may lay the groundwork for future research on selective piano teaching techniques for children with autistic disorder.

Introduction

Autism Spectrum Disorder (Autism/ASD) has become a growing worldwide health crisis with increasing diagnosed cases among children [1]. Autism is a complex neurological and developmental disorder that begins early in life and affects how a person acts, learns, and interacts with others. The symptoms of the disorder primarily range from poor eye contact, repetitive behaviors, "tuning people out" to intense tantrums and high sensitivity to noise [2].

Special abilities are more common in autism than in other groups, with one study finding that more than 70% of autistic children and adults had a special isolated skill in memory (52% of the sample), visuo-spatial abilities (32%), calculation, drawing or music (about 17% for each area). Some well-documented skills are as astounding as any in fiction, such as the renowned artist S. Wiltshire's ability to draw in beautiful detail the cityscape of Tokyo from memory after a single 20 minute helicopter ride over the city [3].

A growing number of parents incline to help their children with ASD develop musical talents, with the piano being one of the more popular choices. Children and adults with ASD show greater pitch sensitivity and pitch categorization abilities than typical controls, enhanced pitch memory and labeling abilities [4]. However, a number of teaching techniques exist with little consensus on which would produce a greater effect in developing the musical abilities of

autistic children. This case study will present independent research regarding the effects of two different methods of instruction on the piano skill development of an autistic child from the age of 7 to 9.

The Case Study Object

This paper presents the case of A, a 9-year-old child with autism who was engaged in different teaching methods in developing musical abilities for the past three years (starting from age 7). A lives in the state of New Jersey in the United States for approximately five years. He was diagnosed with autistic disorder at two years old, and his diagnosis still stands at the end of this study.

The child started studying piano systematically beginning from the age of almost seven. He took piano lessons regularly in the weekends but had only occasional practice sessions during the week. He expresses enjoyment in listening to classical music along with other genres.

Method

The musical ability assessment in this experiment follows the Classical Piano Jury Rubric put forth by the Sonoma State University Department of Music [5-7]. This rubric is used to evaluate jury performance, or live performance, of students at that institution. The performer is judged from four facets: tone quality (beauty and control), technique (use of pedal, note and rhythmic accuracy,

precision/dexterity), and interpretation (contrast and style, phrasing, tempo, dynamics), and artistry (fluency, technical mastery). For each facet, the researcher rates the performer from 1-10. See table below for descriptions.

	1-3	4-6	7-8	9-10
Tone Quality	Underdeveloped treatment of melodic and harmonic voicing and musically expressive clarity and control	Developing appropriate treatment of the melodic and harmonic voicing and musically expressive clarity and control	Tone is well developed but occasionally lacks appropriate interpretation of voice that is in need of refinement	Tone is mature and voicing is appropriate and musically expressive
Technique	Technical flaws hinder performance. Performer has to restart due to errors	Technical facility and note accuracy is inconsistent	Technical facility is very good, with minor flaws during difficult passages or inappropriate pedaling choices	Technical facility is fluid and accurate with an outstanding display of dexterity and appropriate pedaling
Interpretation	Performer lacks a fundamental understanding of the appropriate choice in phrasing, tempo and dynamics	Performer's musical interpretation is developing. Tempo, phrasing and dynamic choices are not always appropriate	Performer displays a good understanding of appropriate musical interpretation in regard to tempo, phrasing and dynamics	Performer displays a deep understanding of appropriate musical interpretation demonstrated by tasteful tempo, phrasing and dynamics
Artistry	Performance is underprepared. Technical flaws hinder the fluency of the Performance	Performance is somewhat prepared. Fluency is inconsistent.	Performance shows adequate preparation. Fluency is very good, with minor flaws during difficult passages.	Performance is extremely well prepared with exemplary Artistic fluency.

The researcher teaches classical piano pieces using the Suzuki method* to the child, who is observed closely. Any indication of anxiety or discomfort resulted in a 5-minute break. After five sessions (typically after a month), the child is asked to play a piece he completed. Data were collected through evaluating the performance of the child using the rubric above. This process is repeated using the traditional piano lessons method* following the Suzuki method period. Each time, the child learns a different piece but with similar difficulties. Together, this process is repeated 5 times – 2 times a year – and the data below shows the results after this three-year period (2017/1-2019/12). The qualitative observation includes all the characteristics demonstrated in each repeated process.

Suzuki Method: Children are taught music as if they were being immersed in a foreign language. Children are exposed to music, learning to listen to the piece before any attempt at reproducing the song is made. Children learning to play piano with the Suzuki method are taught to play “by ear” first, and learning to sight read music is not taught until the child is successful with reproducing music by ear. This teaching technique allows the child to imitate most of the time. Most importantly, Suzuki instruction teaches children to play the instrument before introducing note reading [5, 6].

Traditional Piano Lessons: children are taught to read notes and sight read before listening to the actual piece. Children will play the instrument after learning note reading [5, 6].

Results

Qualitative observation for each teaching method

Suzuki: The subject had noticeably longer attention span when engaged in imitating others’ performance. The pieces learned can be recalled after a period of time. The subject shows little signs of anxiety with rare violent behavior. The subject rarely eats snacks during his 5-minute breaks.

Traditional: While the subject had noticeably shorter attention span when learning to read notes, his attention span increases when playing on the keyboard. The pieces learned are rarely recalled after a period of time. The subject oftentimes fails to recall technical skills learned in previous sessions, resulting in the failure to read notes. The subject usually takes longer to complete a piece in comparison to learning with the Suzuki method. During the sessions, the child shows signs of anxiety more frequently, sometimes with violent behavior, including punching the piano and rarely self-harm.

Quantitative Results – Classical Piano Jury Rubric

1/2017 Suzuki	Score
Tone Quality	6
Technique	9
Interpretation	3
Artistry	7
2/2017 Traditional	Score
Tone Quality	3
Technique	7
Interpretation	4
Artistry	5
8/2017 Suzuki	Score
Tone Quality	7
Technique	9
Interpretation	2
Artistry	8

9/2017 Traditional	Score
Tone Quality	2
Technique	6
Interpretation	6
Artistry	5
3/2018 Suzuki	Score
Tone Quality	6
Technique	8
Interpretation	2
Artistry	7
4/2018 Suzuki	Score
Tone Quality	3
Technique	8
Interpretation	2
Artistry	4
10/2018 Suzuki	Score
Tone Quality	5
Technique	8
Interpretation	6
Artistry	6
11/2018 Suzuki	Score
Tone Quality	2
Technique	4
Interpretation	5
Artistry	5
5/2019 Suzuki	Score
Tone Quality	5
Technique	9
Interpretation	3
Artistry	8
6/2019 Suzuki	Score
Tone Quality	4
Technique	5
Interpretation	4
Artistry	5
11/2019 Suzuki	Score
Tone Quality	8
Technique	8
Interpretation	4
Artistry	7

12/2019 Suzuki	Score
Tone Quality	3
Technique	6
Interpretation	4
Artistry	5
Average	
Suzuki (2017-2019)	Score
Tone Quality	6.1
Technique	8.5
Interpretation	3.3
Artistry	7.2
Suzuki (2017-2019)	Score
Tone Quality	2.8
Technique	6.0
Interpretation	4.2
Artistry	4.8

Discussion

While there is a lack of reports on how different piano instruction methods affect the musical skills of autistic children, the results of this case support the researcher’s prediction based on research exploring musical talents of autistic children – children with ASD show greater pitch sensitivity and pitch categorization abilities than typical controls, with enhanced pitch memory [4, 8].

In A’s case, he scored 2.5 points, or a category, higher in “technique” and 3.3 points, or a category, higher in “tone quality” when instructed with the Suzuki method than the traditional method. This vast difference appears to show the effectiveness of exposing this child to the Suzuki method, which appears to increase recall and music expression.

It should also be noted that there is a slight discrepancy between the “interpretation” categories, as traditional piano lessons seem to stimulate the child into a more complex understanding of the tempo, phrasing, and dynamics. However, in comparison to the two previously mentioned categories, this difference can be almost negligible when the child has ASD.

The dramatic difference indicates the importance of the choice of teaching method during piano lessons of this child with autism. His response to selective teaching methods can often result in less time to learn a piece, a greater chance of remembering the notes, and a more pleasant piano-learning experience. To maximize the effectiveness of piano instruction methods, more tests should be conducted to measure the effectiveness of other teaching methods. The results may also be interpreted as follows: as the traditional method is more abstract and requires more comprehension skills, which the subject is not familiar with, the subject may have more success with the Suzuki method, which requires less work memory to learn new things.

As noted by a study, there appears to be a superior recall ability for the tone pairings in the autism group [8]. Such findings might explain why the Suzuki method is more effective in making progress. Because

of their improved “recall ability,” imitating performances result in a greater chance of completing piano pieces than learning notes. This suggests that a specific teaching method according to the subject’s response – likely Suzuki – seems to result in the most progress. For children with autism, the Suzuki method may be a superior method than the traditional method. However, ASD encompasses a range of symptoms and levels. Therefore, individualized methods based on objective experimentation may be most optimal. A’s results provide encouraging support for the continual usage of the Suzuki method in teaching piano to children with autism. The findings encourage the researcher to choose specific teaching methods, preferably Suzuki, in teaching A. The teaching method may be quantitatively assessed through consistent behavioral observation and skill assessment. The findings in this study may lay the groundwork for future research regarding other teaching methods.

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