

The Influence of Music on the Communication and Social Skills of Learners with Autism

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Abstract

This study examined the influence of music on the communication and social skills of learners with autism at Mandaue City Central SPED School, Mandaue City SPED High School, and Basak Elementary School during the Academic Year 2021–2022, serving as the basis for a proposed Communication and Social Skills Enhancement Plan. Utilizing a descriptive-correlational method, the study gathered data through questionnaires administered to parent and teacher respondents using a universal sampling technique. Data were analyzed using percentages, total weighted points, weighted mean, t-test, and Pearson product-moment correlation. Results showed that music was perceived to have a high influence on communication and social skills by parents, and a very high influence by teachers. Parents also rated learners' communication and social skills as high. A significant difference was found between parents' and teachers' perceptions regarding music's influence on these skills. While there was no significant relationship between parents' perception and learners' communication skills, a significant relationship existed between parents' perception and learners' social skills. Based on the findings, it was concluded that music significantly contributes to enhancing the communication and social skills of learners with autism. Therefore, the adoption of a Communication and Social Skills Enhancement Plan is strongly recommended.

Keywords: Special Education, influence of music, social skills, communication skills, autism, descriptive-correlational method, Mandaue City, Cebu, Philippines

1. Introduction

Autism Spectrum Disorder (ASD) represents a multifaceted neurodevelopmental condition characterized by persistent challenges in communication, social interaction, and behavior (Bertelli et al., 2022; Dalili & Zohuri, 2023; Hirota & King, 2023). According to Heller and Kern (2021), children diagnosed with ASD often encounter difficulties comprehending verbal and nonverbal signals, engaging in reciprocal interactions, and participating constructively in group settings. These challenges significantly impact their educational experiences and overall quality of life. Consequently, developing effective strategies to enhance communication and social skills constitutes a paramount concern for educators, therapists, and parents alike (Øzerk et al., 2021).

In recent years, some studies have found that music has emerged as a promising educational tool for learners with Autism Spectrum Disorder (ASD) (Mayer-Benarous et al., 2021; Rusli, 2023). With its inherent rhythm, structure, and motivational qualities, music possesses the potential to function as an engaging medium for learning and interaction (Bauer, 2020). On a global scale, particularly within the Philippines, music is often incorporated into the daily routines of individuals with autism (Lumanta, 2023). Activities such as singing, rhythmic movements, and musical games are frequently employed to cultivate participation, imitation, and peer interaction, fundamental elements in advancing social and communication skills.

Educators from special education institutions in Mandaue City have observed that the integration of music significantly aids learners with autism in multiple ways. For example, it encourages verbal imitation, enhances classroom engagement, and promotes social interaction. Despite the increasing utilization of this

methodology, there is a continuing necessity for empirical research to more thoroughly comprehend the extent of music's influence on the communication and social development of these learners.

This study examines the impact of music integration on the communication and social skills of learners with autism in selected special education schools within Mandaue City. Additionally, it investigates the perceptions of both parents and teachers concerning the role of music in the development of their children or students. The findings of this study will inform the formulation of a Communication and Social Skills Enhancement Plan, providing practical recommendations for educators working with children on the autism spectrum.

2. Literature Review

Integrating music into the learning experiences of children with autism is strongly supported by several well-known educational theories. Vygotsky believed children learn best through social interaction, and music naturally creates opportunities for shared activities and connections. Bandura emphasized the power of learning by watching and copying others, which often happens when children sing songs or follow movements together. Meanwhile, Skinner's idea of reinforcing positive behaviors fits well with how music can encourage participation, focus, and expression. Gagné also highlighted the importance of carefully planned instruction, which music can support by offering structure, routine, and clear learning steps—something beneficial for learners with autism.

In the Philippine context, there are strong legal foundations that support inclusive and creative approaches to education for children with disabilities. For instance, the Magna Carta for Persons with Disabilities (RA 7277) and An Act Establishing a Ten-Year Training Program for Teachers of Special and Exceptional Children in the Philippines (RA 5250) both promote special programs that meet the unique needs of these learners. Presidential Decree 603 and the 1987 Constitution emphasize every child's right to grow and learn in a nurturing environment. More recently, the Enhanced Basic Education Act (RA 10533) encourages schools to adapt the curriculum to suit different types of learners better, making room for strategies like music integration in the classroom.

Research backs up what these laws and theories suggest. Studies show that music helps learners with autism improve their communication, social interaction, and even emotional control. For example, children involved in music programs have been found to speak more, maintain better eye contact, and show more interest in group activities (Pater et al., 2021; Mayer-Benarous et al., 2021). Teachers have also noticed that music makes classrooms more engaging and helps build friendships among students (Campbell, 2022; Crawford, 2020; Ng et al., 2022). Interestingly, a study from the University of Montreal even found changes in the brain that support better movement and sound processing after musical activities. These findings point to music as a powerful, enjoyable, and inclusive tool for helping learners with autism thrive in school.

3. Purpose of the Study

This study investigates the influence of music on the communication and social skills of learners with autism in selected SPED centers in Mandaue City Division during the 2021–2022 school year. Specifically, it examines the perceptions of parents and teachers regarding music's impact, explores the current communication and social skills of learners with autism as perceived by parents, and identifies differences and relationships in these perceptions. The findings served as the basis for developing a Communication and Social Skills Enhancement Plan.

4. Research Methodology

This study employed a descriptive-correlational research design using universal sampling to examine the influence of music on the communication and social skills of learners with autism in selected SPED schools in Mandaue City. The respondents included 16 teachers and 30 parents from Mandaue City Central SPED School, Mandaue City SPED High School, and Basak Elementary School. The environment consisted of SPED centers implementing modular learning modalities during the pandemic. Data were gathered through a structured questionnaire adapted from Archontopoulou and Vaiouli (2020), which featured two parts: respondent profiles and a Likert-scale assessment of perceptions on music's influence. After securing permissions from the Division Superintendent and school heads, the researchers distributed the questionnaires and collected the completed forms for analysis. Data were analyzed using frequency counts, percentages, weighted means, t-tests, and Pearson's *r* to determine significant differences and relationships.

A scoring scale from 1 (very low) to 4 (very high) was used to interpret the level of influence of music on the learners' communication and social development. The findings served as the foundation for creating a Communication and Social Skills Enhancement Plan tailored for learners with autism.

5. Results and Discussion

This section summarizes the data gathered from three schools: Mandaue City Central SPED School,

Table 1. Age and Gender of the Parent-Respondents

Age (in years)	Female		Male		Total	
	f	%	f	%	f	%
50 and above	4	13.33	1	3.33	5	16.67
43 – 49	4	13.33	3	10.00	7	23.33
36 – 42	5	16.67	1	3.33	6	20.00
29 – 35	10	33.33	1	3.33	11	36.67
Failed to respond			1	3.33	1	3.33
Total	23	76.67	7	23.33	30	100.00

Mandaue City SPED High School, and Basak Elementary School. The results aim to determine the extent to which music influences the communication and social skills of learners with autism.

5.1 Profile of the Parent Respondents

This part discusses the demographic profile of the parents in terms of identified variables such as age and gender, number of children, parents' highest educational attainment, and combined family monthly income. Moreover, it determines the profile of the teachers in terms of their age and gender, marital status, highest educational attainment, length of service, and training and seminars attended.

Table 1 shows that out of the 30 parent-respondents, 23 were female (76.67%) and 7 were male (23.33%). Among the female respondents, the largest group—10 individuals or 33.33%—were aged 29 to 35. This was followed by 5 respondents (16.67%) aged 36 to 42, and 4 respondents (13.33%) in the 43–49 and 50 and above age brackets. Among the male respondents, 3 (10.00%) were aged 43 to 49, while 1 (3.33%) fell into the 29–35, 36–42, and 50 and above age groups. One male respondent (3.33%) did not indicate his age. Overall, the majority of parent-respondents were female and within the 29–35 age range.

These findings suggest that most parents of learners with autism in the study were relatively young, falling within the millennial generation. This implies a higher likelihood of being aware of modern parenting trends, adaptable to changes, and engaged in employment. Millennial parents are more inclined to support their children's education, positively impacting student performance. According to Barger et al. (2019) active parental involvement correlates with better academic outcomes for children.

Table 2. Number of Children of the Parent-Respondents

Number of Children	f	%
5 and above	1	3.33
3 – 4	9	30.00
1 – 2	20	66.67
Total	30	100.00

As shown in Table 2, of the 30 parent-respondents, 20 (66.67%) reported having 1 to 2 children. Meanwhile, 9 respondents (30%) had 3 to 4 children, and only 1 parent (3.33%) reported having 5 or more children. These results indicate that the majority of the parents preferred smaller family sizes, typically consisting of one to two children.

This preference for smaller families suggests a greater capacity for parents to provide focused attention and support to their children, particularly in terms of education. With fewer dependents, parents

may be more able to invest time and resources to ensure their children's academic and social development. Labeeque and Sanaullah (2019) emphasize that access to quality education is essential in supporting social and economic development, contributing to wealth creation and improved living standards.

Table 3.Highest Educational Attainment of the Parent-Respondents

Educational Attainment	f	%
With Master's Units	2	6.67
College Graduate	1	3.33
College Level	8	26.67
High School Graduate	13	43.33
High School Level	2	6.67
Elementary Graduate	0	0.00
Elementary Level	3	10.00
Not Schooled	1	3.33
Total	30	100.00

Table 3 shows that among the 30 respondents, 13 (43.33%) were school graduates, (26.67%) had

parent-high while 8

reached the college level but had not completed a degree. Three parents (10%) had only completed elementary education, 2 (6.67%) were either in high school or had earned master's units, and 1 parent each (3.33%) was a college graduate and unschooled, respectively.

These results suggest that many parents discontinued formal education after high school, likely prioritizing employment and family responsibilities over further studies. Others may have pursued higher education but were unable to complete it due to financial or personal constraints (Agormedah et al., 2020).

Table 4. Occupation of the Parent-Respondents

Occupation	f	%
Housewife	6	20.00
Utility	3	10.00
Barangay Staff	2	6.67
Messenger	2	6.67
Sales staff	2	6.67
Driver	2	6.67
Customer Support Associate	2	6.67
Accounting Staff	1	3.33
OFW	1	3.33
Kitchen Staff	1	3.33
Teacher	1	3.33
Laborer	1	3.33
Self-employed	1	3.33
Street Cleaner	1	3.33
None	3	10.00
Failed to respond	1	3.33
Total	30	100.00

This reflects a strong commitment among the parents to provide for their families, often at the expense of their educational advancement.

As presented in Table 4, 6 out of 30 parent-respondents (20%) were housewives. Three parents (10%) worked as utility personnel, while another three reported having no occupation. Two parents (6.67%) each were employed as barangay staff, messengers, sales staff, drivers, and customer support associates. One

respondent (3.33%) each worked as an accounting staff, overseas Filipino worker (OFW), kitchen staff, teacher, laborer, self-employed individual, and street cleaner. One respondent did not indicate their occupation.

These findings suggest that the majority of the parent-respondents are employed, and their earnings serve as the primary source of income for their households. This implies that they are likely capable of providing financial support for their children's educational needs. According to Mesra (2018), parental employment and income are among the most influential factors in raising children. Furthermore, studies have shown a significant correlation between parental occupation and children's academic performance, indicating that families with higher income levels tend to yield better educational outcomes for their children (Cooper & Stewart, 2021; Kerr et al., 2021; Magnuson & Duncan, 2019).

Table 5. Combined Family Monthly Income of the Parent-Respondents

Monthly Income (in pesos)	f	%
Above 30,000	1	3.33
25,001-30,000	0	0.00
20,001-25,000	5	16.67
15,001-20,000	3	10.00
10,001-15,000	11	36.67
10,000 and below	10	33.33
Total	30	100.00

As shown in Table 5, 11 out of 30 parent-respondents (36.67%) reported a combined monthly family income ranging from ₱10,001 to ₱15,000. Ten parents (33.33%) earned ₱10,000 and below, while 5 parents (16.67%) had a combined monthly income between ₱20,001 and ₱25,000. Three parents (10%) earned between ₱15,001 and ₱20,000, and only one parent (3.33%) reported a monthly income above ₱30,000.

Table 6. Age and Gender of the Teacher-Respondents

These findings indicate that the majority of the parent-respondents belong to low-income households. This economic condition may limit their ability to fully support their children's educational needs. Some research noted that parents from lower-income families often lead busy lives, tend to have lower expectations for their children, and may prioritize financial survival over educational involvement (Mistry & Elenbaas, 2021; Şengönül, 2021).

Moreover, while parental income may not have a direct impact on educational attainment, it exerts long-term effects by influencing access to quality early childhood education, well-resourced schools, learning materials, and supplementary educational support (Dietrich et al., 2021). These factors contribute significantly to the academic foundation and overall development of children.

5.2 Profile of the Teacher Respondents

This section presents the summary of the profile of the teachers' respondents from the three schools in terms of age and gender, marital status, highest educational attainment, length of service, training and seminars attended.

Age (in years)	Female		Male		Total	
	f	%	f	%	f	%
49 – 56	4	25.00	0	0.00	4	25.00
41 – 48	3	18.75	0	0.00	3	18.75
33 – 40	0	0.00	0	0.00	0	0.00
25 – 32	8	50.00	1	6.25	9	56.25
Total	15	93.75	1	6.25	16	100.00

As shown in Table 6, there were a total of 16 teacher-respondents, consisting of 15 females and 1 male. Among the female teachers, 8 (50%) were aged 25 to 32 years old, 4 (25%) were between 49 and 56 years old, and 3 (18.75%) were aged 41 to 48 years old. The only male respondent, representing 6.25% of the total teacher population, also fell within the 25 to 32 age bracket. These findings indicate that the majority of the teacher-respondents were female and predominantly within the 25 to 32 age range.

This suggests that teaching remains a female-dominated profession, particularly in early and special education contexts. The data also point to a relatively young teaching workforce, with many educators likely to be more attuned to 21st-century teaching strategies. Younger teachers tend to be more technologically adept, adaptable to evolving pedagogical trends, and open to professional development. According to Hanushek et al. (2019) and Ismail et al. (2018), younger teachers—particularly those aged 21 to 34—are often associated with better student outcomes. Furthermore, research has shown that a teacher’s gender can influence their teaching effectiveness, potentially affecting student engagement and achievement.

Table 7. Marital Status of the Teacher-Respondents

Marital Status	f	%
Married	10	62.50
Single	6	37.50
Total	16	100.00

As presented in Table 7, among the 16 teacher-respondents, 10 were married, comprising 62.50% of the total, while the remaining 6 (37.50%) were single.

These findings suggest that a majority of the teacher-respondents have chosen to establish their own families. This may imply that married teachers possess a greater sense of responsibility and are more driven to perform well in their roles, as they work not only for professional fulfillment but also to support their families. Research supports this observation, indicating that married teachers often exhibit higher levels of commitment and dedication to their work. According to Sengul et al. (2019), students taught by married teachers tend to achieve higher academic scores compared to those taught by single teachers. Furthermore, studies by Kara (2020) and Kavita and Hassan (2018) found significant differences in teaching effectiveness between married and unmarried educators, with marital status positively influencing teachers’ performance in the classroom.

Table 8. Highest Educational Attainment of the Teacher-Respondents

Educational Attainment	f	%
With Doctorate Units	1	6.25
Masters Graduate	3	18.75
With Master’s Units	11	68.75
Bachelors Degree	1	6.25
Total	16	100.00

As presented in Table 8, among the 16 teacher-respondents, 11 (68.75%) were pursuing a master's degree, 3 (18.75%) were master's graduates, 1 (6.25%) held a doctoral degree, and 1 (6.25%) had only a bachelor's degree.

These findings suggest that most teacher-respondents are engaged in or have completed graduate studies, likely motivated by the desire for professional advancement, higher qualifications, and eligibility for promotion. Graduate education enables teachers to deepen their expertise in their chosen field, enhancing their teaching effectiveness. Additionally, educators with advanced degrees often receive higher compensation or annual stipends, as noted by Wiggan et al. (2021).

Moreover, Callo and Yazon (2020) emphasized that the impact of holding a master's degree on student achievement can vary depending on the subject area and the level of education taught, suggesting that graduate education can contribute to improved instructional quality in specific contexts.

Table 9. Length of Service of the Teacher-Respondents

Length of service	f	%
19 and above	4	25.00
13 – 18	1	6.25
7 – 12	7	43.75
1 – 6	4	25.00
Total	16	100.00

As presented in Table 9, 7 out of 16 teacher-respondents (43.75%) had been in the teaching profession for 7 to 12 years. Four teachers (25%) had more than 19 years of experience, while another 4 (25%) had 1 to 6 years of teaching experience. Only 1 teacher (6.25%) reported having 13 to 18 years of experience.

These findings indicate that the majority of respondents have accumulated substantial teaching experience. This suggests that many are seasoned educators who have likely developed strong classroom management skills and pedagogical practices. According to Berger et al. (2018) and Zenciroğlu and Sadık (2018), teachers with more years of classroom experience tend to display greater control, engage more positively with students, and demonstrate better decision-making capabilities compared to their less experienced counterparts. Furthermore, teacher self-efficacy in student engagement and classroom management has increased with years of service in the profession (Kundu et al., 2021; Poulou et al., 2019). These insights underscore the value of teaching experience in shaping effective educational practices.

Table 10. Trainings and Seminars Attended by the Teacher-Respondents

Trainings and Seminars Attended	f	Rank
INSET	8	1
VINSET 2021	4	2
PROJECT REFRESH	2	4
SEMINAR WORKSHOP FOR SPED	2	4
Webinar on Inclusive Education	2	4
NONE	3	3

*multiple response

As presented in Table 10, the most commonly attended training among the teacher-respondents was the INSET, with 8 teachers having participated, making it the top-ranked training. VINSET 2021 ranked second, with 4 teachers in attendance. Three other seminars—Project Refresh, the Seminar-Workshop for

SPED, and the Webinar on Inclusive Education—were each attended by 2 teachers, placing them jointly in fourth place.

These findings suggest that the teachers are committed to enhancing their teaching competencies through participation in professional development activities. Their willingness to engage in training reflects a proactive attitude toward continuous improvement. The most important factor in the quality of students' learning is the quality of teaching and school leadership (Dimmock, 2020). Teachers and leaders need to develop their professional thinking and practice continuously throughout their careers (Padillo et al., 2021). This underscores the vital role of ongoing professional development in promoting effective teaching and improving student outcomes.

5.3 Level of Influence of Music on the Communication and Social Skills of Learners with Autism

This section presents a summary of the data gathered from parents and teacher respondents regarding the perception of the influence of music on the communication and social skills of autistic learners.

Table 11. Level of Influence of Music on the Social and Communication Skills of Learners with Autism as Perceived by the Parents

S/N	Indicators	WM	INTERPRETATION
1	Music can be used as a tool for developing social relationships for children with autism.	3.47	Very High
2	Children with autism can coordinate and control their social interactions using music	3.27	Very High
3	Music can enhance daily routines for children with autism.	3.13	High
4	Music can support connectedness with the group for children with autism.	3.13	High
5	Participation in shared experiences (i.e. singing together) promotes a sense of belonging in the group.	3.10	High
6	Participation in shared experiences (i.e. singing together) promotes empathy.	3.00	High
7	Participation in shared experiences (i.e. singing together) promotes solidarity and the sense of belonging.	2.97	High
8	Music therapy influences the way the child with autism reacts to others.	3.17	High
Aggregate Mean		3.15	High

Legend: 3.25 – 4.00-Very High; 2.50 – 3.24-High; 1.75 – 2.49-Low; 1.00 – 1.74 –Very Low

As shown in Table 11, the parent respondents perceived that the influence of music on the communication and social skills of learners with autism garnered an aggregated mean of 3.15, which is interpreted as high. Two of these indicators were considered very high: music is used for developing social relationships, and music helps coordinate and control social interactions among these children. Six indicators also have a weighted mean, all interpreted as high: music enhances daily routines, supports connectedness, promotes belongingness in the group, promotes empathy, promotes solidarity, and influences their reactions.

These results suggest that music has improved these learners' communication and social skills. Parents have observed development in how these learners interact with others and communicate with others. This implies that music is an effective tool for enhancing the socialization and communication of these learners. Music therapy helps enhance emotional comprehension, engagement, and social abilities, including shared attention, social greeting customs, and communication skills (Bharathi et al., 2019).

Table 12. Level of Influence of Music on the Social and Communication Skills of Children with Autism as Perceived by the Teachers

S/N	Indicators	WM	Interpretation
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1	Music can be used as a tool for developing social relationships for children with autism.	3.69	Very High
2	Children with autism can coordinate and control their social interactions using music	3.06	High
3	Music can enhance daily routines for children with autism.	3.50	Very High
4	Music can support connectedness with the group for children with autism.	3.69	Very High
5	Participation in shared experiences (i.e. singing together) promotes a sense of belonging in the group.	3.81	Very High
6	Participation in shared experiences (i.e. singing together) promotes empathy.	3.69	Very High
7	Participation in shared experiences (i.e. singing together) promotes solidarity and the sense of belonging.	3.75	Very High
8	Music therapy influences the way the child with autism reacts to others.	3.69	Very High
Aggregate Mean		3.61	Very High

As shown in Table 12, the level of influence of music, as perceived by the teacher respondents, has an aggregated mean of 3.61, which, when interpreted, is considered very high. Most of the indicators also got a weighted mean between 3.25 and 4, which, when interpreted, is very high. These indicators include music as a tool for developing social relationships, enhancing daily routines, supporting connectedness, promoting a sense of belonging, fostering empathy, promoting solidarity, and influencing how individuals react to others. One indicator also got a weighted mean of 3.09, which is interpreted as high. These results imply that, according to the teacher respondents, these learners have excellent improvements in their communication and social skills. These learners demonstrated a high ability to interact and communicate with others when music was integrated into the school curriculum.

These findings stipulated that music is an excellent tool for teachers to teach learners with autism. This can be supported by the study of Hunt (2019) which demonstrated through experimental research that music therapy sessions taught these learners how to read social cues, cooperate within group limits, wait, and transition from one activity to the next. Another study by Bharathi et al. (2019) demonstrated that music therapy is a reliable solution for enhancing the social abilities of autistic learners. For these children, MT assisted in the development of a type of communication that enhanced their ability to comprehend, respond, and maintain interactions with their classmates.

5.4 Perception of Parents on the Level Of Communication and Social Skills of the Learners with Autism

Understanding the communication and social skills of learners with autism before, during, and after intervention is crucial for parents to effectively support their child's development, and the following tables summarize parent respondents' perceptions of these skill levels.

**Table 13. Level of Communication Skills of Learners with Autism
As Perceived by the Parents**

S/N	Indicators	WM	Interpretation
1	Says his own first name or nickname	3.60	Very High
2	Names at least three actions	3.17	High
3	Says his age when asked	3.47	Very High
4	Responds to questions that use the word "who"	2.80	High
5	Identifies one or more alphabet letters	3.50	Very High
6	Understands at least three more advanced gestures	3.00	High
7	Follows instructions with two related actions	2.93	High
8	Responds to questions that use the word "why"	2.57	High
9	Follows instructions with one and two steps	3.03	High
10	Copies his own first name correctly	3.63	Very High

11	Follows instructions involving right and left	3.17	High
12	Writes both his first and last name from memory	3.27	Very High
13	Reads sentences of three or more words out loud	2.73	High
14	Understands sarcastic words	2.17	Low
15	Remembers to do something up to an hour later	2.50	High
Aggregate Mean		3.04	High

Legend: 3.25 – 4.00-Very High; 2.50 – 3.24-High; 1.75 – 2.49-Low; 1.00 – 1.74 –Very Low

As shown in Table 13, the overall level of communication skills of learners with autism, as perceived by their parents, yielded an aggregated mean of 3.04, which falls under the "high" category. Out of the 15 indicators assessed, five were rated "very high," including the ability to say, copy, and write their own name or age, and identify one or more letters of the alphabet. Additionally, learners demonstrated a "high" level in naming at least three actions, responding to "who" and "why" questions, understanding gestures, following instructions, and reading three or more words aloud. However, a notable difficulty was observed in understanding sarcastic language, which received a "low" interpretation.

These findings suggest that, according to parents, the use of music at home significantly contributed to developing high-level communication skills among the learners. The ability to recite personal information, follow directions, and answer basic questions appeared to improve with the integration of music. This aligns with studies by Bharathi et al. (2019) and Yum et al. (2020) which found that music therapy promotes greater engagement and enhances both verbal and nonverbal communication in children with autism. Simpson-Abrams (2018) also supported the use of home-based music therapy as part of a family-centered intervention approach. Similarly, Thompson et al. concluded that music therapy positively influences the social communication skills of children with ASD in collaboration with their parents.

Table 14. Level of Social Skills of Learners with Autism as Perceived by the Parents

S/N	Indicators	WM	Interpretation
1	Recognizes the gender of himself and others	3.30	Very High
2	Plays with peer(s) for 5 minutes under supervision	2.90	High
3	Says the relationship of familiar others to self	3.03	High
4	Helps others when asked	3.07	High
5	Shares toys/possessions when told to do so	2.67	High
6	Plays with others at outdoor games with no score	2.43	Low
7	Plays with peer(s) for 20 minutes under supervision	2.30	Low
8	Responds politely when given something	3.00	High
9	Moves away from aggressive children nearby	2.63	High
10	Uses words or gestures to express distress	2.67	High
11	Accepts helpful suggestions/solutions from others	2.63	High
12	Shows happiness, sympathy, or concern for others	2.87	High
13	Asks others to play or spend time together	2.37	Low
14	Controls anger when unexpected events disrupt plans	2.57	High
15	Modifies his voice level for the location/situation	2.10	Low
Aggregate Mean		2.70	High

Legend: 3.25 – 4.00-Very High; 2.50 – 3.24-High; 1.75 – 2.49-Low; 1.00 – 1.74 –Very Low

As presented in Table 14, parents perceived that music integration positively influenced the social skills of learners with autism, with an aggregated mean score of 2.70, interpreted as high. One indicator—recognition of gender—received a very high rating with a weighted mean of 3.30. Several other indicators, including playing with peers for five minutes under supervision, identifying relationships, helping others when asked, and sharing toys when prompted, scored between 2.50 and 3.24, also interpreted as high. However, learners showed challenges in playing outdoor games, playing with peers for 20 minutes under supervision, initiating play with others, and adjusting their voice level according to location or situation, with weighted means between 1.75 and 2.49, indicating low proficiency.

These findings suggest that music has enhanced various social skills such as cooperative play, gestural communication, and helping behaviors. Nonetheless, learners still require targeted support to sustain more prolonged social interactions, initiate social engagement, and modulate voice volume appropriately. Recognizing these specific areas of difficulty can guide parents and teachers in prioritizing intervention goals.

Moreover, these results support using music as a valuable home-based tool for advancing socialization skills. Music therapy has been shown to effectively promote family-centered objectives by enabling parents of children with ASD to integrate music-based activities into everyday family routines (Yakobson, 2021).

5.5 Test of Significant Mean Difference Between the Teachers' and Parents' Perceptions on the Influence of Music On The Communication and Social Skills of Learners with Autism

The succeeding table presents the results of a test conducted to determine if there is a significant difference between teachers' and parents' perceptions regarding the influence of music on the communication and social skills of learners with autism.

Table 15. Test of Significant Difference on the Perception of the Parents and Teachers on the Influence of Music on the Social and Communication Skills of Learners with Autism

Source of Difference	Mean	Standard Deviation	Mean Difference	Computed t- value	p-value	Decision	Result
Parents	25.23	3.05	-3.64	-3.906*	0.000	Reject Ho	Significant
Teachers	28.88	2.94					

*significant at $p < 0.05$ (two-tailed)

As shown in Table 15, the computed p-value of 0.000, which is below the 0.05 significance level, indicates a statistically significant difference between the perceptions of parents and teachers. Consequently, the null hypothesis is rejected. This suggests that parents and teachers hold differing views regarding the impact of music on the development of learners with autism, implying that parents' perceptions of music's influence may not fully align with those of teachers in the school setting. Nevertheless, despite these differences, music remains a valuable tool for supporting learners with autism whenever observable improvements occur. Supporting this, Epstein et al. (2020) note that therapists have successfully used music to enhance communicative behaviors and social engagement in individuals with autism. Additionally, Febriantini et al. (2021) emphasize that because autistic individuals often rely on non-verbal communication, systematic use of music can open new channels of expression through body language, gestures, and eye contact.

5.6 Test of Significant Relationship Between the Parents' Perception of the Influence of Music and Skills of Learners with Autism

Table 16 presents the results of a test for a significant relationship between parents' perception of the influence of music and the communication skills of learners with autism.

Table 16. Test of Significant Relationship between the Parents' Perception of the Influence of Music and the Social Skills of Learners with Autism

Variables	r-value	Strength of Correlation	p - value	Decision	Result
Influence of music and the Social Skills of Children with Autism	0.214	Negligible Positive	0.255	Do not Reject Ho	Not Significant

*significant at $p < 0.05$ (two-tailed)

As presented in Table 16, the computed p-value of 0.255 is greater than the 0.05 level of significance, indicating that the relationship between the two variables is not statistically significant and thus does not warrant rejection of the null hypothesis. This suggests that, based on parents' perceptions, music does not have a measurable effect on the social skills of learners with autism, and that their views do not necessarily predict social skill outcomes. However, music remains a valuable tool for fostering social development, as supported by Sharda et al. (2018), whose research demonstrated that music can effectively enhance the social abilities of individuals with autism.

5.7 Test of Significant Relationship Between the Parents' Perception of the Influence of Music and Communication Skills of Learners with Autism

Table 17 presents the results of a test for a significant relationship between parents' perception of the influence of music and the communication skills of learners with autism.

Table 17. Test of Significant Relationship between the Parents' Perception of the Influence of Music and the Communication Skills of Learners with Autism

Variables	r-value	Strength of Correlation	p - value	Decision	Result
Influence of music and the Social Skills of Children with Autism	0.548*	Moderate Positive	0.002	Reject Ho	Significant

*significant at $p < 0.05$ (two-tailed)

As presented in Table 17, the r-value of 0.548* indicates a moderate positive correlation, and the p-value of 0.002—being less than the 0.05 level of significance—confirms a statistically significant relationship between the two variables, leading to the rejection of the null hypothesis. This result suggests that parents' perceptions of music's influence are positively associated with the communication skills of learners with autism. This finding aligns with the study by LaGasse et al. (2019), which examined how music therapy impacts various communication markers in autistic learners, revealing that music therapy significantly enhanced attention, initiation of communication, responsiveness to communication cues, and social behavior.

6. Findings

The demographic profile of the parent-respondents revealed that most were females aged 29 to 35, had one to two children, were high school graduates, worked as housewives, and had a combined monthly family income ranging from ₱10,001 to ₱15,000. Meanwhile, most teacher-respondents were females aged 25 to 32, married, held units in a master's degree, had 7 to 12 years of teaching experience, and had attended training and seminars, particularly during INSET.

Regarding the influence of music on learners with autism, parents perceived its impact on communication and social skills as high, while teachers rated it as very high. Both respondent groups assessed the learners' communication and social skills as high.

Hypothesis testing revealed a significant difference between parents' and teachers' perceptions of music's influence on these skills. Additionally, a significant relationship was found between parents' perception of music and learners' communication skills, but no significant relationship was found with their social skills.

7. Conclusion And Recommendation

The findings of this study revealed that, based on the perceptions of parent and teacher respondents from Mandaue City SpEd Center High School, Mandaue City Central SpEd School, and Basak Elementary School, music significantly influenced the communication and social skills of learners with autism. Both

parents and teachers observed notable improvements in these areas through music integration. In light of these findings, the researchers recommend several measures to enhance further these skills, including offering scholarships or training for special education teachers on music-based interventions, promoting collaboration between parents and teachers for consistent progress monitoring, integrating music into daily learning activities, and encouraging the Department of Education (DepEd) to ensure that school heads effectively orient parents and equip teachers with proper training. Furthermore, the study strongly recommends the adoption of the Communication and Social Skills Enhancement Plan, developed as an output of this research, for classroom implementation by parents and teachers.

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