Pertanika J. Soc. Sci. & Hum. 31 (3): 1197 - 1218 (2023)

PERTANIKA JOURNALS

SOCIAL SCIENCES & HUMANITIES

Journal homepage: http://www.pertanika.upm.edu.my/

Cultivating 21st-Century Learning Skills: The Effectiveness of Song-based Music and Movement for Improving Children's Social Skills

Su Sinn Ow[1], Chiew Hwa Poon[1]* and Ku Wing Cheong[2]

[1]Music Department, Faculty of Creative Arts, Universiti Malaya, 50603 Kuala Lumpur, Malaysia
[2]Institute of Music, UCSI University, 56000 Cheras, Kuala Lumpur, Malaysia

ABSTRACT

Researchers and educators asserted that music-based intervention is more effective than traditional teaching approaches when educating children due to the fact that music-based intervention promotes students' memory and interest. An ongoing imbalance in education that stands to be corrected is how parents and teachers may be more concerned with children's academic achievement than their social skills. In that context, this quantitative study aimed to investigate the effectiveness of song-based music and movement intervention in improving social skills among elementary-age children. The sixty participants (aged 7–9 years) were divided equally into three experimental groups (song-based, music and movement as well as song-based music and movement intervention) and a control group (no treatment). Quantitative data collected through pre and post-tests were assessed by three independent evaluators using the researcher-adapted Intrapersonal and Interpersonal Skills Measurement Form (IISMF). Participants' physical reactions, such as facial expressions, behaviours, and emotions, were observed. The results indicated that the song-based music and movement intervention had significantly improved the social skills on both dimensions of intrapersonal and interpersonal compared to the other interventions. This study provides insights to promote the implementation of song-based music and movement intervention for schoolteachers to improve young age children's social skills. Furthermore, social skills are one of the crucial elements in 21st-century learning skills that contribute to their future success.

Keywords: Children, social skills, song-based music and movement

ARTICLE INFO

Article history:
Received: 28 November 2022
Accepted: 28 July 2023
Published: 14 September 2023

DOI: https://doi.org/10.47836/pjssh.31.3.15

E-mail addresses:
susinnow93@gmail.com (Su Sinn Ow)
chiewhwa.poon@um.edu.my (Chiew Hwa Poon)
cheongkw@ucsiuniversity.edu.my (Ku Wing Cheong)
*Corresponding author

ISSN: 0128-7702
e-ISSN: 2231-8534

INTRODUCTION

The 21st-century learning skills allow students to embrace real-life scenarios that teach them to plan, work as a team and develop skills. Erdogan (2019) surmised that the traditional teaching approaches, which emphasise students' mastery of knowledge through reading, writing, and arithmetic, are no longer effective. Thus, emerging 21st-century learning skills have attracted researchers' and educators' attention and interest. The 'four Cs' in 21st-century learning skills include critical thinking, communication, collaboration, and creativity (Anugerahwati, 2019; Shabrina & Astuti, 2022), which essentially determine how learners are able to engage with new knowledge. Saleh (2019) states that 21st-century learners are encouraged to be creative and critical thinkers. Unlike traditional teaching approaches, problem-solving projects are widely infused in the curriculum and require students to analyse problems, assess the information's value, make informed decisions, and take action. Lázaro et al. (2018) studied that the group activities such as discussions, presentations, and question-and-answer (Q&A) sessions are ideally included as fundamental components to allow participants to communicate, cooperate, and compromise with group members. Through group participation, learners have opportunities to exchange ideas and experiences with others, which promotes the consideration of multiple perspectives and diversity of thought. Undoubtedly, 21st-century learning skills have drawn new learning approaches by providing opportunities for learners to engage knowledge through classroom experiences.

Both intrapersonal and interpersonal social skills play a crucial role in preparing students to become proficient communicators (Gardner, 2011). The intrapersonal skills allow individuals to understand personal desires, fears, and traits, whilst the interpersonal skills underpin how learners understand other people's emotions, intentions, and motivations (Armstrong, 2018). The intrapersonal skills were investigated to guide the learners to understand themselves well by identifying personal strengths and weaknesses. By participating in the designed 21st-century group activities such as group discussions and Q&A sessions, learners develop self-confidence and self-motivation to achieve their goals (Perea & Ruz, 2014). On the other hand, the 21st-century problem-solving projects were proven effective in encouraging learners to practice interpersonal skills by learning to interact effectively and respectfully with peers, which are especially valuable in multinational communities (Erdogan, 2019; Saleh, 2019). However, according to Mohamed et al. (2020) and Nadesan and Shah (2020), the school curriculum in Malaysia overwhelmingly emphasises students' cognitive development on science and mathematics skills. Social skills are often considered lesser important and sometimes neglected. Most children are judged on their academic success rather than abilities and intelligence outside of basic academics. Thus, one of the objectives

of this study is to draw the awareness and importance of social skills in the Malaysian education industry.

Various educators and researchers concurred that music and movement intervention align with 21st-century learning skills (Davidova, 2019; Mustikawati & Astuti, 2019; Reynolds, 2018; Vasil et al., 2018). According to Nurgiyantoro (2005b), music and movement intervention includes dance, speech, role-playing, and other musical activities. Music and movement intervention can ease stress and promote relaxation, attention, and interest. Both music and movement intervention and 21st-century learning skills promote experiential and learner-centred approaches where learners can play the main roles in assimilating new knowledge from the assigned projects. Chua and Ho (2017) found that the popular music classroom has a widely infused learner-centred approach and group activities that allow learners to show their voices. Learners developed self-confidence by practising critical thinking and collaborative skills while involved in musical group work. Machfauzia et al. (2018) utilised Indonesian folk songs to improve collaboration and communication skills. Musical group activities, which widely include games and singing, have successfully improved children's communication and collaboration skills by providing opportunities to learn how to cooperate and respect their peers.

The song-based intervention in this study primarily involves group singing activities. Watson (2012) identified the importance of singing in young children's growth developmental and early exposure through their mothers singing lullabies and rhymes. Enjoyable and interesting social activity suitable for children to relieve their stress while singing. Singing allows humans to express feelings, experiences, and moods (Kim, 2000; Welch, 2012). Welch (2012) noted that choral singing enhances self-confidence, self-efficacy, social awareness, and positive group identity. Jensen (2000) and Governor et al. (2013) also agreed that singing can be an effective teaching tool for transferring knowledge and information. Students can engage in stronger memorisation and the ability to recall through practising music.

From the existing studies, few individuals have investigated the combination of song-based intervention and music and movement intervention with social skill development. For example, Cochran (2008), Carter (2015), and Good et al. (2014) investigated only song-based intervention on social skills. Nevertheless, elementary-age children's social skills have been neglected in various studies. Many studies involved preschool-age children (Blanky-Voronov & Gilboa, 2022; Ozturk & Can, 2020; Simpson, 2013) and children with autism (Bharathi et al., 2019; Eren, 2015; LaGasse, 2014) as their studies' participants. However, social skills still play a crucial role in elementary-age children's growth development (Selimović et al., 2018).

Several quantitative and qualitative studies collected data through questionnaires and interviews involving children's parents and teachers. However, these studies

reported ambiguous results, potentially due to the personal perspectives and bias of these adults in reporting on the children's outcomes (Good et al., 2014; Intani, 2012; Isabel, 2015). Austin and Sutton (2014) noted that qualitative research practices that ask children to share feelings and opinions may be inherently subjective or biased. Personal emotions, such as nervousness or hesitation, on the part of children and researchers, may cause differences in expressing interpretations and behaviours. This study implemented task-based observation to overcome such issues, where three professional evaluators directly observed and rated children's performance.

The knowledge gap was identified as limited studies employed music movement and song-based intervention combinations to investigate the social skills among elementary-age children. Furthermore, the task-based observation of this study addressed the limitations of previous studies. Therefore, this study aims to examine the effects of song-based music and movement intervention on elementary-age children's social skills.

METHODOLOGY

This study employed a randomised pre-test–post-test between subjects' experimental designs. The participants for this study consisted of 60 children aged seven to nine years old selected from four childcare centres in Malacca, Malaysia. They were subjected to no treatment, song-based music and movement, as well as song-based music and movement treatment interventions. The intervention comprised eight 30-minute sessions within a 3-month data collection timeframe. Figure 1 shows the variables, measurements, participants numbers, and treatment duration engaged in the study.

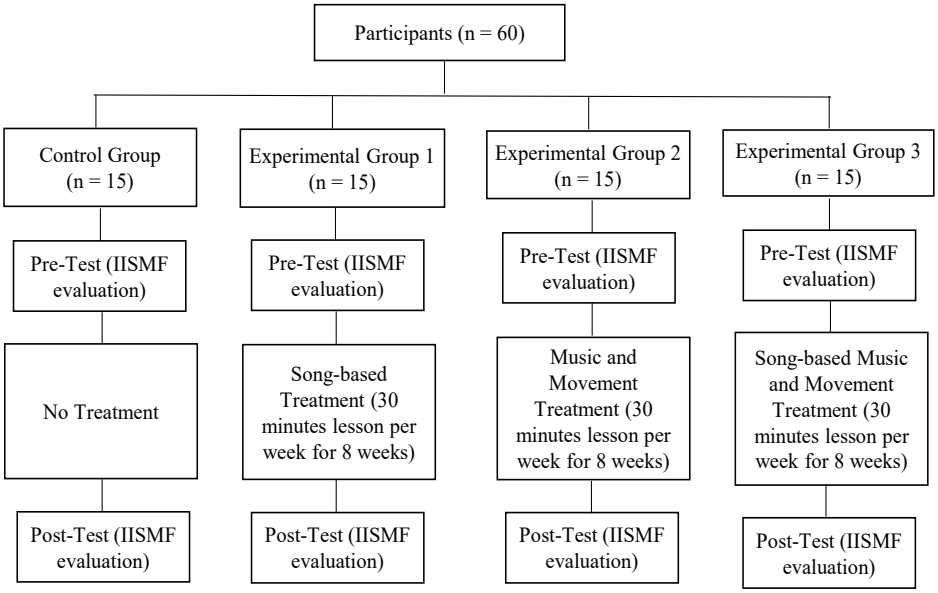

Figure 1. Assignment path of variables, measurements, participants numbers, and treatment duration

Participants

Purposive sampling was employed, and participants (n = 60) were chosen according to the following selection criteria: (1) children of seven to nine years old; (2) no formal music training prior to the study. The pre-test was used to evaluate each participant's ability. They were randomly assigned into four groups through random sampling: Group 1 with song-based intervention (n = 15), Group 2 with music and movement intervention (n =15), Group 3 with song-based music and movement (n = 15), together with a control group (n = 15).

Independent Variables

The independent variables for this study were the four different treatment interventions: (i) no treatment, (ii) song-based (SB), (iii) music and movement (MM), and (iv) song-based music and movement (SBMM). The first SB intervention involved vocal warmups and required participants to learn a new song during each session with the music teacher's piano accompaniment. These songs were taught by rote (echo singing), with students sitting in a circle. MM and SBMM interventions included musical activities such as role-playing, dance, storytelling, playing unpitched percussion instruments, and playing musical games. However, the MM intervention participants had not been involved with singing activities, whilst singing activities had been widely infused in SBMM intervention by requiring participants to learn a new song for each session.

Dependent Variables

The two dependent variables in this study were intrapersonal and interpersonal skills. The interpersonal variable requires individuals to establish intentions and motivations while participating in group activities. The intrapersonal variable allows individuals to understand their desires, fears, and capacities (Gardner, 2011). Both skills play an essential social value to understand themselves well and improve the capability to communicate with others. Four experienced primary school teachers were invited to discuss the appropriateness and suitability of each item in the Intrapersonal and Interpersonal Skills Measurement Form (IISMF) to ensure the content validity of the dependent variables in this study. The intrapersonal and interpersonal variable consists of 15 measuring items, respectively. This IISMF was adapted from the existing social measurements, namely School Social Behaviour Scales-Second Edition (SSBS-2; Merrell, 1993), Home and Community Social Behaviour Scale (HCSBS; Merrell & Caldarella, 2000), and Preschool and Kindergarten Behaviour Scales (PKBS; Merrell, 1994). The intrapersonal skills were (i) postural attention, (ii) movement, (iii) interest and confidence, (iv) understanding problems, (v) appropriate manner, (vi) following rules, (vii) concentrating, (viii) calmness, (ix) self-restraint, (x) not prompted, (xi) temper control, (xii) distress, (xiii) paranoid and obsessive behaviours, (xiv) self-reflection, and (xv) beliefs. The interpersonal skills were (i) facial expressions, (ii) not interrupting-teacher,

(iii) sharing intentions, (iv) enjoyment, (v) encouragement, (vi) getting information, (vii) not interrupting-group members, (viii) speaking up, (ix) compromises and cooperation, (x) offering help, (xi) verbal politeness, (xii) praise, (xiii) lack of criticism, (xiv) showing empathy, and (xv) humorous.

Instrumentation

The IISMF was adapted from existing social skills measurement rating forms referred to as the Home and Community Social Behaviour Scale (HCSBS; Merrell & Caldarella, 2000), Preschool and Kindergarten Behaviour Scale 2 (PKBS-2; Merrell, 1994), and School Social Behaviour Scale (SSBS; Merrell, 1993). Four experienced music teachers were invited for two 60-minute discussion sessions, in which they recommended professional suggestions and provided advice pertaining to structure suitable criteria for the IISMF. Three primary teachers also evaluated the IISMF to analyse the appropriateness of the measurement form.

The IISMF used a five-point Likert scale to allow the evaluators to perform objective evaluations of participants' intrapersonal and interpersonal skills. The IISMF measurement form was designed in Google Forms and sent to each evaluator. The evaluative criteria in the IISMF were designed with detailed descriptions that characterised the social skill levels. Three professional evaluators were invited to complete the rating form after observing the participants' performances. Each evaluator was given explanations regarding each criterion on the rating form to ensure inter-rater reliability. They were asked to rate the score most accurately, describing the participants' behaviours and emotions. The inter-judge reliability for IISMF was utilised with Cronbach's alpha correlation coefficients and calculated for each item. The inter-judge reliabilities from 0.60 to 0.96 corresponded as moderate to high. Jasmi (2012) claimed that the acceptable α value is 0.60 to 0.99. Therefore, all of the items for the Intrapersonal Skill test and Interpersonal Skill test are reliable for this study.

Materials

The SB, MM, and SBMM intervention sessions were carried out by introducing a new children's song for every session, such as Baa-Baa Black Sheep, Ten Little Indians, I am a Little Tea Pot, and The Captured Bird, accompanied by a piano. The music teacher introduced a new song for every session to attract the participants' interest with a simple and fun melody. The selected songs' melodies were within an octave and employed simple rhythmic value. The selected vocabularies were discussed with three elementary school English teachers to suit the lower elementary level. The music teacher taught the songs by echo singing and telling the story of the music. The participants were welcome to share their ideas and stories during the interventions. The MM and SBMM interventions were mainly fulfilled through utilising body movement, musical and

unpitched percussion instruments (e.g., triangle, wooden T-shape block with mallets, castanets).

Data Collection Procedure

The interventions were conducted in eight 30-minute sessions for each experimental group. The SB intervention was designed around introducing a new song to the participants in every session with piano accompaniment. Participants were asked to sit in a circle and go through a vocal warmup before learning the new song. The MM intervention was introduced by conducting a musical play without singing. The SBMM intervention was introduced by learning new songs and concurrently involved different musical activities in every session, such as role-playing, musical games, dance, and unpitched percussion instrument ensembles.

Both pre-and post-tests involved the same procedures to measure participants' intrapersonal and interpersonal skills. Participants were asked to form a circle, hold hands with their peers and pass through a hula-hoop without letting go of their hands to evaluate their social skills. The whole process of pre-and post-test evaluation was video recorded from four different angles to capture participants' facial expressions, reactions, behaviours and emotions. Three evaluators were asked to rate the participants' physical reactions to IISMF using a 5-point Likert Scale. Participants were observed through three sessions before, during, and after the group task.

Data Analysis Procedure

The collected data was analysed according to the criteria stipulated in the IISMF. The results were analysed in descriptive and inferential statistics. The descriptive analysis included mean scores, the mean difference and standard deviation. The inferential analysis involved one-way ANOVA to determine the effectiveness of the song-based music and movement interventions.

RESULTS

The data were analysed using SSPS software to investigate the effectiveness of different interventions on participants' social skills based on age elements. Participants (n = 60) were grouped into a control group and three experimental groups, that are described as Control Group (n = 15), Experimental Group One (n = 15) was exposed to the SB intervention, Experimental Group Two (n = 15) was guided with MM intervention, Experimental Group Three (n = 15) was exposed to the SBMM intervention. The participants' social skills were measured in two main dimensions, referring to interpersonal and intrapersonal skills. Both dimensions included 15 items to describe each skill criterion.

Descriptive Statistics

The descriptive statistics included the mean, standard deviation, mean difference, and mean difference percentage, through which we investigated the effectiveness of each intervention. Data comparison was carried

out for the pre-test and post-test between one control group and three experimental groups.

Table 1 shows the data of intrapersonal variables for the Intrapersonal and Interpersonal Social Measurement Form (IISMF). The pre-test intrapersonal mean scores for the 15 individual items ranged from 2.98 (*self-restraint*) to 3.49 (*postural attention*) for the Control Group, ranged from 3.31 (*calm*) to 3.91 (*movement*) for Experimental Group 1 (SB), ranged from 3.13 (*same manner*) to 3.82 (*self-restraint*) for Experimental Group 2 (MM), and ranged from 3.20 (*same manner*) to 3.91 (*concentrations*) for Experimental Group 3 (SBMM). The post-test mean scores ranged from 2.00 (*follow rules*) to 2.56 (*believes*) for the Control Group, ranged from 3.53 (*interest and confidence, understanding problem, same manner*) to 3.93 (*self-reflection*) for Experimental Group 1 (SB), ranged from 3.56 (*self-restraint*) to 4.33 (*understanding problem*) for Experimental Group 2 (MM) and ranged from 3.82 (*self-restraint*) to 4.78 (*distress*, *not paranoid*) for Experimental Group 3 (SBMM). By comparing the pre-and post-test, the mean differences for Control Group, Experimental Group 1, 2, and 3 ranged from -1.16 (*understanding the problem*) to -0.47 (*self-restraint*), -0.22 (*movement*) to 0.49 (*calm*), -0.26 (*self-restraint*) to 0.94 (*same manner*) and 0.42 (*self-restraint*) to 1.22 (*distress*) respectively.

The results in Table 1 show higher mean values and mean differences for the SBMM intervention (Experimental Group 3) than the Control Group, SB intervention (Experimental Group 1) and MM intervention (Experimental Group 2) respective to the intrapersonal variables, as revealed in the Intrapersonal and Interpersonal Social Measurement Form (IISMF).

Moving forward, Table 2 displays the data of interpersonal variables as listed in the IISMF. The pre-test interpersonal mean scores for the 15 individual items ranged from 2.76 (*verbal politeness*) to 3.44 (*enjoy, get information*) for the Control Group, ranged from 2.93 (*praise*) to 3.89 (*share intentions*) for Experimental Group 1 (SB), ranged from 2.69 (*praise*) to 3.93 (*not interrupting the teacher*) for Experimental Group 2 (MM) and ranged from 3.04 (*humorous*) to 3.73 (*get information*) for Experimental Group 3 (SBMM). The post-test mean scores ranged from 1.91 (*not interrupting the teacher*) to 3.09 (*get information*) for the Control Group, ranged from 2.64 (*praise*) to 4.04 (*not interrupting the teacher*) for Experimental Group 1 (SB), ranged from 2.80 (*verbal politeness*) to 4.44 (*not interrupting the teacher*) for Experimental Group 2 (MM) and ranged from 4.20 (*praise*) to 4.78 (*share intentions*) from Experimental Group 3 (SBMM). By comparing the pre-and post-tests, the mean difference scores for Control Group, Experimental Group 1, 2, and 3 ranged from -1.29 (*not interrupting the teacher*) to -0.27 (*speaks up*), -0.54 (*encouragement*) to 0.24 (*not criticism*), 0.15 (*praise*) to 0.75 (*humorous*) and 0.96 (*facial expression*) to 1.45 (*not criticism*) respectively.

Table 1
Pre- and post-tests mean, standard deviation, and mean difference for intrapersonal variables in Intrapersonal and Interpersonal Social Measurement Form for the Control Group, Experimental Group 1, Experimental Group 2, and Experimental Group 3

	IISMF											
	Control Group (n = 15)			Experimental Group 1 (n = 15)			Experimental Group 2 (n = 15)			Experimental Group 3 (n = 15)		
	Pre-test	Post-test		Pre-test	Post-test		Pre-test	Post-test		Pre-test	Post-test	
Variable	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*
Postural Attention	3.49 (0.69)	2.38 (0.68)	-1.11	3.89 (0.32)	3.69 (0.63)	-0.20	3.60 (0.75)	4.29 (0.66)	0.69	3.84 (0.80)	4.73 (0.45)	0.89
Movement	3.36 (0.61)	2.42 (0.75)	-0.94	3.91 (0.29)	3.69 (0.63)	-0.22	3.67 (0.83)	4.18 (0.75)	0.51	3.67 (1.00)	4.76 (0.43)	1.09
Interest and Confidence	3.40 (0.65)	2.42 (0.69)	-.0.98	3.53 (0.66)	3.53 (0.55)	0.00	3.31 (1.00)	4.11 (0.80)	0.80	3.40 (0.96)	4.56 (0.76)	1.16
Understanding Problem	3.27 (0.91)	2.11 (0.78)	-1.16	3.56 (0.69)	3.53 (0.79)	-0.03	3.47 (0.97)	4.33 (0.64)	0.86	3.44 (0.97)	4.56 (0.89)	1.12
Same Manner	3.16 (0.67)	2.40 (0.78)	-0.76	3.69 (0.51)	3.53 (0.59)	-0.16	3.13 (0.94)	4.07 (0.78)	0.94	3.20 (0.84)	4.40 (0.99)	1.20
Follows Rule	3.11 (0.88)	2.00 (0.90)	-1.11	3.64 (0.53)	3.80 (0.81)	0.16	3.69 (0.73)	4.20 (0.76)	0.51	3.58 (0.92)	4.51 (0.84)	0.93
Concentrations	3.16 (0.60)	2.04 (0.82)	-1.12	3.62 (0.61)	3.76 (0.83)	0.14	3.80 (0.63)	4.29 (0.51)	0.49	3.91 (0.90)	4.73 (0.50)	0.82

Table 1 *(Continue)*

	IISMF											
	Control Group (n = 15)			Experimental Group 1 (n = 15)			Experimental Group 2 (n = 15)			Experimental Group 3 (n = 15)		
	Pre-test	Post-test		Pre-test	Post-test		Pre-test	Post-test		Pre-test	Post-test	
Variable	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*
Calm	3.02 (0.75)	2.24 (0.83)	-0.78	3.31 (0.70)	3.80 (0.76)	0.49	3.64 (0.57)	4.09 (0.73)	0.45	3.80 (0.97)	4.76 (0.48)	0.96
Self-restraint	2.98 (0.92)	2.51 (0.82)	-0.47	3.44 (0.69)	3.69 (0.950	0.25	3.82 (0.98)	3.56 (0.99)	-0.26	3.40 (0.78)	3.82 (0.96)	0.42
Not prompted	3.29 (0.97)	2.38 (0.98)	-0.91	3.40 (0.86)	3.64 (0.77)	0.24	3.27 (0.99)	4.04 (0.80)	0.77	3.53 (0.97)	4.44 (0.89)	0.91
Temper Control	3.29 (0.79)	2.33 (0.90	-0.96	3.64 (0.65)	3.87 (0.69)	0.23	3.67 (0.64)	4.18 (0.53)	0.51	3.80 (0.99)	4.76 (0.48)	0.96
Distress	3.13 (0.84)	2.16 (1.00)	-0.97	3.56 (0.69)	3.87 (0.69)	0.31	3.60 (0.62)	4.16 (0.56)	0.56	3.56 (0.99)	4.78 (0.42)	1.22
Not Paranoid	3.27 (0.81)	2.16 (1.00)	-1.11	3.64 (0.61)	3.89 (0.68)	0.25	3.62 (0.65)	4.20 (0.59)	0.58	3.71 (0.99)	4.78 (0.42)	1.07
Self- Reflection	3.18 (0.78)	2.24 (0.93)	-0.94	3.73 (0.50)	3.93 (0.62)	0.20	3.42 (0.69)	4.00 (0.71)	0.58	3.80 (0.94)	4.69 (0.51)	0.89

Table 1 *(Continue)*

	IISMF											
	Control Group (n = 15)			Experimental Group 1 (n = 15)			Experimental Group 2 (n = 15)			Experimental Group 3 (n = 15)		
	Pre-test	Post-test		Pre-test	Post-test		Pre-test	Post-test		Pre-test	Post-test	
Variable	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*
Beliefs	3.36 (0.71)	2.56 (0.94)	-0.80	3.78 (0.42)	3.84 (0.64)	0.06	3.62 (0.61)	4.16 (0.60)	0.54	3.73 (0.99)	4.67 (0.52)	0.94
Mean Difference Average			-0.94			0.11			0.57			0.97

Note. MD = Mean difference

Table 2

Pre- and post-test mean, standard deviation and mean difference for interpersonal variables in Intrapersonal and Interpersonal Social Measurement Form for Control Group, Experimental Group 1, Experimental Group 2 and Experimental Group 3

	IISMF											
	Control Group (n = 15)			Experimental Group 1 (n = 15)			Experimental Group 2 (n = 15)			Experimental Group 3 (n = 15)		
	Pre-test	Post-test		Pre-test	Post-test		Pre-test	Post-test		Pre-test	Post-test	
Variable	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*
Facial Expression	3.27 (0.69)	2.11 (0.88)	-1.16	3.60 (0,62)	3.47 (0.69)	-0.13	3.44 (0.87)	4.07 (0.45)	0.63	3.51 (0.94)	4.47 (0.66)	0.96

Table 2 *(Continue)*

	IISMF											
	Control Group (n = 15)			Experimental Group 1 (n = 15)			Experimental Group 2 (n = 15)			Experimental Group 3 (n = 15)		
	Pre-test	Post-test		Pre-test	Post-test		Pre-test	Post-test		Pre-test	Post-test	
Variable	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*
Not Interrupting (Teacher)	3.20 (0.73)	1.91 (0.90)	-1.29	3.87 (0.340	4.04 (0.56)	0.17	3.93 (0.86)	4.44 (0.50)	0.51	3.56 (0.97)	4.60 (0.54)	1.04
Share Intentions	3.40 (0.72)	2.64 (0.98)	-0.76	3.89 (0.32)	3.64 (0.530	-0.25	3.58 (0.72)	4.24 (0.53)	0.66	3.67 (0.98)	4.78 (0.42)	1.11
Enjoy	3.44 (0.66)	2.78 (1.02)	-0.66	3.42 (0.58)	3.11 (0.86)	-0.31	3.33 (1.00)	3.80 (0.73)	0.47	3.29 (0.94)	4.53 (0.76)	1.24
Encouragement	3.09 (0.67)	2.42 (0.87)	-0.67	3.47 (0.55)	2.93 (0.75)	-0.54	3.31 (0.95)	3.58 (0.87)	0.27	3.40 (0.94)	4.58 (0.75)	1.18
Get Information	3.44 (0.55)	3.09 (0.90)	-0.35	3.71 (0.55)	3.67 (0.67)	-0.04	3.80 (0.59)	4.29 (0.55)	0.49	3.73 (0.99)	4.71 (0.46)	0.98
Not Interrupting (Group Mate)	3.11 (0.75)	2.09 (0.95)	-1.02	3.69 (0.47)	3.89 (0.65)	0.20	3.80 (0.66)	4.33 (0.56)	0.53	3.38 (0.88)	4.56 (0.50)	1.18
Speaks Up	3.27 (0.58)	3.00 (0.98)	-0.27	3.36 (0.74)	2.89 (0.86)	-0.47	3.13 (0.94)	3.47 (0.97)	0.34	3.36 (0.98)	4.40 (0.89)	1.04
Compromises and cooperates	3.13 (0.76)	2.09 (0.95)	-1.04	3.36 (0.68)	3.29 (0.82)	-0.07	3.11 (0.78)	3.51 (0.87)	0.40	3.40 (0.91)	4.51 (0.92)	1.11

Table 2 *(Continue)*

	IISMF											
	Control Group (n = 15)			Experimental Group 1 (n = 15)			Experimental Group 2 (n = 15)			Experimental Group 3 (n = 15)		
	Pre-test	Post-test		Pre-test	Post-test		Pre-test	Post-test		Pre-test	Post-test	
Variable	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*	Mean (*SD*)	Mean (*SD*)	*MD*
Offer helps	3.02 (0.940	2.24 (1.00)	-0.78	3.33 (0.71)	3.36 (0.74)	0.03	3.13 (0.87)	3.53 (0.97)	0.40	3.33 (0.90)	4.47 (0.97)	1.14
Verbal Politeness	2.76 (0.65)	2.18 (0.75)	-0.58	2.96 (0.71)	2.76 (0.77)	-0.20	2.76 (0.91)	2.80 (0.97)	0.04	3.16 (0.74)	4.27 (0.75)	1.11
Praise	2.87 (0.76)	2.07 (0.89)	-0.80	2.93 (0.75)	2.64 (0.80)	-0.29	2.69 (1.00)	2.84 (0.95)	0.15	3.16 (0.67)	4.20 (0.79)	1.04
Not Criticise	3.31 (0.76	2.31 (0.97)	-1.00	3.67 (0.52)	3.91 (0.76)	0.24	3.87 (0.73)	4.24 (0.61)	0.37	3.31 (0.97)	4.76 (0.43)	1.45
Show Empathy	2.93 (0.72)	2.27 (0.89)	-0.66	3.47 (0.59)	3.33 (0.74)	-0.14	2.82 (0.86)	3.49 (0.92)	0.67	3.22 (0.97)	4.49 (0.63)	1.27
Humorous	3.18 (0.65)	2.56 (0.97)	-0.62	3.38 (0.58)	3.29 (0.87)	-0.09	2.96 (0.98)	3.71 (0.79)	0.75	3.04 (0.95)	4.40 (0.89)	1.36
Mean Difference Average			-0.78			-0.12			0.45			1.15

Note. MD = Mean difference

The results (Table 2) show higher mean values and mean differences for the song-based MM intervention (Experimental Group 3) higher than the Control Group, SB intervention (Experimental Group 1) and MM intervention (Experimental Group 2) with regard to the interpersonal variables for IISMF.

Inferential Statistics

The one-way ANOVA test was conducted to compare the intrapersonal skills among elementary-age children after they were exposed to different interventions. The null hypothesis of this study was that there would be no statistically significant difference in the intrapersonal skills among participants regardless of different assigned groups. Table 3 shows that the calculations among these four groups have proven significantly different, $F(3,56) = 86.031$, $p < 0.001$. Following this lead, the null hypothesis was rejected as the SBMM intervention on intrapersonal skills contributed a significant effect.

Table 3
One-way ANOVA analysis for the effect of song-based music and movement intervention on intrapersonal skills

ANOVA					
	Sum of Squares	*df*	Mean Square	*F*	*p*
Between Group	30.157	3	10.052	86.031	<0.001
Within Group	6.543	56	0.117		
Total	36.700	59			

Table 4 displays the pre-and post-test mean scores for social skills achievement of intrapersonal variables for one control group and three experimental groups. The SBMM intervention (M = 0.968, SD = 0.244) scored the highest, followed by MM (M = 0.542, SD = 0.493), SB (M = 0.113, SD = 0.213) and control group (M = -0.940, SD = 0.346). Notwithstanding the SB intervention (Experimental Group 1), MM intervention (Experimental Group 2) and SBMM intervention (Experimental Group 3) have significantly improved the intrapersonal variables; it was; however, the SBMM achieved the highest mean difference among the three experimental groups. Therefore, the SBMM intervention instilled significant improvement in the intrapersonal dimensions of social skills.

For the interpersonal skills, the one-way ANOVA test was conducted similarly among the elementary-age children after exposure to different interventions. The null hypothesis of this study was that there would be no statistically significant difference in the interpersonal skills among participants exposed to no treatment, SB intervention, MM intervention, and SBMM intervention. Table 5 depicts the calculations among these four groups with significantly

different variables with F (3,56) = 123.578, $p < 0.001$. The null hypothesis was then rejected as there was indeed a significant effect resulting from SBMM intervention on interpersonal skills.

Table 4
Descriptive analysis for the effect of song-based music and movement intervention on intrapersonal skills

Descriptive			
Group	Mean	*SD*	n
Control Group	-0.940	0.346	15
Song-based	0.113	0.213	15
Music and Movement	0.542	0.493	15
Song-based Music and Movement	0.968	0.244	15

Table 5
One-way ANOVA analysis for the effect of song-based music and movement intervention on interpersonal skills

ANOVA					
	Sum of Squares	*df*	Mean Square	*F*	*p*
Between Group	30.141	3	10.047	123.578	<0.001
Within Group	4.553	56	0.081		
Total	34.694	59			

Table 6 displays the pre and post-test mean scores for social skills achievement for both the pre-and post-tests of interpersonal variables for a control group and three experimental groups. Again, a similar trend was observed that showed the SBMM intervention (M = 1.146, SD = 0.335) scored the highest, followed by MM (M = 0.445, SD = 0.318), SB (M = -0.122, SD = 0.212) and control group (M = -0.777, SD = 0.258). The SBMM intervention has once again achieved the highest mean difference among the three experimental groups and could significantly improve the interpersonal dimensions of social skills.

The descriptive and inferential analysis revealed that the SBMM intervention could be employed as an educational tool to achieve the highest performance compared to the three interventions in developing elementary-age children's social skills.

DISCUSSION

The following conclusions were derived from this study on the effectiveness of SBMM intervention for social skills development among elementary-age children (aged 7–9 years). Although the SB intervention groups had shown improvement, the SBMM intervention scored significantly highest

Table 6
Descriptive analysis for the effect of song-based music and movement intervention on interpersonal skills

Descriptive			
Group	Mean	SD	n
Control Group	-0.777	0.258	15
Song-based	-0.122	0.212	15
Music and Movement	0.445	0.318	15
Song-based Music and Movement	1.146	0.335	15

among the four groups. As such, the results revealed that the SBMM intervention was more effective when compared across all the interventions in improving children's intrapersonal and interpersonal skills.

The SBMM intervention involved group music activities such as role-playing, dancing, group discussions, and games that provided opportunities for the children to practice their social skills. Meanwhile, the MM intervention encouraged children to take part in musical activities but without learning, just to sing the song. Singing can effectively improve children's social skills. Nurgiyantoro (2005a) identified that singing promotes happiness, encourages children to relieve stress and motivates them to practice communication with their peers. Kristyana and Suharto (2014) stated that a song is a communication form that includes two patterns of expression, which are musical expression and linguistic expression. Nevertheless, children exposed to MM intervention would have limited opportunities to practice their language during the intervention. The SB intervention taught children to recognise new vocabulary but did not provide them with opportunities to practice these through communication with their peers. The children who underwent the SB intervention might have learned the specific vocabulary, but they would end up with a lack of opportunity to practice the skill in the real world. In a more effective approach, the SBMM intervention involved various tasks that required students to compromise, communicate, and collaborate with peers. Children were encouraged to exchange ideas, be good listeners and be more considerate to accept others while participating in the group tasks.

The results of the study supported Halverson's (2018) proposal that social skills are easier to activate through interaction with peers. The group discussion does not involve advanced language skills, and children of lower language proficiency can still participate in the basic discussion and easily take part in the learning process through communication with their peers. In this connection, the children can enhance their social skills through the gained experiences as they learn from others' strengths and weaknesses while participating in group tasks. This approach can serve as an effective education tool for teachers to build the children's confidence in communication and improve their language proficiency.

According to Kivunja (2014), it is wise for children to accept mistakes with an open heart in the progress of fulfilling a given task. Although success brings confidence and motivation, failure allows children to learn and prevent them from committing similar mistakes in the future. Undoubtedly, children can memorise better the learning content through real-life communication. Compared to the SB intervention participants, the participants exposed to the SBMM intervention could experience the real-world learning environment when applying their knowledge. They learned through their failures and experiences, which are in line with the engagement with 21st-century skills. On the contrary, in the song-based intervention, children only engaged in one-way learning, whereby they were taught to sing the song through imitation. In this context, although the children could memorise the tune and lyrics of the song, they might have been left uncertain of how to utilise the appropriate vocabulary with correct grammar in real-life communication.

The SBMM intervention utilised a child-centred approach comprising various curricula and devices integrated with games, singing, chanting, playing unpitched percussions, and role-playing. Children were trained to enhance their social skills through body movement and creative musical activities. The results of this study supported the proposal of Evans (1972) that movement is the main vehicle for young children to explore and learn their new world. Music and movement were utilised to teach the young children to engage with musical learning, as well as pique the children's interest in discovering new knowledge and practising new skills. According to Edwards (2013), music and movement activities can contribute to children's growth and development by enhancing different skills such as linguistic, listening, and social skills. Accordingly, compared to the song-based intervention, the song-based music and movement intervention was more effective as it provided greater opportunities for the children to practice and enhance their social skills. The approach is also substantiated by Rabinowitch (2020), who claimed that performing music in a group can promote different degrees of interaction. In this case, music serves as a flexible channel to allow the learners to participate in formal (i.e., choir and orchestra) or informal settings (i.e., play-based musical activities and jamming) of the learning process.

Both 21st-century skills and the SBMM intervention applied here share the same ideology and concept in the learner-centred approach. The 21st-century learning skills were categorised into communication, collaboration, creativity, and critical thinking, i.e., the 'four Cs' skills that mainly focus on how learners can engage with new knowledge (Erdogan, 2019). Riggio and Reichard (2008) concluded that social skills encompass a broad range of skills that require thought and appropriate reactions to manage specific social situations. They listed three dimensions of social skills, including expressiveness, sensitivity and control. By developing these three dimensions,

learners can equip themselves well with effective communication and become mature and sophisticated listeners during social role-playing. According to Kivunja (2014), mastery of communication requires learners to interact effectively and establish appropriate behaviour with specific people. Further, Al-Mahrooqi (2012) noted how communication skill development can enable students to improve their confidence, earn respect and avoid recalcitrant behaviours during interactions. To achieve this, learners must develop appropriate manners and behaviour while interacting with others. In agreement with the literature, the results of this study showed that the song-based music and movement intervention provided opportunities for elementary school children to practice and enhance their social skills, which could serve as a base of cultivation towards 21st-century skills.

Trilling and Fadel (2009) emphasised the importance of collaborative learning that advocates group work. Through collaborative learning, students were taught to contribute different fields of knowledge, skills, and abilities to a group. In this regard, social skills were indeed directly practised in a collaborative manner, whereby the learners practised their communication skills with peers to solve a problem. In another research, Argyris (2017) stressed how social skills can guide learners to develop interpersonal skills while they work in a group. By developing social skills, individuals could develop self-awareness and self-reflection while working with others in problem-solving. Similarly, in the present study, the song-based music and movement intervention involved a wide variety of task groups to develop the collaborative skills of the participants.

Mahpudz and colleagues (2020) denoted that the 21st-century skillset requires learners to develop social skills that include communication and collaboration. Learners should be encouraged to make new friends and communicate effectively with one another, regardless of their cultural background or ethnicity, which encourages students to develop positive attitudes and behaviours while working with their peers. Students should also be encouraged to think outside the box, imagine conducive scenarios and produce new ideas to promote creativity. Beyond this, critical thinking allows learners to assess, judge, and analyse the value of information, identify problems and make reasonable decisions (Erdogan, 2019). Critical thinking and creativity require learners to pitch in by brainstorming and creating new ideas, which is closely associated with the well-being of their social skills. Previous researchers agreed that social skills underpin communication and collaboration, the key concepts and ideas among 21st-century skills (Alismail & McGuire, 2015; Laal et al., 2012). Both these elements make learners confident and dare to compete in the real world. With that in mind, to conclude, the findings of this study indicate that the song-based music and movement intervention can significantly improve elementary-age children's social skills, which are pivotal and directly related to 21st-century skills.

CONCLUSION

The results of this study indicated that the implementation of song-based music and movement (SBMM) can be an effective tool in educating elementary-age children. Traditional teaching approaches delivered by music educators are mostly focusing on teacher-centred delivery methods. On the contrary, the SBMM intervention that promotes a learner-centred approach can notably improve elementary school children's social skills. Educators must remain cognisant in cultivating elementary school children's social skills during their development stage. Enhancing their social skills plays a crucial part in preparing them to become all-rounded communicators.

In conclusion, children enjoy singing songs and innately respond to rhythms through body movements. It is evident from this study that children's social skills can be enhanced by participating in group music activities that include singing and movement. By creating engaging song-singing, music and movement activities, teachers develop children's social skills to be proficient communicators, which contributes to one of the main pillars of 21st-century skills.

Recommendations for Future Research

The recommended teaching approach in this study, SBMM, may not be analogously suitable for children from different cultures and backgrounds. Future research is suggested to focus on examining the effectiveness of SBMM intervention across children in different classroom settings and countries. Furthermore, this study involved a small sample of participants. Therefore, the intervention's effectiveness might not be generalisable to the population at large. Thus, future studies should include a larger number of study participants.

ACKNOWLEDGEMENT

The authors would like to thank Universiti Malaya, Malaysia for its support in funding the article processing charges and the reviewers' thoughtful comments and remarks. We also like to express our gratitude to all of the research participants.

REFERENCES

Alismail, H. A., & McGuire, P. (2015). *21st century standards and curriculum: Current research and practice* (EJ1083656). ERIC. https://files.eric.ed.gov/fulltext/EJ1083656.pdf

Al-Mahrooqi, R. (2012). English communication skills: How are they taught at schools and universities in Oman? *English Language Teaching*, *5*(4). https://doi.org/10.5539/elt.v5n4p124

Anugerahwati, M. (2019). Integrating the 6Cs of the 21st century education into the English lesson and the school literacy movement in secondary schools. *KnE Social Sciences*, *3*(10), 165-171. https://doi.org/10.18502/kss.v3i10.3898

Argyris, C. (2017). *Integrating the individual and the organization*. Routledge. https://doi.org/10.4324/9780203788417

Armstrong, T. (2018). *Multiple intelligences in the classroom.* ASCD.

Austin, Z., & Sutton, J. (2014). Qualitative research: Getting started. *The Canadian Journal of Hospital Pharmacy*, *67*(6), 436-440. https://doi.org/10.4212/cjhp.v67i6.1406

Bharathi, G., Venugopal, A., & Vellingiri, B. (2019). Music therapy as a therapeutic tool in

improving the social skills of autistic children. *The Egyptian Journal of Neurology, Psychiatry and Neurosurgery*, *55*, Article 44. https://doi.org/10.1186/s41983-019-0091-x

Blanky-Voronov, R., & Gilboa, A. (2022). The "*Ensemble*"-A group music therapy treatment for developing preschool children's social skills. *International Journal of Environmental Research and Public Health*, *19*(15), Article 9446. https://doi.org/10.3390/ijerph19159446

Carter, Y. M. (2015). *The impact of singing-integrated reading instruction on the oral reading fluency and motivation of elementary students in an out-of-school time program* [Doctoral dissertation, Virginia Commonwealth University]. VCU Scholar Compass. https://doi.org/10.25772/GVNW-6J41

Chua, S. L., & Ho, H. P. (2017). *Towards 21st-century music teaching-learning: Reflections on student-centric pedagogic* practices involving popular music in Singapore. In G. Smith, Z. Moir, M. Brennan, S. Rambarran, & P. Kirkman (Eds.), *The Routledge Research Companion to Popular Music Education* (pp. 87-99). https://doi.org/10.4324/9781315613444-8

Cochran, K. (2008). *The effects of singing and chanting on the reading achievement and attitudes of first-graders* [Doctoral dissertation, Clemson University]. Tiger Prints Clemson Library. https://tigerprints.clemson.edu/all_dissertations/280

Davidova, J. (2019). Music teacher's competences in the 21st century. *Pedagogika*, *134*(2), 99-108. https://doi.org/10.15823/p.2019.134.6

Edwards, L. C. (2013). *Music and movement: A way of life for the young child*. Pearson.

Erdogan, F. (2019). Effect of cooperative learning supported by reflective thinking activities on students' critical thinking skills. *Eurasian Journal of Educational Research*, *19*(80), 1-24.

Eren, B. (2015). The use of music interventions to improve social skills in adolescents with autism spectrum disorders in integrated group music therapy sessions. *Procedia - Social and Behavioral Sciences*, *197*, 207-213. https://doi.org/10.1016/j.sbspro.2015.07.125

Evans, J. R. (1972). *A comparison of the synchronous, rhythmic motor, and spontaneous rhythmic movement of educable mentally retarded and normal children* [Doctoral dissertation, Ohio State University]. OhioLINK Electronic Thesis and Dissertations Center. http://rave.ohiolink.edu/etdc/view?acc_num=osu1486734577565899

Gardner, H. (2011). *Frames of mind: The theory of multiple intelligences*. Basic Books.

Good, A., Russo, F. A., & Sullivan, J. (2014). The efficacy of singing in foreign-language learning. *Psychology of Music*, *43*(5), 627-640. https://doi.org/10.1177/0305735614528833

Governor, D., Hall, J., & Jackson, D. (2013). Teaching and learning science through song: Exploring the experiences of students and teachers. *International Journal of Science Education, 35*(18), 3117-3140. https://doi.org/10.1080/09500693.2012.690542

Halverson, A. (2018). *21st-century skills and the "4Cs" in the English language classroom.* University of Oregon Libraries. http://hdl.handle.net/1794/23598

Intani, E. N. (2012). Developing modified Indonesian children song lyrics to teach vocabulary to elementary school third graders. *English Education Journal*, *2*(2), 183-188.

Isabel, Y. P. (2015). Composing songs for teaching science to college students. *Universal Journal of Educational Research*, *3*(10), 724-726. https://doi.org/10.13189/ujer.2015.031010

Jasmi, K. A. (2012, March 28-29). *Kesahan dan kebolehpercayaan dalam kajian kuantitatif dan kualitatif* [Validity and reliability in quantitative and qualitative studies] [Paper Presentation]. Kursus Penyelidikan Kualitatif Siri 1 2012, Malacca, Malaysia. https://www.researchgate.net/publication/293097747

Jensen, E. (2000). *Music with the brain in mind*. Corwin Press.

Kim, S. (2000). *The effects of sequential movement activities on first-grade students' solo singing abilities* (Publication No. 9976141) [Doctoral dissertation, The University of Southern Missisippi]. ProQuest Dissertation Publishing. https://www.proquest.com/openview/34e161b981f27e5fbfd47d8a2102ee3f/1?pq-origsite=gscholar&cbl=18750&diss=y

Kivunja, C. (2014). Teaching students to learn and to work well with 21st-century skills: Unpacking the career and life skills domain of the new learning paradigm. *International Journal of Higher Education*, *4*(1), 1-11. https://doi.org/10.5430/ijhe.v4n1p1

Kristyana, L. N., & Suharto, S. (2014). Singing as a strategy to enhance the ability to speak for early childhood. *Harmonia Journal of Arts Research and Education, 14*(2), 123-130. https://doi.org/10.15294/harmonia.v14i2.3293

Laal, M., Laal, M., & Kermanshahi, Z. K. (2012). 21st century learning; learning in collaboration. *Procedia - Social and Behavioral Sciences*, *47*, 1696-1701. https://doi.org/10.1016/j.sbspro.2012.06.885

LaGasse A. B. (2014). Effects of a music therapy group intervention on enhancing social skills in children with autism. *Journal of Music Therapy*, *51*(3), 250-275. https://doi.org/10.1093/jmt/thu012

Lázaro, S.M., León-del-Barco, B., Felipe-Castaño, E., Polo-del-Río, M.-I., & Iglesias-Gallego, D. (2018). Cooperative team learning and the development of social skills in higher education: The variables involved. *Frontiers in Psychology*, *9*. https://doi.org/10.3389/fpsyg.2018.01536

Machfauzia, A. N., Sayuti, S. A., & Djohan, D. (2018). Musical interpretation: Case study in musical instrument practice learning vocational high school. *Jurnal Pendidikan Vokasi*, *8*(2), 193-203. https://doi.org/10.21831/jpv.v8i2.19875

Mahpudz, A., Jamaludin, & Palimbong, A. (2020). Tolerance learning to develop students' social skills in the 21st century. In *Proceedings of the International Conference on Social Studies, Globalisation and Technology (ICSSGT 2019;* pp. 169-178). https://doi.org/10.2991/assehr.k.200803.022

Merrell, K. W. (1993). S*chool social behavior scales*. Assessment-Intervention Resources.

Merrell, K. W. (1994). *Preschool and kindergarten behavior scales. Test manual*. Clinical Psychology Publishing Company, Inc.

Merrell, K. W., & Caldarella, P. (2000). *Home and community social behavior scales*. Assessment-Intervention Resources.

Mohamed, S., Satari, N., Yasin, M. H., & Toran, H. (2020). Malaysian early childhood educators' perceptions regarding children's social–emotional development. In *Proceedings of the 3rd International Conference on Learning Innovation and Quality Education (ICLIQE 2019;* pp. 103-113). Atlantis Press. https://doi.org/10.2991/assehr.k.200129.014

Mustikawati. A., & Astuti, K. S. (2019) Bringing 21st century music skills to the curriculum through interdisciplinary study. In K. Astuti, G. McPherson, B. Sugeng, T. Kurniasari, Herawan, C. Drake, Ashadi, E. Retnowati, & A. C. Pierewan (Eds.), *21st-century innovation in music education: 1st International Conference of the Music Education Community (INTERCOME 2018;* pp. 174-180). Routledge. https://doi.org/10.1201/9780429024931

Nadesan, N. K., & Shah, P. M. (2020). Non-linguistic challenges faced by Malaysian students in enhancing speaking skills. *Creative Education*, *11*(10), 1988-2001. https://doi.org/10.4236/ce.2020.1110145

Nurgiyantoro, B. (2005a). *Sastra anak: Pengantar pemahaman dunia anak* [Children's literature: An introduction of children's understanding to the world]. Gadjah Mada University Press.

Nurgiyantoro, B. (2005b). *Teori pengkajian fiksi* [Theory of fiction studies]. UGM Press.

Ozturk, E., & Can, A. A. (2020). The effect of music education on the social values of preschool children. *Cypriot Journal of Educational*

Sciences, *15*(5), 1053-1064. https://doi.org/10.18844/cjes.v15i5.5150

Perea, M. M. P., & Ruz, N. R. (2014). Intrapersonal intelligence and motivation in foreign language learning. *European Scientific Journal*, *10*(17), 142-150.

Rabinowitch, T.-C. (2020). The potential of music to effect social change. *Music & Science*, *3*. https://doi.org/10.1177/2059204320939772

Reynolds, T. (2018). *Developing musicianship and 21st century learning skills using the lisk "creative director" series* [Doctoral dissertation, University of Massachusetts Amherst]. ScholarWorks@UMass Amherst. https://doi.org/10.7275/12444327

Riggio, R. E., & Reichard, R. J. (2008). The emotional and social intelligences of effective leadership. *Journal of Managerial Psychology*, *23*(2), 169-185. https://doi.org/10.1108/02683940810850808

Saleh, S. E. (2019). Critical thinking as a 21st century skill: Conceptions, implementation and challenges in the EFL classroom. *European Journal of Foreign Language Teaching*, *4*(1), 1-16.

Selimović, Z., Selimović, H., & Opić, S. (2018). Development of social skills among elementary school children. *International Journal of Cognitive Research in Science Engineering and Education*, *6*(1), 17-30. https://doi.org/10.5937/ijcrsee1801017S

Shabrina, A., & Astuti, U. P. (2022). The integration of 6CS of the 21st-century education into English skills: Teachers' challenges and solutions. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, *7*(1), 28-37. https://doi.org/10.17977/jptpp.v7i1.15185

Simpson, J. (2013). *The effect of music therapy on social skills training in a preschool setting* [Master's thesis, The Florida State University]. DigiNole: FSU's Digital Repository. http://purl.flvc.org/fsu/fd/FSU_migr_etd-7606

Trilling, B., & Fadel, C. (2009). *21st-century skills: Learning for life in our times*. Jossey-Bass.

Vasil, M., Weiss, L., & Powell, B. (2018). Popular music pedagogies: An approach to teaching 21st-century skills. *Journal of Music Teacher Education*, *28*(3), 85-95. https://doi.org/10.1177/1057083718814454

Watson, V. (2012). *Teaching your child music*. BrillKids.

Welch, G. (2012). *The benefits of singing for children*. https://www.researchgate.net/publication/273428150