Table 1. Study characteristics, outcome measures and results

Study	Study design	Diagnosis	Intervention		Comparison		Outcomes of interest reported	Follow-up
			Characteristics	Туре	Characteristics	Туре		
Geretsegger 2022								
Bharathi, 2019*	RCT	ASD, DSM-V	n = 26 Mean age (range): 9.5 (6-12) yrs. Female (%): 50	MT, group setting, 3x/week, with emphasis on interactive and relational aspects	n = 26 Mean age (range): 9.5 (6-12) yrs. Female (%): 50	'Placebo': Passive music listening	Social interaction (TSSA)	6 months
Bieleninik, 2017*	RCT	ASD, ICD-10	n = 182 Mean age (SD): 5.5 (0.8) yrs Female (%): 18.1	MT, individual setting, 1 or 3 times a week, with emphasis on interactive and relational aspects	n = 182 Mean age (SD): 5.4 (0.9) yrs Female (%): 18.1	Standard care	Social interaction: Social affect ADOS Flexibility (adaptive behavior) via SRS subscale autistic mannerisms Quality of life	12 months
Gattino, 2011*	RCT	ASD	n = 12 Mean age (range): 9.75 (7-12) yrs Female (%): 0	Individual setting MT, weekly, with emphasis on interactive and relational aspects	n = 12 Mean age (range): 9.75 (7-12) yrs Female (%): 0	Standard care	Social interaction Verbal communication Non-verbal communication (CARS social communication domain, Brazilian version)	7 months
Ghasemtabar, 2015	RCT	Mild/Moderate Autism CARS	n = 13 Mean age (range): 8.9 (7-12) Female (%): 46	MT, group setting, 2x/ week, with emphasis on interactive and relational aspects	n = 14 Mean age (range): 9.2 (7-12) Female (%): 50	Standard care	Social interaction (SSRS-P)	3.5 months
Kim, 2008	RCT (cross- over)	Autism	n = 10 Mean age (range): 4.3 (3.3-5.9) yrs Female (%): 0	Individual setting MT, weekly, with emphasis on interactive and relational aspects	n = 10 Mean age (range): 4.3 (3.3-5.9) yrs Female (%): 0	'Placebo' activity without music	Social interaction (PDDBI) Non-verbal communication (ESCS)	4 months
LaGasse, 2014*	RCT	ASD, no dual disability diagnosis	n = 9 Mean age (range): 7.6 (6-9) yrs Female (%): 24	MT, group setting, 2x/ week, with emphasis on interactive and relational aspects	n = 8 Mean age (range): 7.6 (6-9) yrs Female (%): 24	'Placebo' activity without music	Social interaction (SRS) Non-verbal communication	8 weeks
Lim, 2010*	RCT	ASD	n = 18 Mean age (range): 4.7 (3-5) yrs Female (%): 12	Individual setting MT, daily, highly structured	n = 18 Mean age (range): 4.7 (3-5) yrs Female (%): 12	'Placebo' activity without music	Verbal communication (VPES)	5 days

Lim, 2011	RCT (cross- over)	ASD	n = 22 Mean age (range): 4.3 (3-5) yrs	Individual setting MT, daily, highly structured	n = 22 Mean age (range): 4.3 (3-5) yrs	'Placebo' activity without music	Verbal communication (VPES)	2 weeks
Porter, 2017*	RCT	ASD (ICD-10)	n = 24 Age range: 8-16 yrs Female (%): 28	Individual setting MT, weekly, with emphasis on interactive and relational aspects	n = 23 Age range: 8-16 yrs Female (%): 28	Standard care	Social interaction (Social Skills Improvement System Rating Scales (SSIS)) Quality of life (EQ5D) Flexibility (adaptive behavior, CBCL)	6 months
Rabeyron, 2020	RCT	ASD (CARS)	n = 19 Mean age (SD): 4.9 (0.8) Female (%): 5	MT, group setting, weekly, highly structured	n = 18 Mean age (SD): 5.4 (0.7) Female (%): 22	'Placebo': Passive music listening	Social interaction Verbal communication Non-verbal communication (CARS social communication domain) Flexibility (adaptive behavior, Aberrant Behavior Checklist (ABC))	8 months
Schwartzberg 2013*	RCT	ASD	n = 16 Mean age (range): 15.8 (9-21) Female (%): 3%	MT + music based social story, group setting, daily, highly structured	n = 16 Mean age (range): 15.8 (9-21) Female (%): 3%	'Placebo' activity without music	Social interaction (ASSP) Verbal communication (comprehension checks)	3 days
Sharda, 2018	RCT	ASD (DSM-IV)	n = 26 Mean age (range): 10.3 (6-12) yrs Female (%): 18	Individual setting MT, weekly, with emphasis on interactive and relational aspects	n = 25 Mean age (range): 10.3 (6-12) yrs Female (%):12	'Placebo' activity without music	Social interaction (SRS-2) Verbal communication (PPVT-4) Non-verbal communication (CCC-2) Flexibility (adaptive behavior) (VABS) Quality of life (FQoL)	8-12 weeks
Thompson, 2014*	RCT	ASD	n = 12 Age range: 3-6 yrs Female (%): 17	Family based setting MT, weekly, with emphasis on interactive and relational aspects	n = 11 Age range: 3-6 yrs Female (%): 17	Standard care	Social interaction (VSEECS, SRS) Verbal communication (MBCDI-W&G) Non-verbal communication (MBCDI-W&G)	16 weeks
Yurteri, 2019	RCT	ASD	n = 12 Age range: 4.8-9.3 yrs Female (%): 0	Individual or group setting MT, twice weekly, with emphasis on	n = 12 Age range: 4.8-9.3 yrs Female (%): 0	Standard care	Quality of life (PedsQL)	8 weeks

		interactive and		
		relational aspects		

Abbreviations: ADOS = Autism Diagnostic Observation Scale; ASD= Autism spectrum Disorder; ASSP= Autism Social Skills Profile; CARS = Childhood Autism Rating Scale; CBCL = Child Behavior Checklist; CCC-2 = Children's Communication Checklist; DSM = diagnostic and statistical manual of mental disorders; ESCS = Early Social Communication Scales; EQ5D= Euroqol 5D; FQoL = Beach Family Quality of Life; MT= Music therapy; MBCDI-W&G = MacArthur-Bates Communicative Development Inventories, words and gestures; PDDBI = Pervasive Developmental Disorder Behavior Inventory; PEP = Psychoeducational Profile; PedsQL = Pediatric Quality of Life Inventory; PPVT-4 = Peabody Picture Vocabulary Test-4; RCT = randomized controlled trial; SRS = Social Responsiveness Scale; SSIS = social skills improvement system rating scales; SSRS-P = Social Skills Rating System Scale-Parent form; TSSA= TRIAD Social Skills Assessment; VABS = Vineland Adaptive Behavior Scales VPES = Verbal Production Evaluation Scale VSEECS = Vineland Social Emotional Early Childhood Scales * Mean age and percentage females are reported for the total study population only