Table S1. Full Search Strategy

Search
S1 (MH "Multiple Sclerosis")
S2 "multiple sclerosis"
S3 "MS"
S4 "demyelinat*"
S5 S1 OR S2 OR S3 OR S4
S6 (MH "Dancing+")
S7 (MH "Dance Therapy")
S8 "danc*"
S9 "ballet"
S10 "ballroom"
S11 "tango"
S12 "jazz"
S13 "Zumba"
S14 "movement to music"
S15 S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12
S16 S5 AND S15
Expanders: Apply equivalent subjects
NAMED 10
→ AMED: 10
N CINILLA I CO
→ CINHAL: 60
S1 Multiple Sclerosis/
S2 multiple sclerosis.mp.
S3 MS.mp.
S4 demyelinat*.mp.
S5 S1 OR S2 OR S3 OR S4
S6 exp Dancing/
S7 exp Dance Therapy/

	S8 danc*.mp. S8 ballet.mp. S10 ballroom.mp. S11 tango.mp. S12 jazz.mp. S13 zumba.mp. S14 movement to music.mp. S15 S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 S16 S5 AND S15  → 91
Web of Science (Core Collection)	(TS=("multiple sclerosis" OR "MS" OR "demyelinat*")) AND TS=((danc* OR "ballet" OR "ballroom" OR "tango" OR "jazz" OR "Zumba" OR "movement to music"))  → 216
ProQuest (Health & Medical Collection, Nursing & Allied Health Database, and PsycINFO)	S1 (noft("multiple sclerosis") OR TI,AB("MS") OR noft("demyelinat*")) S2 (noft(danc*) OR noft("ballet") OR noft("ballroom") OR noft("tango") OR noft("jazz") OR noft("zumba") OR noft("movement to music")) S3 S1 AND S2  → Health & Medical Collection: 173  → Nursing & Allied Health Database: 84  → PsychINFO: 50
Scopus	( TITLE-ABS-KEY ( "multiple sclerosis" OR "demyelinat*" ) ) AND ( TITLE-ABS-KEY ( danc* OR "ballet" OR "ballroom"

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OR "tango" OR "jazz" OR "zumba" OR "movement to music"))
<b>→</b> 50

 Table S2. Complete Characteristics of Included Studies

Author, Date,	Sample Characteristics	Intervention	<b>Outcome Measures</b>	Main Findings	Quality
Design	(size <sup>a</sup> , sex, age, MS type,	Characteristics			
	disability status, disease	(type, delivery mode,			
	duration)	dosage, frequency,			
		duration, adverse events,			
		adherence, dropouts)			
Randomized Cor	ntrolled Trial				
Young et al, <sup>35</sup>	81 (self-reported	Movement-to-music	Primary:	Primary:	Moderate
2019;	diagnosis);	(M2M, n = 27);	Mobility (TUG)	<u>TUG</u>	(60%
proof-of-concept				Pre M2M group: $12.3 \pm 12.4$	quality
trial	66F/15M;	Group, in-person;	Walking endurance (6MWT)	Post M2M group: 12.2 ± 14.1	criteria met)
	Mean age dance group,	60 minutes x 3/week for		Group difference $(P = .03)$ *	
	$49.67 \pm 9.40$ years;	12 weeks;	Lower-extremity	, , ,	
		·	functional strength	Post hoc, between M2M-WC	
	MS type, NR;	AE (study-related), 1;	(5XSTS)	(P = .01)*	
				Cohen's $d = 0.7$ , medium ES	
	PDDS range, 0-6 (no	Adherence, 53.7%	Secondary:		
	disability - bilateral		Fatigue and pain	Post hoc, between AY-WC	
	support);	Lost to follow-up, $n = 3$	(PROMIS Fatigue and	$(P = .09)^{\circ}$	
	,	-	Pain Interference Short		
	Mean disease duration of	Adapted yoga (AY, n =	Forms 8a)	<u>6MWT</u>	
	dance group, $13.56 \pm 8.26$	26);		Pre M2M group: $341.7 \pm 110.1$	
	years			Post M2M group: 383.9 ±	
		Group, in-person;		134.1	
		60 minutes x 3/week for		Group difference accounting	
		12 weeks;		for PDDS $(P = .04)*$	
		AE (study-related), 0;		Post hoc, between M2M-WC	
				(P = .04)*	

		Adherence, 67.7%		Cohen's $d = 0.6$ , medium ES	
		Lost to follow-up, $n = 5$		Post-hoc, between AY-WC $(P = .25)$	
		Waitlist control (WC, n = 28);		$\frac{5XSTS}{\text{Group difference } (P = .41)}$	
		Biweekly, educational newsletters;		Secondary:	
		Lost to follow-up, n = 5		PROMIS-Fatigue Group difference accounting for PDDS $(P = .08)^{\circ}$	
				Post hoc, between M2M-WC $(P = .09)^{\circ}$ Cohen's $d = 0.49$ , medium ES	
				$\frac{PROMIS-Pain}{Group difference} (P = .70)$	
Nonrandomized	Studies				I.
Mandelbaum et al, <sup>38</sup> 2016;	8 (confirmed diagnosis);	Salsa dance;	Gait (T25-FW, MSWS-12)	Pre-post, within group $\underline{TUG}(P = .02)*$	Moderate (60%
uncontrolled, before-and-after	5F/3M;	Group, in-person;	Balance (DGI, BBS)	Pre: 9.5 (8.6; 10.0) Post: 8.5 (8.1; 8.9)	quality criteria met)
study	Age range, 29-63 years;	60 minutes x 2/week for 4 weeks;	Mobility (TUG)	$\underline{\text{GLTEQ}} (P = .01)^*$	
	7 RRMS/1 SPMS;	AE, 0;	Balance confidence	Total minutes/week Pre: 250.0 (25.0; 447.5) Post: 450.0 (205.0; 721.2)	
	PDDS range, 0-3 (no disability-walking disability);	Adherence, 98%	(ABC) Self-efficacy (MSSS)	Post: 450.0 (305.0; 731.3)  Moderate exercise (min)	
	<i></i>	Dropouts, 0	(11200)	Pre: 70.0 (0.0; 338.8)	

Disease duration range, 1-	Motivation for PA	Post: 325.0 (240.0; 492.5)
22 years	(MPAM-R)	m . 11 ·
	DI 1 1 (1 )	Total leisure activity (METs)
	Physical activity	Pre: 28.0 (4.5; 50.8)
	(GLTEQ)	Post: 43.0 (30.0; 67.5)
	MS symptom checklist	MS Symptoms (P = .05)*
	(MS Symptoms)	Pre: 5.0 (2.0; 6.8)
	(MS Symptoms)	Post: 5.5 (2.3; 8.5)
	Neurological disability	1 050. 5.5 (2.5, 6.5)
	(PDDS)	$\overline{DGI}(P = .09)^{\circ}$
	(= = = *)	
		$ABC (P = .09)^{\circ}$
		<u>T25-FW, MSWS-12, BBS,</u>
		MSSS, PDDS, MPAM-R,
		(P>0.1)
		Pre 3-month follow-up
		$\underline{DGI}(P = .04)*$
		Pre: 22.5 (20.3; 23.8)
		3-month: 24.0 (22.3; 24.0)
		TUC (D = 05)*
		TUG (P = .05)* Pre: 9.5 (8.6; 10.0)
		3-month: 8.3 (8.0; 8.9)
		Post: 43.0 (4.3, 50.6) Post: 43.0 (30.0; 67.5)  MS Symptoms (P = .05)* Pre: 5.0 (2.0; 6.8) Post: 5.5 (2.3; 8.5)  DGI (P = .09)°  ABC (P = .09)°  T25-FW, MSWS-12, BBS, MSSS, PDDS, MPAM-R. (P > 0.1)  Pre 3-month follow-up DGI (P = .04)* Pre: 22.5 (20.3; 23.8) 3-month: 24.0 (22.3; 24.0)  TUG (P = .05)* Pre: 9.5 (8.6; 10.0) 3-month: 8.3 (8.0; 8.9)  MSWS-12 (P = .05)* Pre: 29.2 (1.0; 59.9) 3-month: 17.7 (1.6; 41.7)
		MSWS-12 (P = .05)*
		Pre: 29.2 (1.0; 59.9)
		3-month: 17.7 (1.6; 41.7)
		$\underline{\text{GLTEQ}} (P = .07)^{\circ}$

				$\frac{\text{T25-FW, ABC, BBS, MSSS,}}{\text{MS Symptoms, MPAM-R,}}$ $\frac{\text{PDDS}}{\text{PDDS}} (P > .1)$ $Pre \ 6\text{-month follow-up}$ $\text{All outcomes} (P > .1)$	
Scheidler et al, <sup>39</sup> 2018; uncontrolled, before-and-after study	8 (confirmed diagnosis); 8F/0M; Age range, 36-65 years; All RRMS; EDSS range, 2.5-6.5 (mild disability-moderate disability); Disease duration, NR	Targeted ballet; Group, in-person; 60 minutes x 2/week for 16 weeks; AE, 0; Adherence, preset criteria of over 94% of classes Dropouts, 2	Ataxia (ICARS and smoothness of movement in 5-meter walk from motion capture data [Uni-Lateral S-index])  Balance (MBT and center of pressure measurements of balance in step-to-stand task [GBM])	Pre-post, within group ICARS Pre: $19.6 \pm 6.3$ Post: $8.19 \pm 6.6$ $(P < .001)*$ Cohen's $d = 2.6$ , huge ES  Unilateral S-index, right Pre: $-81.7 \pm 10.9$ Post: $-75 \pm 8.7$ $(P = .028)*$ Cohen's $d = 0.87$ , large ES  Unilateral S-index, left Pre: $-78.6 \pm 10.3$ Post: $-73.2 \pm 7.5$ $(P = .027)*$ Cohen's $d = 0.87$ , large ES  MBT Pre: $16.6 \pm 5.0$ Post: $23.6 \pm 2.6$ $(P = .001)*$ Cohen's $d = 1.2$ , very large ES	Moderate- high (80% quality criteria met)

				Pre: $-4.82 \pm 6.9$ Post: $-17 \pm 10.4$ (P = .025)* Cohen's $d = .68$ , medium ES $\frac{\text{GBM, right, left, and front}}{(P > .05)}$	
Ng et al, <sup>37</sup> 2020; controlled, before-and-after	13 (confirmed diagnosis); 12F/1M;	Ballroom dance (n = 7);	HR-QoL (PROMIS-GH)	Within group, dance group:  PROMIS-GH $(P = .03)$ *  Pre: 40 (29,45)	Moderate- high (80% quality
study	Age range, 40-59 years;	Group, in-person; 60 minutes x 2/week for	Self-efficacy (MSSE)  MS Exercise Self-	Post: 42 (34,48) MSFC (P = .03)*	criteria met)
	12 RRMS/1 PPMS;	6 weeks;	efficacy	Pre: 0.25 (-1.33, 0.35) Post: 0.47 (-0.90, 0.55)	
	PDDS range, 1-4 (mild disability-cane use);	AE, 0;	Fatigue (FIS)	PASAT $(P = .03)$ *	
	Disease duration, NR	Adherence, all complete at least 75% sessions	Depression (BDI)	Pre: 49 (31, 55) Post: 55 (45, 60)	
		(preset criteria)	Balance (BBS, DGI)	FIS $(P = .07)^{\circ}$	
		Dropouts, 0	Mobility (TUG)	BDI $(P = .07)^{\circ}$	
		No-dance control group $(n = 6)$	Physical function (MSFC: 9-HPT, T25- FW, PASAT)	$\underline{BBS} (P = .07)^{\circ}$	
			Exercise intensity (HR, RPE)	$\underline{\text{TUG}} (P = .08)^{\circ}$ $\underline{\text{MSSE-Control}} (P = .46),$ $\underline{\text{MSSE-Frace}} (P = .46) \text{ MGSE-Frace}$	
				$\frac{\text{MSSE-Function}}{\text{Exercise Self-efficacy}} (P = .18), \underline{\text{MS}}$	

2020; controlled, pilot, before-and-after study	17 (confirmed diagnosis); 16F/1M; Age range, 29-65 years; MS Type, NR; Disability status, cane (n = 1), walker (n = 2), crutch (n = 1); Disease duration range, 3 21 years	Choreo-based participatory dance (n = 7); Group, in-person; 90 minutes x 2/week for 10 weeks; AE, NR; Adherence, NR; Dropouts, 1	Primary: Fatigue (MFIS, FSS, DWI, CFI)  Secondary: Physical capacity (6MWT, T25-FW, ABC, DGI, 5TSTS, MSWS-12, 9HPT)  Sensory function (EmNSA)  Cognitive capacity	.21), $\underline{\text{DGI}}(P = .11)$ , $\underline{\text{9HPT}}(P = .35)$ , $\underline{\text{T25-FW}}(P = .53)$ Within group, control group: All outcomes $(P > .1)$ Between dance & control groups: $\underline{\text{PROMIS-GH}}(P \le .05)^*$ $\underline{\text{MSFC}}(P \le .05)^*$ Within group, dance group:  Primary: $\underline{\text{MFIS}}(P = .03)^*$ Pre: 43 (19; 48)  Post: 26 (6; 49) $\underline{\text{MFIS physical}}(P = .02)^*$ Pre: 19 (8; 24)  Post: 13 (3; 20) $\underline{\text{FSS}}(P = .31)$ , $\underline{\text{DWI}}(P = .87)$ , $\underline{\text{CFI}}(P = .25)$ Secondary:	Moderate (60% quality criteria met)
	21 years	Dropouts, 1	(SMDT, PASAT)	Secondary: $\underline{5STS} (P = .04)*$	

Control art group (n =	Dual Task Performance	$\underline{ABC} (P = .04)*$
Group in parson:	HR-QoL (MSIS-29, SF-36)	MSWS-12 (P = .046)*
Group, in-person; Approximately 90	Leg coordination	9HPT-dominant ( <i>P</i> =.02)*
minutes x 2/week for 10 weeks;	Leg coordination	$\underline{DT - Cognitive} (P = .03)*$
AE, NR;		<u>Leg coordination</u> $(P = .046)*$
Adherence, NR		$\underline{PASAT} (P = .068)^{\circ}$
		<u>MSIS-29</u> $(P = .063)^{\circ}$
		$\underline{DT \ Cost} \ (P = .063)^{\circ}$
		Within group, art group: Primary:
		MFIS (P=.005)* Pre: 48 (41; 54)
		Post: 42 (28; 47)
		MFIS, physical (P = .01)* Pre: 25 (20; 30)
		Post: 20 (13; 23)  ESS (P = 72) DWI (P = 74)
		$ \underline{FSS} (P = .72), \underline{DWI} (P = .74), \\ \underline{CFI} (P = .45) $
		Secondary: $\underline{SDMT}(P = .04)*$
		$\frac{\text{DT - Cognitive}}{\text{DT - Cognitive}} (P = .02)*$

				$\underline{PASAT} (P = .085)^{\circ}$	
Camacho et al, <sup>40</sup> 2021; uncontrolled, before-and-after study	5 (confirmed diagnosis);  4F/1M;  Age range, 38-64 years;  All RRMS;  EDSS, mean of 3.5 ± 1.5 (mild-moderate disability);  Disease duration, NR	Targeted ballet; Group, in-person; 60 minutes x 2/week for 12 weeks; AE, 0; Adherence, mean hours of 21.8 ± 4.65 (preset criteria of 24 hours) Dropouts, 0	Ataxia (ICARS and smoothness of movement in 5-meter walk from motion capture data [Bilateral S-index])  Balance (MBT)	Pre-post, within group:  ICARS $(P = .01)^*$ Hedge's $g = -1.21$ , large ES  MBT $(P = .015)^*$ Hedge's $g = 1.08$ , large ES  Bilateral S-index $(P = .0499)^*$ Hedge's $g = .69$ , medium ES	Moderate (60% quality criteria met)
<b>Quantitative Des</b>	scriptive Studies			1	
Salgado and de Paula Vasconcelos, <sup>43</sup> 2010; case report	1 (confirmed diagnosis); Female; Age, 45 years; RRMS; EDSS, 3 (moderate disability); Disease duration, 10 years	Dance/movement therapy;  1 on 1, in-person;  100 minutes x 2/ week for 20 weeks;  AE, NR;  Adherence and dropouts, N/A	Neurological disability (EDSS, MRD, NRS)	Pre-post changes  EDSS Pre: 3 Post: 2 (-1)  MRD Pre: 6 Post: 5 (-1)  NRS Pre: 64 Post: 71 (+7)	Low (40% quality criteria met)

11 (confirmed diagnosis);	Jazzercise;	Questionnaire	Percentage agreed or strongly	Low (40% quality
11F/0M;	Group, in-person;	reported changes in	postintervention:	criteria met)
Age range, 32-70 years;	45 minutes x 2/ week for 16 weeks;	coordination, energy,	56% balance and coordination 67% strength and flexibility	
MS type, NR;	AE, 0;	strength	78% confidence	
Disability status, ambulatory without	Adherence, 67-75%		100% enjoyment & satisfaction with classes &	
assistance $(n = 7)$ , use walkers $(n = 4)$ ;	Dropouts, $n = 3$		motivation to continue with classes	
Disease duration, NR				
1 (confirmed diagnosis); +6 other people with	Clinical dance therapy;	Primary: Mobility (FSST)	Tau-U analysis Primary:	Moderate (60%
reduced mobility	Group, in-person;	Secondary:	$\frac{\text{FSST}}{(P = .86)}$	quality criteria met)
Female;	90 minutes x 2/ week for 12 weeks:	Mobility (MDRT-	Tau-U: 0.08	,
Age, 60 years;			Secondary: MDRT-behind	
MS Type, NR;			(P = .034)*	
Disability status, walks with a limp:				
Disease duration, NR	2.000000,1071		$\frac{(P = .034)^*}{(P = .034)^*}$ Tau-U: 1, Very large ES	
	11F/0M; Age range, 32-70 years; MS type, NR; Disability status, ambulatory without assistance (n = 7), use walkers (n = 4); Disease duration, NR  1 (confirmed diagnosis); +6 other people with reduced mobility Female; Age, 60 years; MS Type, NR; Disability status, walks with a limp;	11F/0M;  Age range, 32-70 years;  MS type, NR;  Disability status, ambulatory without assistance (n = 7), use walkers (n = 4);  Disease duration, NR  1 (confirmed diagnosis); +6 other people with reduced mobility  Female;  Age, 60 years;  MS Type, NR;  Disability status, walks with a limp;  Group, in-person;  Clinical dance therapy;  Group, in-person;  AE, NR;  Adherence, 71%  Dropouts, N/A	11F/0M;  Age range, 32-70 years;  MS type, NR;  Disability status, ambulatory without assistance (n = 7), use walkers (n = 4);  Disease duration, NR  1 (confirmed diagnosis); +6 other people with reduced mobility  Female;  Age, 60 years;  MS Type, NR;  Disability status, walks with a limp;  Group, in-person;  Group, in-person;  Adherence, 67-75%  Dropouts, n = 3  Clinical dance therapy; Mobility (FSST)  Secondary: Mobility (MDRT-behind, MBT)	agreed outcome improved postintervention:  Age range, 32-70 years; Age, 0; Age, 0 years; Age, 60

Ares-Benítez et	1 (confirmed diagnosis);	Spanish dance &	Spasticity (MAS)	Pre-post changes	Low (40%
al, <sup>44</sup> 2021;		physiotherapy;		BBS	quality
case report	Female;		Balance (BBS)	Pre: 30	criteria met)
		1 on 1, in-person;		Post: 55 (+25 points)	
	Age, 49 years;		Walking endurance		
		60 minutes x 5/week for	(6MWT)	<u>6MWT</u>	
	RRMS;	3 weeks;		Pre: 427.24 m and 1.19 m/s	
			Spatiotemporal gait	Post: 465 m and 1.46 m/s	
	EDSS, 5 (moderate disability);	AE, NR;	patterns (Gaitrite)	(+37.76 m and +0.27 m/s)	
		Adherence & dropouts,	Muscle strength	MMT	
	Disease duration, 24 years	N/A	(MMT)	Ankle dorsiflexors, +2 points	
				Ankle plantar flexors, +1 point	
			Range of motion	Knee and hip muscles, no	
			(goniometry)	change	
				MAS	
				Sural triceps, -1 point	
				Quadriceps, hamstrings, psoas	
				& adductors, no change	
				et audustors, no change	
				Spatiotemporal gait	
				parameters, left lower limb,	
				right lower limb	
				Stride time (s), -0.04, -0.02	
				Step length (cm), +12.6, +13.6	
				Stride length (cm),+26.4,+26.1	
				Base of support (cm),+3.9,+2.8	
				Single support (%GC), +5.2,	
				+3.3	
				Double support (%GC), -10.2,	
				-9.8	
				Balance (%GC), +3.3, +5.4	

				Speed (cm/s), +24.8 Cadence (steps/minute), +4.6	
Mixed Methods S	Studies			1	1
Mason, <sup>45</sup> 2020; thesis	5 (self-reported diagnosis);  Sex, age, MS type, disability status, and disease duration, NR	Participatory dance; Group, in-person; 75 minutes x 1/week for 6 weeks; AE, NR; Adherence, 93% Dropouts, n = 0	Quantitative Self-efficacy (MSSE- 10)  Qualitative Exit questionnaire	Quantitative Pre-post, within group  MSSE-10 Pre: 880 Post: 906 (P = .225)  Qualitative Participants reported experiencing improvements in self-efficacy, self-confidence & physical well-being.	Low (20% quality criteria met)
Whiteside and Ruckert, 46 2020; evaluation	22 (self-reported diagnosis) including n = 12 (AM group) and n =10 (PM group)  21F/1M;  Age, NR;  MS type, NR;  Disability status, multiple walking aids, wheelchairs (n = 2);  Disease duration, NR	Participatory dance; Group, in-person; 75 minutes x 1/week for 10 weeks; AE, NR; Adherence & dropouts, N/A (drop-in format)	Quantitative Fatigue (FSS)  Balance confidence (ABC)  Gait (MSWS-12)  Qualitative Interviews & participant observation	Quantitative Pre-post, within group  ABC  AM group $(P > .05)$ PM group $(P = .07)^{\circ}$ FSS  AM group $(P = .02)^{*}$ Pre: 5.4  Post: 4.7  PM group $(P = .06)^{\circ}$ MSWS-12  AM group $(P = .06)^{\circ}$	Moderate (60% quality criteria met)

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				PM group (P > .05)  Qualitative Participants reported experiencing improvements in	
				body confidence & awareness,	
				well-being, belonging & quality of life.	
Qualitative Stud	y	1	1		
Baeza and Fuertes, <sup>47</sup> 2022	1 (confirmed diagnosis);	Creative movement practice;	Interviews using visual narratives from	Participant reported improvements in body	Low (40% quality
, -	Female;	Solo, remote;	photographs as metaphors	confidence & awareness, emotional confidence & well-	criteria met)
	Age, 53 years;	100 minutes x 1/week	metaphors	being & connectedness with family members.	
	MS type, NR;	for 6 weeks;		Talling members.	
	Disability status, carries out daily activities	AE, NR;			
	independently using a cane at home and wheelchair outside;	Adherence & dropouts, N/A			
	Disease duration, 18 years				

5STS, Five Times Sit-to-Stand; 6MWT, 6-Minute Walk Test; 9HPT, 9-Hole Peg Test; ABC, Activities-Specific Balance Confidence Scale; AE, adverse events; BBS, Berg Balance Scale; BDI, Beck Depression Inventory; CFI, Cognitive Fatigability Index; DGI, Dynamic Gait Index; DT, dual task; DWI, Distance Walked Index; EDSS, Expanded Disability Status Scal;, EmNSA, Erasmus modified Nottingham Sensory Assessment; ES, effect size; F, female; FIS, Fatigue Impact Scale; FSS, Fatigue Severity Scale; FSST, Four Square Step Test; GC, gait cycle; GLTEQ, Godin Leisure Time Exercise Questionnaire; HR, heart rate; HR-QoL, health-related quality of life; ICARS, International Cooperative Ataxia Rating Scale; M, male; MAS, Modified Ashworth Scale);MBT, Mini-Balance Evaluation Systems Test; MDRT, Multi-Directional Reach Test; MFIS, Modified Fatigue Impact Scale; MMT, Daniels-Worthingham Manual Muscle Test; MPAM-R, Motives for Physical Activity Measure-Revised; MRD, Minimal Record Disability; MSFC, MS Functional Composite Score; MSIS-29, MS Impact Scale-29; MSSE, Multiple Sclerosis Self-efficacy Scale; MSSS, MS Self-Efficacy Scale; MSWS-12, 12-Item Multiple Sclerosis Walking Scale; N/A, not applicable; NR, not reported; NRS, Scripps Neurologic Rating Scale; PASAT, Paced Auditory Serial Addition Test; PDDS, Patient Determined Disease Steps scale; PPMS, primary progressive MS; PROMIS-GH, Patient-Reported Outcomes Measurement Information System Global Health; RPE, rating of perceived exertion; RRMS, relapsing-remitting MS; T25-FW, Timed 25-Foot Walk Test; TUG, Timed Up and Go; SF-36, Short Form Health Survey; SDMT, Symbol Digit Modalities Test; SPMS, secondary progressive MS.

<sup>&</sup>lt;sup>a</sup>All people with MS unless otherwise specified.

<sup>\*</sup>*P* ≤ .05

<sup>°</sup>trend towards significance (P < .1)

 Table S3. Examples of Qualitative Data

Themes	Sample Qualitative Data									
Theme 1: Body awareness and physical confidence	"When I fell, again in the same place during the week, this time instead of battering and bruising and injuring myself, I kept on my feet because I automatically did that backward, straight leg, and it kept me on my feet. It then let me reach forward and hold onto the sink, so I could get my balance back."  "I have noticed that I am more confident in trying things that I thought I couldn't do, or that I knew I would end up exhausted after, like running or stretching."									
Theme 2: Psychological wellbeing	"I enjoy the class. Sometimes I end the class feeling tired but in a better and more energetic mood. In those days where I felt tired even before starting the class, I knew that I would not be forced to do more than I was able to."									
Theme 3: Sense of belonging	"You're going somewhere where you don't have to explain as much. Because I don't mind going in and saying 'this is what my symptoms are; this is what I find difficult; this is what I want to get out of it,' but it's more just that when I'm saying that, I don't then have to explain what that actually means on top of having to have that initial explanation."  "The class is a totally nonjudgmental atmosphere, so self-conscious inhibition is minimal."  "45									
Theme 4: Social relationships	"When you feel the heat and it is heat that comes into your bodyyou're smiling; you're feeling warmer. And I think when you see each other and we're passing and you're smiling, I love									

that part when you're just doing the dancing with each other and that's lovely."46

"This image reflects union, and it is what I have felt with my daughter in the last activity of embracing slowly. It is something we never do and should being such a simple and good gesture, we should do it more often." <sup>47</sup> (translated from Spanish to English)

 Table S4. Mixed Methods Appraisal Tool (MMAT) Quality Assessment

Studies	Qua	litativ	e stud	ies		Randomized controlled trials									ntitati ies	Mixed-methods studies						MMAT score	Overall quality					
Author, Date, Design	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	3.4	3.5	4.1	4.2	4.3	4.4	4.5	5.1	5.2	2   5	5.3	5.4	5.5		Downloa
Baeza and Fuertes, 47 2022	Y	Y	CT	N	N																						**	Low d
Young et al, 35 2019; proof-of- concept trial						Y	Y	N	Y	N																	***	Moderate Moderate
Mandelbaum et al, <sup>38</sup> 2016; uncontrolled, before-and-after study											Y	Y	СТ	N	Y												***	Moderate Modernoress.com/ijm
Scheidler et al, <sup>39</sup> 2018; uncontrolled, before-and-after study											Y	Y	Y	Y	СТ												****	Moderate- high supplement
Ng et al, <sup>37</sup> 2020; controlled, before- and-after study											N	Y	Y	Y	Y												****	Moderate- high Spatti
Van Geel et al, <sup>36</sup> 2020; controlled, before-and-after study											Y	Y	Y	N	CT												***	Moderate 2073-25-4-10
Camacho et al, <sup>40</sup> 2021; uncontrolled, before-and-after study											CT	Y	Y	Y	CT												***	Moderate Moderate  Moderate  12
Salgado and de Paula Vasconcelos, <sup>43</sup> 2010; case report																СТ	N	Y	Y	CT							**	Low July 2023
Charlton et al, <sup>42</sup> 2010; survey																N	N	N	Y	Y							**	Low

Lachance et al, <sup>41</sup> 2021; single-case experimental study													СТ	Y	Y	N	Y						***	Moderate
Ares-Benítez et al, <sup>44</sup> 2021; case report													СТ	N	Y	Y	N						**	Low Downloade
Mason, <sup>45</sup> 2020; mixed-methods thesis	СТ	СТ	Y	Y	Y			CT	Y	Y	Y	Y						Y	N	N	СТ	N	*	Low from http://r
Whiteside and Ruckert, <sup>46</sup> 2020; mixed-methods evaluation	Y	Y	Y	Y	Y			CT	Y	N	Y	Y						N	Y	Y	Y	N	***	Moderate an allenpress

Y (Yes), N (No), CT (Can't tell)