

Supplementary file 4: Physical activity interventions for people experiencing homelessness

Broad intervention theme	Physical activity intervention	Study	Number of participants receiving intervention and providing study data	Setting	Frequency	Intensity	Time	Type	Group/individual	Presence of other components
Soccer	Soccer (group training)	Randers 2010	15	Outdoors four-a-side asphalt soccer pitch (22× 16m)	Two sessions	NS	1 hour	<u>Soccer</u> : 4 vs 4 Soccer games	Group	NS
		Helge et al, 2014 & Randers et al, 2012	18	<u>Soccer</u> : Outdoors four-a-side asphalt pitch (22× 16m) <u>Supervised training</u> : fitness centre	<u>Soccer</u> : mean of 2.2 ± 0.7 sessions per week <u>Supervised training</u> : mean of 0.5 ± 0.2 sessions per week, including 5 x strength exercises (one set of 10–12 repetitions)	<u>Soccer</u> : Verbally encouraged by coaches <u>Supervised training</u> : low intensity warm up, moderate intensity strength training, exercises at > 15Repetition Maximum	<u>Soccer</u> : 10min warm up, duration of soccer training unclear <u>Supervised training</u> : 15mins warm up + strength training time unclear	<u>Soccer</u> : 4 vs 4 Soccer games <u>Supervised training</u> : cardiovascular warm up, strength-based resistance training	Group	NS
		Sherry & Strybosch, 2012	144	NS	Weekly	NS	14min games with 1min half time break	Soccer	Group	Links to service
	Soccer (Tournament participation)	Randers et al, 2018	15	Outdoors four-a-side artificial turf street soccer	NS	Majority of play at 70-100 %HR _{peak}	4 day tournament. Mean playing time per	Soccer	Group	International travel

				pitch (22×16m with 4m wide goals)		Rate Perceived Exertion (x/10) 4.8± 2.5	game: 11.1 ± 2.6min			
		Welty Peachey et al, 2013	11	NS	NS	NS	4 day tournament	Soccer	Group	Opening/closing ceremonies, awards
	Soccer (group training and Tournament participation)	Magee & Jeanes, 2013	6	NS	NS	NS	10 weeks training + tournament	Soccer	Group	Access to support services
		Sherry, 2010	8	NS	NS	NS	NS	Soccer	Group	Informal support, link to services
Group outdoor exercise	Group Outdoor Adventure	Norton et al, 2020	32	Outdoors	NS	NS	NS	Archery, geocaching, rock climbing, and hiking	Group	Debrief, reflection on experience, individual and therapy therapy, childcare, ABC-R therapy model during outdoor activity
		Parry 2021a	30	Countryside, 170km from usual residence	NS	NS	4 days	Team based activities: canoeing, hiking, high ropes course, and raft building	Group	Preceding phase of 10 x Positive Youth Development life skills workshops
		Parry 2021b	54	Outdoors	NS	NS	3 to 4 days	canoeing, raft building, a mountain hike, high and low ropes courses, mountain biking, and caving.	Group	Preceding phase of 10 x Positive Youth Development life skills workshops and Team-based,

										structured reflections
	Running groups	Dawes et al, 2019	11	Local park	NS	Participant self-selected	1 hour/session	Running	Group	Running kit, healthy snack
	Gardening groups	Grabbe et al, 2013	8	Vegetable garden in rear parking lot of daytime shelter for women	2 x per week	NS	“staffed sessions” 2 hours, but women could engage in gardening at any time during daylight hours when the shelter was open.	Gardening, including: planting seeds, pulling weeds, watering, harvesting, washing produce,	Group, but possible to undertake as an individual, if desired	Food preparation, health, nutrition, and horticulture education
Group indoor multimodal exercise	Group instructor-led dance	Knestaut et al, 2010	11	Recreation room of homeless shelter	Weekly	Gentle warm up, exercise to elevate heart rate and raise core temperature	50 mins	Instructor-led group dance programme: stretching, cardiovascular exercise and dance genres including: hip hop, country-line dance, ballet, and creative movement/improvisation	Group	Informal debrief
	Group instructor-led, exercise	Malden et al, 2019	10	Local leisure centre	Weekly	NS	Approx. 1 hour	instructor-led group fitness class: aerobic circuits and strength-based resistance training exercises to music	Group	peer support workshop and lunch

	Sitting/ walking meditation, aerobic-based dance exercise training	Shors et al, 2014	8	NS	2x per week for 8 weeks	NS	1 hour total: 20 mins Sitting meditation, 10 mins walking, 30mins aerobic-based dance exercise training	Sitting meditation, walking, aerobic-based dance exercise training	Group	NS
Individual multimodal intervention	Pedometer with step count goals	Kendzor et al, 2017	15	Shelter for homeless adults	NS	NS	28 day period	Wear pedometer during waking hours and work towards 10,000 daily step goal	Individual	Educational newsletter, fruit/ veg snacks,
	Earn-a-bike programme	Grimes & Smirnova, 2020	16	Partnership between pedestrian and bicycling advocacy organization and local homeless outreach agency	NS	NS	NS	cycle safety training, including training on riding in heavy traffic and bicycle handling skills. Provision of bicycle and safety equipment	Unclear if training delivered in groups. Earning bicycle individual	Rules of the road and bicycle maintenance training