

Appendix A; Synchronized Metronome Training (SMT) paradigm

Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8	Session 9	Session 10	Session 11	Session 12						
44 min	41 min	41 min	43 min	41 min	43 min	41 min	41 min	42 min	43 min	42 min	44 min						
Pre-test; Exercise 1-13, and soccer- exercise I and II	Exercise 1 3 min / 54 bpm (GS) OFF	Exercise 1 4 min / 54 bpm	Exercise 1 9 min / 54 bpm	Freestyle I 2 min / 78 bpm	Exercise 1 2 min / 54 bpm	Exercise 10 2 min / 54 bpm	Exercise 5 2 min / 54 bpm	Exercise 5 2 minutes	Exercise 8 2 min / 54 bpm	Exercise 12 2 minutes	Exercise 1 2 min / 54 bpm						
	Exercise 1 6 min / 54 bpm (GS) ON	Exercise 4 3 min / 54 bpm		Quick Feet 4 min / 90 bpm	Exercise 2 2 min / 54 bpm	Exercise 3 2 min / 54 bpm	Exercise 11 2 min / 54 bpm	Exercise 2 2 min / 54 bpm	Exercise 6 2 minutes	Exercise 9 2 min / 54 bpm	Exercise 13 2 minutes	Exercise 2 2 min / 54 bpm					
	Exercise 2 3 min / 54 bpm	Quick Feet 4 min / 80 bpm		Quick Feet 4 min / 80 bpm	Tic-Tac 3 min / 90 bpm	Exercise 7 2 min / 54 bpm	Quick Feet 4 min / 90 bpm	Exercise 3 2 min / 54 bpm	Exercise 3 2 min / 54 bpm	Quick Feet 4 min / 90 bpm	Exercise 1 30 min / 54 bpm	Exercise 1 38 min / 54 bpm	Exercise 3 2 min / 54 bpm				
	Exercise 6 3 min / 54 bpm	Exercise 2 3 min / 54 bpm	Exercise 2 3 min / 54 bpm		Exercise 5 2 min / 54 bpm	Multi D Wheel 3min / 78 bpm clockwise	Exercise 4 2 min / 54 bpm	Exercise 4 2 min / 54 bpm	Double MD Wheel 3min / 54 bpm clockwise	Exercise 4 2 min / 54 bpm							
Exercise 1 5 min / 54 bpm	Exercise 10 4 min / 54 bpm	Exercise 3 3 min / 54 bpm	Exercise 2 3 min / 54 bpm	Exercise 9 2 min / 54 bpm	Multi D Wheel 3min / 54 bpm (cw)	Multi D Wheel 3 min / 78 bpm anti clockwise	Exercise 5 2 min / 54 bpm	Exercise 5 2 min / 54 bpm	Double MD Wheel 3 min / 54 bpm anti clockwise	Shuffle step II 3 min / 54 bpm			Freestyle II 2 min / 54 bpm	Exercise 5 2 min / 54 bpm			
		Freestyle I 2 min / 66 bpm	Exercise 3 3 min / 54 bpm	Exercise 3 3 min / 54 bpm	Multi D Wheel 3min / 54 bpm (acw)	Exercise 12 3 min / 54 bpm	Shuffle step I 3 min / 54 bpm	Exercise 6 2 min / 54 bpm	Tic-Tac 4 min / 100 bpm	Freestyle II 2 min / 54 bpm			Freestyle II 2 min / 54 bpm	Double MD Wheel 3 min / 78 bpm clockwise			
Exercise 4 4min / 54 bpm Guidesounds off	Exercise 3 3 min / 54 bpm	Exercise 10 3 min / 54 bpm	Exercise 10 3 min / 54 bpm	Exercise 1 19 min / 54 bpm	Exercise 13 3 min / 54 bpm	Exercise 1 10 min / 54 bpm	On Toes 2 min / 100 bpm	Exercise 1 30 min / 54 bpm	Exercise 12 4 min / 66 bpm	Exercise 1 38 min / 54 bpm	Exercise 1 38 min / 54 bpm	Exercise 4 4 min / 54 bpm					
Exercise 5 2 min / 54 bpm	Exercise 5 3 min / 54 bpm	Exercise 11 3 min / 54 bpm	Exercise 11 3 min / 54 bpm		Exercise 13 3 min / 54 bpm				Exercise 13 3 min / 54 bpm			Exercise 13 3 min / 54 bpm	Exercise 13 3 min / 54 bpm	Exercise 12 4 min / 66 bpm	Exercise 12 4 min / 66 bpm	Quick Feet 4 min / 90 bpm	
Exercise 6 2 min / 54 bpm	Exercise 11 4 min / 54 bpm	Shuffle step I 3 min / 40 bpm Guidesounds off	Exercise 12 3 min / 54 bpm		Exercise 4 16 min / 54 bpm				Exercise 4 16 min / 54 bpm			Tic-Tac 3 min / 100 bpm	Shuffle step II 3 min / 40 bpm	Exercise 12 4 min / 66 bpm	Tic-Tac 3 min / 100 bpm	Exercise 10 2 min / 54 bpm	Exercise 10 2 min / 54 bpm
Exercise 7 3 min / 54 bpm		Exercise 4 4 min / 54 bpm	Exercise 1 4 min / 54 bpm		Tic-Tac 3 min / 90 bpm				On Toes 3 min / 90 bpm			On Toes 3 min / 90 bpm	On Toes 3 min / 90 bpm	Double MD Wheel 3min / 78 bpm clockwise	Exercise 13 4 min / 66 bpm	Exercise 13 4 min / 66 bpm	Exercise 7 2 min / 54 bpm
Exercise 2 4 min / 54 bpm	Freestyle I 2 min / 54 bpm	Exercise 7 2 min / 54 bpm	Multi D Wheel 3 min / 66 bpm clockwise	Twist & Tap Left 2 min / 54 bpm	Twist & Tap Left 2 min / 54 bpm	On Toes 3 min / 90 bpm	Exercise 10 3 min / 54 bpm	Exercise 2 2 min / 54 bpm	On Toes 3 min / 100 bpm	Back & Forth I 3 min / 54 bpm	Post-test; Exercise 1-13, and soccer- exercise I and II						
Exercise 3 4 min / 54 bpm		Exercise 7 2 min / 54 bpm	On Toes 3 min / 80 bpm	Multi D Wheel 3 min / 66 bpm anti clockwise	Twist & Tap Right 2 min / 54 bpm	Twist & Tap Right 2 min / 54 bpm	Twist & Tap Left 2 min / 54 bpm	Double MD Wheel 3 min / 78 bpm anti clockwise	Back & Forth I 3 min / 54 bpm	Back & Forth I 3 min / 54 bpm							
Exercise 8 3 min / 54 bpm	Exercise 8 2 min / 54 bpm	Twist & Tap Left 2 min / 54 bpm	Shuffle step I 3 min / 46 bpm	Back & Forth I 3 min / 54 bpm	Back & Forth I 3 min / 54 bpm	On Toes 3 min / 90 bpm	Exercise 11 3 min / 54 bpm	Exercise 3 2 min / 54 bpm	Back & Forth II 3 min / 54 bpm	Twist & Tap Left 2 min / 54 bpm							
Exercise 9 3 min / 54 bpm	Exercise 9 2 min / 54 bpm	Twist & Tap Right 2 min / 54 bpm	Exercise 13 3 min / 54 bpm	Shuffle step I 2 min / 46 bpm	Shuffle step I 2 min / 46 bpm	Exercise 5 2 min / 54 bpm	Exercise 6 2 min / 54 bpm	Exercise 2 2 min / 54 bpm	Twist & Tap Right 2 min / 54 bpm	Twist & Tap Right 2 min / 54 bpm							

Exercise 1	Both hands	Clapping hands together in a circular fashion	Soccer exercise I	3 floor-mats. One in front and one on each side of participant: _ _ . L toe on L mat -> R toe on front mat -> R toe on front mat -> R toe on right mat -> L toe on L mat... ∞. 54 bpm
Exercise 2	Right hand	Clapping the hand towards the thigh	Soccer exercise II	Kicking a contact-sensing trigger placed under a beam 30 cm above the ground, hitting the trigger with the top of the foot. 54 bpm
Exercise 3	Left hand	Clapping the hand towards the thigh	Freestyle I	4 beats clapping hands (as in exercise 1) -> 4 beats both toes (as in exercise 4) -> 4 beats clapping hands -> 4 beats both toes... ∞
Exercise 4	Both toes	Tapping front floor-sensor, L/R toe alternately	Freestyle II	1 floor-mat in front of participant. 4 beats L toe -> 8 beats both toes -> 4 beats R toe -> 4 beats both toes... ∞
Exercise 5	Right toe	Tapping front floor-sensor with R toe	Quick Feet	3 floor-mats. One in front and one on each side of participant: _ _ . L toe L mat -> L toe front mat -> R toe front mat -> R toe right mat -> L toe on L mat... ∞
Exercise 6	Left toe	Tapping front floor-sensor with L toe	Twist & Tap (L/R)	3 floor-mats. One in front and one on each side of participant: _ _ . Balance on one foot. Tap the three floor mats with the toe of the other foot from L-R or R-L.
Exercise 7	Both heels	Tapping rear floor-sensor, L/R heel alternately	Multidirectional (MD) Wheel	4 floor-mats around the participants. Starts with R toe hitting the R side of the front mat -> R toe on R mat -> R heel on R side of rear mat -> L heel on L side of rear mat -> L toe on L mat -> L toe on the L side of the front-mat -> R toe hitting the R side of the front mat... ∞
Exercise 8	Right heel	Tapping rear floor-sensor with R heel	Double MD Wheel	Like the Multidirectional Wheel, but now the subject is tapping the same mat twice before moving on to the next one.
Exercise 9	Left heel	Tapping rear floor-sensor with L heel	Back & Forth I	3 floor-mats in front of participant: -> * _ _ * ->. Starting with weight on L* foot, stepping on R-L-R mat, then L foot on floor (* to initiate 3 steps (R-L-R) backward movemen... ∞
Exercise 10	R Hand / L Toe	Alternating R hand on thigh, and L toe on mat	Back & Forth II	As Back & Forth I, however starting with the opposite foot.
Exercise 11	L Hand / R Toe	Alternating L hand on thigh, and R toe on mat	Tic-Tac	Like Back and Forth, but with the addition of a wall-mounted hand sensor (+) starting the movement sequence: + * _ _ *
Exercise 12	Balance and tap R/L	Balance on R foot and tap L toe on mat	Shuffle Step	3 floor-mats in a circular lay-out, approx. 1 m apart, and a cone in the middle. The participant moves from one mat to the next utilizing shuffle-steps (sideways skipping)
Exercise 13	Balance and tap L/R	Balance on L foot and tap R toe on mat	On Toes	1 floor-mat in front of the participant. Utilizing a skipping-movement to alternate tapping with L/R toe.