

Workout plan

Workout intervention plan for the physical activity intervention in “Randomised controlled trial of vigorous aerobic group exercise versus leisure group activities for mild to moderate depression in adolescents”.

Training schedule

Mondays 15:30 – 16:35:	Strength focused training session
Wednesdays 15:30 – 16:35:	Aerobic focused training session
Thursdays 15:30 – 16:35:	Mixed training session

Reminders

Text messages (sms) are sent to all participants earlier the same day before group sessions. The messages can but need not be replied. The participants can text or call the group leader if they are hesitant to show up to the group session. The group leader will be available 15 minutes before session to make sure the group sessions start on time.

Check-in, 3-5 minutes

Check-in together where participants share how they are doing and some recent events.

Progression

The goal with every new week should be making every workout a little bit harder than the week before.

Strength sessions

- Week 1-6: 12-18 reps x 2 set per exercise and muscle
30 s rest between exercises
- Week 7-12: 10-12 reps x 3 set per exercise and muscle
20 s rest between exercises

Adding weight with gym equipment or changing body position in the exercises to succeed with the rep scheme and making it harder as the group develop their physical and mental ability.

Aerobic sessions

- Week 1-6: 75 seconds work time x 1 set per exercise
30 seconds of rest between exercises
- Week 7-12: 50 seconds work time x 2 set per exercise
20 seconds of rest between exercises

Mixed sessions

- Week 1-6: 35 s work time per exercise
25 s rest between exercises
x 2 rounds
- Week 7-12: 45 s work time per exercise
15 s rest between exercises
x 2 rounds

Strength session, 55 minutes**Warm-up:** 11-15 minutes

- 5 minutes - Half of the group in conditioning machines, working from 65 % up to 80 % heart rate.
- 5 minutes – The other half doing easy dynamic mobility, led by the trainer. Focusing on ankle, knee, hip and the muscles that surround these joints.

Then, they switch places.

Strength in 6 different exercises: 22-30 minutes- **Squat**

Starting with bodyweight and increasing weight with kettlebell, barbell or dumbbells as they get stronger.

- **Australian pull-up**

Adjust the feet in order to make the exercise easier/heavier.

- **Push-up**

Start on knees, with elevated hand position. Lowering the angle of the body and standing on feet as they get stronger.

- **Lunge (reverse)**

Alternating legs. Starting with bodyweight and increasing weight with kettlebell, barbell or dumbbells as they get stronger.

- **Calf raise**

Standing on a step board to get full range of motion. Starting with bodyweight and increasing weight with kettlebell or dumbbell as they get stronger.

- **Crunch including rotation**

Find the best version for the group. Suggesting crunch with upper body rotation to start with. Make it more challenging with adding legs in the motion.

Start at one exercise and work there for 60 seconds, rest 30 seconds and move on to the next exercise. Extra rest time between rounds.

- Week 1-6:
- 12-18 reps x 2 set per exercise and muscle
 - 60 second work time
 - 30 s rest between exercises
 - 60 s rest between rounds
 - 2 rounds of extra core training

- Week 7-12: - 10-12 reps x 3 set per exercise and muscle
 - 45 second work time
 - 20 s rest between exercises
 - 60 s rest between rounds
 - 3 rounds of extra core training
- Core training:** 5-7 minutes
- **Side plank** with dynamic raise 30 seconds/side
 Starting with one knee on the floor and progress up to their feet as they get stronger.
 - **Back extension** 45 seconds
 x 2-3 rounds with 30 second rest between rounds.

This part is done everybody at ones on their own mat.

Cool down: 5-10 minutes
 Easy mobility led by the trainer. Focus on getting the heart rate down successively and to get a nice finish of this session.

Aerobic session – 55 minutes

Warm-up:

Balance: 5 – 7 minutes

- Training balance standing on one leg. Progress as the group evolves with more challenging moves at the same time. Balance training in combination with getting the whole body warm.

Jumping: 7 - 10 minutes

- Working on jumping: forward, backward, side, diagonal, up, down, one legged etc. Starting with jumping on floor level and progress with more challenging jumps as the group gets better.
- Combining the jumping with mobility focusing on the hip joint as active recovery.

Pre intervals: 6 minutes

- Cossack squat 20 s
- Jumping Jacks 10 s
- Bear crawl different directions 20 s
- High knees 10 s
- Rest 30 s

1.5 minute rounds x 4

Interval aerobic training

12 stations: 18 – 26 minutes

- Rower (Concept 2 rower)
- Jump rope (Thick 400 g jump rope)
- Air bike (Xebex Air Bike)
- Rower (Concept 2 rower)
- Jump rope (Thick 400 g jump rope)
- Air bike (Xebex Air Bike)

- Step board side-jog (Standing over the board with the board between legs and jogging up and down)
- Half burpee walk over (Burpee without push-up and walking/jogging over a step board, facing the board and doing a new burpee)
- Running (Xebex Runner) /Treadmill /Shuttle run 10-15 m
- Bike (Concept 2 bike)
- Half burpee (Burpee without push-up)
- Shuttle run 10-15 m

Start at one exercise and work there for X seconds, rest X seconds and move on to the next exercise as a circuit. Extra rest time between rounds week 7-12.

Week 1-6:	75 s work time per exercise 80-85 % of maximum heart rate 30 s rest between exercises x 1 round
Week 7-12:	50 s work time per exercise 85-90 % of maximum heart rate 20 s rest between exercises x 2 rounds 90 s rest between rounds

Cool down: 5-10 minutes

Easy mobility led by the trainer. Focus on getting the heart rate down successively and to get a nice finish of this session.

Mixed session 55 minutes

Warm-up: 12 – 15 minutes

- Move through ankles, wrists, elbows, shoulders, knees, hips and the spine with some easy movement for 3-5 minutes.
 - 2 minutes - Half of the group in conditioning machines, working from 65 % up to 80 % heart rate.
 - 2 minutes – The other half of the group is led by the trainer, doing: Squats, jog on the spot, down-up dog, side plank, standing windmill for 20-30 s/exercise.

Then, they switch places. x 2 rounds (in total, 8 minutes of work)

Circuit interval training

12 different exercises: 26 minutes

- Walking lunges
- Push-up
- Russian twist
- Box step up/Box jump
- Plank walk out
- Sumo deadlift high pull with kettlebell

- Mountain climber
- Thruster with slamball
- Sideplank 5 s/side
- Burpee
- Step board jog
- Jumping pull-ups/Squat pullup

Start at one exercise and work there for X seconds, rest X seconds and move on to the next exercise as a circuit. Extra rest time between rounds.

Week 1-6:	35 s work time per exercise 25 s rest between exercises x 2 rounds 2 min rest between rounds
Week 7-12:	45 s work time per exercise 15 s rest between exercises x 2 rounds 90 s rest between rounds

Cool down: 5-10 minutes

Easy mobility led by the trainer. Focus on getting the heart rate down successively and to get a nice finish of this session.

Round off 2 minutes

A very short summary of today's session and coming exercises along with a refreshing drink e.g. smoothie.