The SEKWONDO (SEniors do taeKWONDO) Study.

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One year Taekwondo training one hour a week improves balance parameters in senior, healthy persons (and as sec. parameters:cardio-respiratory capacity, static and dynamic movement components, and some aspects of cognitive speed).

Ethische beoordeling Positief advies **Status** Werving gestopt

Type aandoening

Onderzoekstype Interventie onderzoek

Samenvatting

ID

NL-OMON22354

Bron

NTR

Verkorte titel

SEKWONDO Study

Aandoening

taekwondo, ageing, dynamic balance, movement coordination, fysical fitness veroudering, senioren, dynamische balans, coordinatie, taekwondo training, cardiale conditie

Ondersteuning

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Overige ondersteuning: Main Sponsor: Institute of Mental Health and Neuro-Sciences (MeHNS), University of Maastricht. Secondairy sponsors: ARBONed, the Netherlands, VTB-Flemish Taekwondo Association.

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Sample size estimation is based on the principle outcome parameter, which is the decrease in angle error on the Motor orientation ability test. Motor orientation ability ("coordination") will be measured by the ability to adjust the base of support from a tilted orientation back to a perfect horizontal orientation (the subjective proprioceptive horizontal or SPH).

Toelichting onderzoek

Achtergrond van het onderzoek

Rationale:

The quality of locomotion decreases with age, and especially its so-called dynamic components, which are conditional for normal walking ability. Programs aiming at improving locomotion quality mainly direct at the static components, whereas Taekwondo training aims to improve especially dynamic movement components.

Objective:

To investigate whether a one year Taekwondo training one hour a week improves balance parameters and dynamic locomotion aspects in senior, healthy persons. Cardio-respiratory function, motor reaction speed, and static movement components will also be measured.

Study design:

Intervention study, with each participant serving as his/her own control.

Study population:

24 healthy volunteers, aging 40-75.

Intervention:

One year Taekwondo training, at least one hour a week.

Main study parameters/endpoints:

Improvement in postural balance, motor orientation ability, dynamic balance, motor reaction time, and cardio-respiratory capacity.

Doel van het onderzoek

One year Taekwondo training one hour a week improves balance parameters in senior, healthy persons (and as sec. parameters:cardio-respiratory capacity, static and dynamic movement components, and some aspects of cognitive speed).

Onderzoeksopzet

Before the start of the one-year weekly training sessions (october 2009), and after this year, when at least 40 sessions have been attended.

Onderzoeksproduct en/of interventie

Training sessions:

Intensity of training exercises will be adjusted to age and physical condition of the volunteers. The programs will generally contain the following elements:

- 1. A warming-up with muscle strengthening and stretching exercises;
- 2. TWD techniques, such as stances, blockings, kicks and punches, which will be trained as basic exercises, with training cushions, or facing an opponent. However, regular WTF TWD sparring will not be practiced!;
- 3. POOMSE, or style figures, which are fixed patterns, illustrating a fight against one or more imaginary opponents. Within one year the two basic POOMSE's YL-Chang and Y-Chang will be practiced, and likely be mastered at one year;
- 4. A number of elementary self defense techniques based on TWD elements.

Complexity and intensity of Taekwondo exercise programs increase over time, while what is fitting and attainable considering the trainee's capability is closely observed.

Training facilities:

Trainings can be attended weekly on Wednesdays from 17.30-18.30 PM in the training facility of the Department of Physical therapy AZM (pending the decision of the RvB AZM, reservation of the room has been granted by the head of the Dept. of Physical Therapy, Mr. G. Roox).

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Healthy volunteers, aging 40-75 years of age, who will follow weekly at least one hour Taekwondo training session.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

All volunteers will have a routine neurological and cardiological investigation, including an exercise ECG. The neurologist and cardiologist should both agree that there are no contraindications to the proposed exercise program. They will report their conclusions in a short report on each individual volunteer. If found indicated, additional information with treating physicians will be sought. When any doubt about eligibility remains, the volunteer will be excluded. The reason for exclusion will be explained to the volunteer. If necessary, the volunteer will be advised to contact his/her general physician, to whom the relevant information will be conveyed, unless the volunteer would object. This applies also to any fortuitous medical finding that would result from the screening procedure.

Exclusion criteria:

1. Psychiatric affliction (under current psychiatric treatment);

- 2. Disease of nervous system or locomotion that are expected to interfere with training;
- 3. Use of oral anticoagulants;
- 4. Negative judgment of any treating physician, program neurologist or cardiologist, after respective investigations, including the exercise ECG test.

Onderzoeksopzet

Opzet

Type: Interventie onderzoek

Onderzoeksmodel: Parallel

Toewijzing: N.v.t. / één studie arm

Blindering: Open / niet geblindeerd

Controle: N.v.t. / onbekend

Deelname

Nederland

Status: Werving gestopt

(Verwachte) startdatum: 07-09-2009

Aantal proefpersonen: 24

Type: Werkelijke startdatum

Ethische beoordeling

Positief advies

Datum: 15-03-2010

Soort: Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 33200

Bron: ToetsingOnline

Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

RegisterIDNTR-newNL700NTR-oldNTR2243

CCMO NL28788.068.09

ISRCTN wordt niet meer aangevraagd.

OMON NL-OMON33200

Resultaten

Samenvatting resultaten

N/A