Using SMS and the Internet to promote physical activity among adults

Gepubliceerd: 09-04-2014 Laatst bijgewerkt: 18-08-2022

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Ethische beoordeling	Positief advies
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON23635

Bron
NTR

Aandoening

Physical activity

Ondersteuning

Primaire sponsor: Maastricht University
Overige ondersteuning: Maastricht University

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Physical activity, intention, planning, goal enactment and self-efficacy

Toelichting onderzoek

Achtergrond van het onderzoek

Background

Physical inactivity is considered a global major public health concern. Sedentary and inactive lifestyles have been related to lower quality of life, higher risk of various medical conditions, an overall higher risk of hospitalization and increased all-cause mortality.

According to the public health guidelines, adults are recommended to engage in moderate physical activity for 30 minutes preferably all days or at least five days a week. It is estimated that half of the Dutch population insufficiently engages in physical activity. Effective interventions are needed in order to encourage an active lifestyle.

Empirical studies indicate that Web-based computer tailoring is a promising health education technique that provides individualized information and feedback on health-related behaviour instead of general, non-tailored information.

Recent years have seen the convergence of mobile Health or mHealth which makes use of mobile telecommunication and multimedia technologies as health care delivery systems. The delivery of an intervention by a smartphone might have a powerful impact as it could be a cost-effective, convenient and wide-reaching way to increase physical activity. Mobile devices are personal, portable and ubiquitous and therefore an appealing intervention platform.

Research questions

1. Are mobile health programmes more effective than web-based programmes in increasing physical activity?

2. Are mobile programmes rated as more appealing and do they lead to higher prolonged use than web-based programmes?

Relevance of the study

Despite the rapid increase in smartphone usage rates and available applications, indeed promoting physical activity, it remains insufficient evidence for the effectiveness of such technologies. The present study has the potential to provide evidence in this area of innovation.

Recruitment

The study will be carried out in the Netherlands. Respondents will be recruited by Flycatcher (i.e. an online access panel).

Doel van het onderzoek

The central hypothesis is that the mobile programme is more effective than the web-based programme in increasing physical activity (PA).

i.e.

1. Both intervention groups will show an increased PA level.

2. Participants of the mobile programme will show a significantly higher PA level compared to participants of the web-based programme or control group.

3. No significant difference in PA is expected in the control group.

4. In addition, the mobile programme will be rated as more appealing than the web-based programme and correlates with higher adherence.

Onderzoeksopzet

Baseline measurement (T0) - 7 days time for consideration

First follow-up measurement (T1) - 7 days after T0

Second follow-up measurement (T2) - 7 dagen after T1

Third follow-up measurement (T3) - 7 days after T2

Fourth follow-up measurement (T4) - 180 days after T0

Onderzoeksproduct en/of interventie

The intervention programme is called "SmartMobiel".

SmartMobiel is a web-based computer-tailored programme that addresses specifically physical activity as healthy lifestyle behaviour. It is based on an eHealth programme (MoMo) developed by our research group in collaboration with the Freie Universität Berlin (Fleig, Schulz, Kremers, & de Vries, 2012).

The main aim of SmartMobiel is to stimulate participants to engage more in physical activity by influencing intention, ability factors (i.e. action plans, goal action), and self-efficacy. In the SmartMobiel programme, a progressive scheme of 4 steps will be applied.
The pre-test questionnaire serves as a baseline measurement. Next, there are 3 feedback moments: personalized messages according to the participant’s responses on the online questionnaires that will inform them about their performance, with an interval of 2 days. After the first follow-up measurement (day 7), respondents receive 3 feedback messages,

again every two days. On day 14, respondents undergo a second follow-up measurement. Followed by a post-test measurement (day 21), respondents receive 3 feedback messages within an interval of two days. The feedback messages are tailored to: physical activity, intention, planning, exercise change, sedentary behaviour, self-efficacy, satisfaction and physical activity change. It will be a test period of 21 days.

For developing the programme, the I-Change model (De Vries et al., 2003) was used as a theoretical framework.

In our randomized controlled trial, respondents will be randomized among three groups: the control group will receive the questionnaires; experimental group 1 will, in addition, receive tailored advice delivered via SMS, and experimental group 2 will receive tailored advice via the Internet.

Contactpersonen

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Active smartphone users

2. Internet access

3. Over the age of 18

4. Would like to engage more in physical activity

5. Sufficient understanding of the Dutch language

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Injuries (leading them to not be able/allowed to engage in moderate physical activity)

2. Being pregnant at the time of recruitment

3. Having a holiday scheduled for more than five working days during the intervention period

4. Participation in another intervention during the intervention period as well

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blindering:	Enkelblind
Controle:	Geneesmiddel

Deelname

Nederland

Status:	Werving gestart
(Verwachte) startdatum:	11-04-2014
Aantal proefpersonen:	423
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies

Datum:	09-04-2014
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL4363
NTR-old	NTR4503
Ander register	SmartMobiel : UM

Resultaten

Samenvatting resultaten
n/a