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A text messaging intervention increasing sports participation in university students

Submission date
29/01/2018

Recruitment status
No longer recruiting

Registration date
06/02/2018

Overall study status
Completed

Last Edited
29/03/2021

Condition category
Nutritional, Metabolic, Endocrine

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
Students within higher education can gain a number of benefits from participating in sport, such as grade improvements and stress reduction. Despite these benefits, participation in sport usually decreases when students begin university. Interventions are therefore needed to increase the performance of this behaviour. Interventions using health psychological theory are more likely to be successful compared to those not using theory. The aim of this study is to increase student participation in recreational sport through the delivery of a mobile health intervention targeting motivation and goal priority.

Who can participate?
Adults aged 18-24 years old who are understanding first-year study at the institution of interest and who own a mobile phone.

What does the study involve?
There are four conditions within the study: attitude only, goal priority only, attitude + goal priority, and active control group. Participants are randomly allocated to one of the four conditions and receive text messages related to their condition (i.e., messages targeting attitude, messages targeting goal priority, and messages targeting attitude and goal priority). Those who are allocated to the control group receive generalised information. Participants are followed up two and four weeks after the start of the study to see how many people are participating in sports.

What are the possible benefits and risks of participating?
The study has a number of benefits. First, participants may find that the intervention encourages the participation in a behaviour that perhaps they are not so familiar with. Next, the behaviour provides a number of health benefits. Finally, participants may gain information that they were previously unaware of relating to sports participation and the psychology underpinning the behaviour.

Where is the study run from?
Leeds Trinity University (UK)

When is the study starting and how long is it expected to run for?
December 2017-April 2018

Who is funding the study?
Leeds Trinity University (UK)

Who is the main contact?
Tom St Quinton
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Contact information

Type(s)
Public

Contact name
Mr Tom St Quinton

Contact details
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Additional identifiers

Protocol serial number
SSHS-2017-083

Study information

Scientific Title
A text messaging factorial design targeting motivation and goal priority to increase student participation in university recreational sport

Acronym
SPILTS

Study objectives
1. The motivational and implemental components will have main effects on self-reported behaviour at follow-up
2. Motivational x implemental interaction effect will result in the combined condition being more effective than each of the individual conditions alone.

Ethics approval required
Old ethics approval format

Ethics approval(s)

The School of Social and Health Sciences Ethics Committee, 25/01/2018, ref: SSHS-2017-083

Primary study design
Interventional

Study design
Factorial design interventional randmoised controlled trial

Study type(s)
Quality of life

Health condition(s) or problem(s) studied
Physical activity

Interventions
Text messages are sent using 'Fast SMS', a messaging service used by businesses to distribute bulk SMS text messages. The factorial design will result in four intervention conditions: attitude only, goal priority only, attitude & goal priority, and active control.

1. Attitude only: text messages targeting the attitude construct are sent three days per week for two weeks.
2. Goal priority only: text messages targeting goal priority are sent three days per week for two weeks.
3. Attitude + goal priority: attitude and goal priority messages are combined within one text message. These are sent three days per week for two weeks.
4. Active control group: the control group are contacted for the same duration and at the same time as the experimental conditions. The content of text messages are generalised information concerning the benefits of sports participation.

The days (i.e., Mon-Sun) and time of day (i.e., morning, afternoon, evening) varies for each message. However, each condition receives a message at the same time. Examples of the text messages to be distributed within each condition can be seen in Table B1. Participants also receive introductory messages and prompts to respond to questionnaires. Such text messages and the message within which they occur can be seen in Table B2.

Participant numbers
Using a power 0.8 for each main effect or interaction (all Numerator df = 1), at an alpha of 0.05, and an effect size of f=0.25, G*Power 3.1.9.2 estimates the required sample size to be 128. Taking into consideration an additional 50% for participant dropout) results in a final required sample size of 192 (48 participants per condition).

Randomisation
Participants are randomised to one of four groups using a computer-based random number generator (see Figure A2). Blocked randomisation are used to ensure an equal number of participants in each condition. Blocks of eight are used, with four participants randomised to one of the four conditions (1:1:1:1 allocation). Automated assignment ensure allocation concealment. Both the researchers and study participants are blinded to intervention conditions (i.e., the control group receives generalised information regarding sports participation).

Intervention Type
Device

Primary outcome(s)
Self-reported behaviour assessing the number of weeks of sports participation are measured using online questionnaires at baseline, T1 (two weeks after baseline) and T2 (four weeks after baseline)

Key secondary outcome(s)
Changes in psychological processes (attitude, intention, goal priority) are measured using online questionnaires at baseline, T1 (two weeks after baseline) and T2 (four weeks after baseline)

Completion date
01/06/2018

Eligibility

Key inclusion criteria
1. Aged 18-25 years
2. Undertaking first-year study at the university
3. Own a mobile phone
4. Have not taken any medication for a heart condition within the past year

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Upper age limit
25 Years

Sex
All

Total final enrolment
289

Key exclusion criteria
1. Are not aged 18-25 years
2. Are not undertaking first-year study at the university
3. Do not own a mobile phone
4. Have taken medication for a heart condition within the past year

Date of first enrolment
22/01/2018

Date of final enrolment
14/02/2018

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Leeds Trinity University
Brownberrie Lane
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LS18 5HD

Sponsor information

Organisation
Leeds Trinity University

ROR
https://ror.org/02x80b031

Funder(s)

Funder type
University/education

Funder Name
Leeds Trinity University

Alternative Name(s)

Funding Body Type
Private sector organisation

Funding Body Subtype
Universities (academic only)

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are/will be available upon request from Investigator: Tom St Quinton, email: t.stquinton@leedstrinity.ac.uk

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		01/01/2021	29/03/2021	Yes	No