ISRCTN14342225 https://doi.org/10.1186/ISRCTN14342225

PLUS (Personality and Living of University Students): A web-based intervention to reduce common mental health problems in university students

Submission date
30/04/2013

Recruitment status
No longer recruiting

Registration date
15/05/2013

Overall study status
Completed

Last Edited
14/01/2015

Condition category
Mental and Behavioural Disorders

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

Plain English summary of protocol

Background and study aims
This study investigates whether an internet website can help students reduce symptoms of common mental health problems, such as low mood, anxiety, drug and alcohol use and eating disorders. Although other websites of this kind already exist, they usually focus on symptoms of one disorder and are not targeted at students. In university students, however, symptoms of different mental health problems often go hand in hand. Our aim is to determine whether students will use this website and whether their low mood, anxiety and self-esteem problems decrease. In addition, we are interested in how much students like the website and to get feedback from them on how to improve it.

Who can participate?
All university students aged 18 or older and studying at a university in the UK were eligible to take part in this study.

What does the study involve?
Students visit the study website and after giving consent complete a set of baseline questionnaires. They receive automated feedback on these questionnaires and are randomised into the intervention or control group. Student in the intervention get access to a series of intervention modules, whereas the control group get access to general information relevant to students. These modules can be completed in any order and speed.
After 6 weeks and 12 weeks, students are asked to complete a series of questionnaires again. The questionnaires assess symptoms of mental health problems (low mood, anxiety, drug and alcohol use and eating disorders), self esteem and personality.

What are the possible benefits and risks of participating?
To compensate students for their time and as an incentive to participate in the study, participants are offered a £15 shopping voucher for completing all three assessments. Participation in this study is not associated with any risk for physical harm. It is possible that

some students find it difficult or upsetting to answer questions on their mental health. However, students do not have to answer all questions unless they want to and they can withdraw from the study at any time by leaving the website. In addition, students contact details of the primary investigator as well as telephone numbers for national helplines are provided on the website.

Where is the study run from?
The study was run from the Section of Eating Disorders, Institute of Psychiatry, Kings College London.

When is the study starting and how long is it expected to run for?
The study started in September 2011 and ran for 6 months. Each participants involvement in the study lasted approximately 12 weeks, beginning with registering on the website and ending with completion of the final set of questionnaire. Students registered at different times during this period.

Who is funding the study?
The study has been funded by the National Institute for Health Research (NIHR).

Who is the main contact?
Dr. Peter Musiat (peter.musiat@kcl.ac.uk)
Prof Ulrike Schmidt, Ulrike.schmidt@kcl.ac.uk (Supervisor)

Contact information

Type(s)
Scientific

Contact name
Dr Peter Musiat

Contact details
PO-Box 077
Institute Of Psychiatry
De Crespigny Park
London
United Kingdom
SE5 8AF

Additional identifiers

Study information

Scientific Title
Web-based trait-focused prevention of common mental disorders in university students

Acronym
PLUS

Study objectives

Main hypothesis:
Students at high risk for common mental disorders (depression, anxiety, substance misuse, eating disorders) receiving the intervention will show significantly reduced levels of depression, anxiety and increased self-esteem compared to students at low risk and students in the control group at post-intervention (12 weeks).

Subsidiary hypotheses:
Students will find the personalized feedback and intervention content helpful and acceptable.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approval provided by Kings College London Research Ethics Committee, Psychiatry, Nursing & Midwifery Research Ethics Subcommittee (REF PNM 10/11-101) on May 16 2011

Primary study design
Interventional

Study design
Multi centre randomised controlled trial

Study type(s)
Prevention

Health condition(s) or problem(s) studied
Depression, anxiety, substance use, eating disorders

Interventions
Students allocated to the intervention group were given access to 5 intervention modules on the PLUS website (Personality and Living of University Students). The modules are online self-help resources and focus on perfectionism, how to improve self-esteem, dealing with difficult emotions and anxiety and worry. Students could also download a text version of each module. Copies of the interventions modules can be obtained from the contact above.

Students in the control group were given access to 3 online modules with general information for students. These modules cover how to find accommodation as a student, money saving tips as well as general study tips, such as time management.

Intervention Type
Other

Phase
Not Applicable

Primary outcome(s)
Participant self-reported depression and anxiety assessed with the Patient Health Questionnaire (9 items) and the Generalised Anxiety Disorder Scale (7 items).
Questionnaires were administered at baseline, 6 weeks after randomisation and 12 weeks after randomisation.

Key secondary outcome(s)
1. Participant self-reported questionnaires assessing:
1.1. Self-esteem (Rosenberg Self-Esteem Scale, 10 items)
1.2. Perfectionism (Frost Multidimensional Perfectionism Scale, 36 items)
1.3. Personality (NEO-Five Factor inventory, 60 items)
1.4. Substance Use Risk Profile, 23 items)
1.5. Eating behaviour (Eating Disorder Diagnostics Scale, 22 items)
1.6. Drinking behaviour (Alcohol Use Disorder Identification Test, 10 items)
1.7. Quality of life (WHO quality of life questionnaire, 26 items)
2. In addition, students could indicate how much they liked the website, how helpful they found the modules and the personalised feedback, how they found the design and usability of the website, as well as whether they had criticism or positive remarks.
3. Attrition and feasibility was assessed by electronically logging which modules students had started and completed.

Completion date
31/03/2012

Eligibility

Key inclusion criteria
1. University student (male or female) aged 18 or older
2. Currently enrolled in a UK Higher Education Institution

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Sex
All

Key exclusion criteria
Does not meet inclusion criteria

Date of first enrolment
01/09/2011

Date of final enrolment
31/03/2012

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
PO-Box 077
London
United Kingdom
SE5 8AF

Sponsor information

Organisation
King's College London (UK)

ROR
https://ror.org/0220mzb33

Funder(s)

Funder type
Government

Funder Name
NIHR Biomedical Research Centre for Mental Health (UK)

Funder Name
South London and Maudsley NHS Foundation Trust (UK)

Funder Name
Institute of Psychiatry, Kings College London (UK)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	15/04/2014		Yes	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes