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Emotion Recognition Training and mood

Submission date
06/07/2012

Recruitment status
No longer recruiting

Registration date
12/09/2012

Overall study status
Completed

Last Edited
21/02/2020

Condition category
Mental and Behavioural Disorders

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

Plain English summary of protocol

Background and study aims
Faces play a key role in everyday life; recognising emotions on faces is important to social functioning. This is difficult in some psychiatric disorders – for example, people with depression are unable to identify happiness in faces. We have developed a new computer-based training programme which targets the recognition of facial expression of emotions by initially assessing the threshold for detecting one emotion over another in an ambiguous expression (e.g., a blend of happiness and sadness), and then providing feedback to shift this threshold (e.g., to favour identification of happiness over sadness), promoting the perception of positive emotion over negative emotion. This study aims to establish the effects of emotion recognition training on mood in people with high levels of depressive symptoms over a 6-week follow-up period.

Who can participate?
Adults aged between 18 and 40 with high levels of depressive symptoms.

What does the study involve?
The participants will be randomly allocated to either a treatment group, who will receive feedback designed to shift their recognition of ambiguous faces as displaying happiness rather than sadness, or to a control group, who will receive feedback not designed to shift their recognition. Depressive symptoms will be measured at the end of treatment and 2 and 6 weeks after training.

What are the potential benefits and risks of participation?
Participants would not directly benefit from taking part in this study. However, the information we get from this study may help us to understand the influence of emotion perception on low mood.

Where will the study be run from?
School of Experimental Psychology, University of Bristol (UK).

When is the study starting and how long will it be expected to run for?
The study is expected to run from August 2012 to December 2013.

Who is funding the study?
Medical Research Council (UK).

Who is the main contact?
Dr Sally Adams
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Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
UoB: 1701

Study information

Scientific Title
Effects of Emotion Recognition Training on mood among individuals with high levels of depressive symptoms

Acronym
ERT

Study objectives
We hypothesise that individuals randomised to receive an intervention designed to modify emotion perception designed to increase the perception of happiness over sadness in ambiguous expressions will show reduced depressive symptoms, reduced negative affect and increased positive effect, compared with individuals randomised to receive a placebo intervention.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Faculty of Science Human Ethics Research Committee, University of Bristol, 02/05/2012, ref: 211010468

Study design
Randomised controlled trial

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Mood disorders

Interventions
We have developed a new paradigm which targets the recognition of facial expression of emotions by initially assessing the threshold for detecting one emotion over another in an ambiguous expression (e.g., a blend of happiness and sadness), and then providing feedback to shift this threshold (e.g., to favour identification of happiness over sadness). Training consists of feedback to shift the participant's balance point, estimated by presenting exemplar faces from a 15-frame morphed face image continuum using a two-alternative forced choice procedure. In the training condition, the 'correct' classification shifted two morph steps towards 'happy'; the two images nearest the balance point that the participant would have previously classified as 'angry' at baseline were considered 'happy' in terms of providing feedback.

Feedback in the control condition was based directly on baseline performance.

Intervention Type
Other

Phase
Not Applicable

Primary outcome(s)
Current primary outcome measures as of 17/05/2013:
Depressive symptoms: Beck Depression Inventory-ii; BDI-ii (rated over the past two weeks)

Previous primary outcome measures until 17/05/2013:
Depressive symptoms: BDI-II (Mood rated over the past week)

Key secondary outcome(s))
Current secondary outcome measures as of 17/05/2013:
1. Depressive symptoms: Hamilton Rating Scale for Depression; HAM-D
2. Anxiety symptoms: Beck Anxiety Inventory; BAI (rated over the past month)
3. Positive affect: Positive and Negative Affect Schedule; PANAS (rated as 'how you feel right now')
4. Negative affect: Positive and Negative Affect Schedule; PANAS (rated as 'how you feel right now')
5. Emotion sensitivity: Emotion Recognition Task (test phase); ERT
6. Approach motivation and persistence: The Fishing Game
7. Depressive interpretation bias: The Scrambled Sentences Test; SST

Previous secondary outcome measures until 17/05/2013:
1. Depressive symptoms: Hamilton Rating Scale for Depression (HAM-D)
2. Anxiety symptoms: Beck Anxiety Inventory (BAI) (mood rated over the past week)
3. Positive affect: Positive and Negative Affect Schedule (PANAS) (mood rated over the past day)
4. Negative affect: Positive and Negative Affect Schedule (PANAS) (mood rated over the past day)
5. Emotion sensitivity: Emotion Recognition Task (ERT) (test phase)
6. Approach motivation and persistence: The Fishing Game
7. Depressive interpretation bias: The Scrambled Sentences Test (SST)

Completion date
01/03/2014

Eligibility

Key inclusion criteria
1. Aged between 18 and 40 years
2. Participants who score 14 or higher on the Beck Depression Inventory (BDI)-II
3. English as first language or equivalent level of fluency
4. Able to give informed consent as judged by lead researcher

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Sex
All

Total final enrolment
190

Key exclusion criteria
1. Primary anxiety disorder, psychosis, bipolar disorder or substance dependence [other than nicotine and caffeine] as defined by Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)
2. Current use of illicit drug (except cannabis)
3. Being at clinically significant risk for suicidal behaviour
4. Use of psychotropic medication in last 5 weeks prior to study
5. Major somatic or neurological disorders and concurrent medication which could alter emotional processing (including active treatment with counselling, psychotherapy and cognitive behavioural therapy). We will allow intermittent use of medication, judged by the principal

investigator.
6. Participants who in opinion of the lead researcher are not appropriate to participate

Date of first enrolment
25/07/2012

Date of final enrolment
01/03/2014

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
University of Bristol
Bristol
United Kingdom
BS8 1TU

Sponsor information

Organisation
University of Bristol (UK)

ROR
https://ror.org/0524sp257

Funder(s)

Funder type
Research council

Funder Name
Medical Research Council (MRC) (UK) ref: MR/J011819/1

Alternative Name(s)
Medical Research Council (United Kingdom), UK Medical Research Council, Medical Research Committee and Advisory Council, MRC

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

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	17/02/2020	21/01/2019	Yes	No
Results article	results	17/02/2020	21/02/2020	Yes	No
Protocol article	protocol	01/06/2013		Yes	No