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The effects of art therapy with various art media on emotion regulation strategies, stress, hormone levels and resilience for junior secondary school students

Submission date
14/02/2022

Recruitment status
No longer recruiting

Registration date
28/02/2022

Overall study status
Completed

Last Edited
28/02/2022

Condition category
Mental and Behavioural Disorders

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[ ] Record updated in last year

Plain English summary of protocol
Background and study aims
Serious emotional problems of adolescents have become a pressing issue in Hong Kong (HK). While causes of the problems are inconclusive, effective measures to combat stress and control teen suicide carry vital significance at the present. As the literature shows that art therapy has a positive impact on emotion, this study aims to specifically investigate the effect of art therapy with mixed media (ATMM) by comparing it with a control group, in improving psychophysiological stress responses, which includes changes in various signs of emotion, interaction between cognition and emotion, and physiological stress response by analyzing salivary cortisol.

Who can participate?
Hong Kong junior secondary students, aged 11-15 from band 1 - 2 were recruited for the study.

What does the study involve?
Students will be randomly allocated to receive either the ATMM group for eight 1.5-hour weekly sessions or to receive no additional treatment. The participants in the no treatment group will receive two half-day expressive arts workshops after the study has finished.

What are the possible benefits and risks of participating?
Participants will be able to receive 8 free art therapy sessions that will be instructed by registered art therapists. During the session, participants can learn different skills and techniques to create clay art pieces, freely express their own thoughts and emotions through art activities, which have possible effects of soothing emotions. Regardless of the group allocation results, both experimental group and waitlist control group participants (subsequently) will receive the free art therapy sessions. The procedure has no known risks.

Where is the study run from?
Hong Kong Baptist University (China)

When is the study starting and how long is it expected to run for?
August 2018 to March 2021

Who is funding the study?
Research Grants Council, University Grants Committee, Hong Kong (China)

Who is the main contact?
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Contact information

Type(s)
Public

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Additional identifiers

Study information

Scientific Title
A study on the effects of art therapy with mixed media on emotion regulation strategies, psychological stress, cortisol rhythm, and resilience for junior secondary students: A randomized controlled trial

Study objectives
The study aims to investigate and compare the effects of an art therapy program with mixed media and an active control group with conventional afterschool tutorial service on the following aspects:
1. Improving emotion regulation strategies;
2. Improving positive affective states;
3. Alleviating negative affective states;

4. Alleviating deficit of cognitive process in affect, exhibited in alexithymia,
5. Reducing psychological and physiological stress levels, and
6. Enhancing resilience.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 01/08/2018, Faculty Research Grant Category II (FRGII) of the HK Baptist University (Hong Kong Baptist University Road, Kowloon Tong, Hong Kong; +852 3411 6461; hkbu_rec@hkbu.edu.hk), ref: FRG2/17-18/028

Primary study design
Interventional

Study design
Randomized controlled interventional trial

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Depression

Interventions
Participants from the art therapy with mixed media (ATMM) group attended eight 1.5-hour weekly sessions of art development class, with approximately 10 students in each group that were led by an experienced art therapist. During the early phase of the session, various kinds of art media have been introduced and shown on how the art media can facilitate expressions of different facets of themselves. The participants will be provided with a safe platform to create thematic artworks in the following sessions with various kinds of art materials and freely express themselves via art.

The control (CON) group received afterschool tutorial groups for academic support and extracurricular activities for social support during the treatment period of the ATMM group. To comply with ethical principles, the CON group members were given two half-day expressive arts workshop as compensation after the completion of the study.

Intervention Type
Behavioural

Primary outcome(s)
Measured at T0 (baseline), T1 (after completion of the intervention), and T2 (8 weeks following the completion of the intervention):
1. Salivary cortisol measured using the “Salivette” kits (Starstedt, Ag & Co., Numbrecht, Germany)
2. Emotion regulation measured using the State Difficulties in Emotion Regulation Scale (S-DERS)
3. Emotion measured using the Positive and Negative Affect Schedule (PANAS)
4. The 25-item Connor-Davidson Resilience Scale (CD-RISC)
5. Emotional awareness measured using the Toronto Alexithymia Scale (TAS-20)

Key secondary outcome(s)

Experiences of the intervention measured using focus groups at completion of the intervention

Completion date
31/03/2021

Eligibility

Key inclusion criteria
1. Hong Kong junior secondary students, aged 11-15 from band 1 – 2 were recruited for the study.
2. S.2-3 students, aged between 11-15;
3. Ability to understand and communicate in Cantonese;
4. Medical conditions that are likely to limit group participation during the course of the 6-week program will be excluded; and
5. Willing to perform art making activities in group activities with minimal assistance.

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Child

Lower age limit
11 Years

Upper age limit
15 Years

Sex
All

Key exclusion criteria
Participants were excluded if they had been clinically diagnosed with depressive disorder, anxiety disorder, or any other psychiatric disorder that required medical treatment or professional intervention during the past 12 months, diagnosed with other medical conditions or receiving counselling treatment during the program. Both parents and the participants gave written informed consent prior to the screening procedures and joining the study.

Date of first enrolment
01/09/2019

Date of final enrolment
30/12/2020

Locations

Countries of recruitment

China

Hong Kong

Study participating centre
Hong Kong Baptist University
Room 1012A, 10/F
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Sponsor information

Organisation
Hong Kong Baptist University

ROR
https://ror.org/0145fw131

Funder(s)

Funder type
University/education

Funder Name
Research Grants Council, University Grants Committee

Alternative Name(s)
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Funding Body Type
Private sector organisation

Funding Body Subtype
Universities (academic only)

Location
Hong Kong

Results and Publications

Individual participant data (IPD) sharing plan
All data generated or analysed during this study will be included in the subsequent results publication. Acquired participant level raw data will only be included in results publications /conferences of this study and will not be accessible for the public. All participants will be indicated by a participant code, no identifiable personal information will be stored with the data or published. All datasets will be destroyed within 3 years after the publication of research results.

IPD sharing plan summary
Published as a supplement to the results publication