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Acceptance and commitment therapy program to improve psychological flexibility, empathy, and anger management in adolescents involved in crime

Submission date
19/10/2025

Recruitment status
No longer recruiting

Registration date
20/10/2025

Overall study status
Completed

Last Edited
20/10/2025

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
Young people who get involved in crime often find it hard to manage their emotions, understand others' feelings, and adapt to difficult situations. This study looked at whether a type of therapy called Acceptance and Commitment Therapy (ACT) could help improve these skills in teenagers who had been involved in the justice system.

Who can participate?
The study included teenagers aged 15 to 17 years who had previously been part of a legal investigation and chose to take part voluntarily.

What does the study involve?
Participants joined a group program with six weekly sessions, each lasting about two hours. These sessions were held in person and focused on helping the teens accept their thoughts and feelings, stay present, understand themselves better, identify what matters to them, and take positive action. Researchers collected information before the program started, right after it ended, and again one and three months later. A separate group of teens who didn't receive any therapy were also included for comparison.

What are the possible benefits and risks of participating?
Taking part could help teens better manage their emotions, become more empathetic, and handle challenges more flexibly. The risks were very low, with the main one being possible emotional discomfort during group discussions.

Where is the study run from?
The study was carried out at the Faculty of Health Sciences at Karamanoğlu Mehmetbey University in Karaman, Türkiye.

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

Who is funding the study?
Investigator initiated and funded

Who is the main contact?
Dr Mehtap Genç, mehtap_coplu@kmu.edu.tr

Contact information

Type(s)
Public, Scientific, Principal investigator

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Additional identifiers

Study information

Scientific Title
Effects of acceptance and commitment therapy-based intervention on psychological flexibility, empathy, and anger in adolescents involved in crime

Acronym
ACT-Youth Crime

Study objectives
Research question:
Is the Acceptance and Commitment Therapy (ACT)-based intervention effective in improving psychological flexibility, empathy, and anger among adolescents involved in crime?

Hypotheses:
H1: Adolescents who receive the ACT-based intervention will show higher levels of psychological flexibility compared to their pre-intervention scores and to those who did not receive the intervention.
H2: Adolescents who receive the ACT-based intervention will show higher levels of empathy

compared to their pre-intervention scores and to those who did not receive the intervention.
H3: Adolescents who receive the ACT-based intervention will show lower levels of anger compared to their pre-intervention scores and to those who did not receive the intervention.

Ethics approval required
Ethics approval required

Ethics approval(s)
Approved 30/04/2020, Istanbul University-Cerrahpaşa Social and Human Sciences Research Ethics Committee (Istanbul University - Cerrahpaşa Rectorate, 34320 Avcılar/Istanbul, İstanbul, 34320, Türkiye; +90 212 473 7000; sbbaetik@iuc.edu.tr), ref: 74555795-050.01.04 / 2020-04

Primary study design
Interventional

Study design
Single-centre quasi-experimental interventional study

Study type(s)
Quality of life, Treatment

Health condition(s) or problem(s) studied
Psychological inflexibility, low empathy, and anger management problems in adolescents involved in crime.

Interventions
The intervention was an Acceptance and Commitment Therapy (ACT)-based group program designed to enhance psychological flexibility, empathy, and anger regulation in adolescents involved in crime. The program consisted of six weekly face-to-face sessions lasting approximately 120 minutes each and focused on the six core ACT processes (acceptance, cognitive defusion, contacting the present moment, self as context, values, and committed action). Participants in the control group did not receive any psychological intervention during the study period. Assessments were conducted at four time points: pretest (Week 1, immediately before the first session’s therapeutic content), posttest (Week 6, immediately after the last session’s therapeutic content), 1-month, and 3-month follow-up.

Intervention Type
Behavioural

Primary outcome(s)
Psychological flexibility was measured using the Acceptance and Action Questionnaire-II (AAQ-II), Turkish version adapted by Yavuz et al. (2016), at four time points: pretest (Week 1, immediately before the first session’s therapeutic content), posttest (Week 6, immediately after the last session’s therapeutic content), 1-month follow-up, and 3-month follow-up.

Key secondary outcome(s)
1. Empathy was measured using the Child and Adolescent KA-SI Empathic Tendency Scale – Adolescent Form (Kaya & Siyez, 2010) at four time points: pretest (Week 1, immediately before the first session’s therapeutic content), posttest (Week 6, immediately after the last session’s therapeutic content), 1-month follow-up, and 3-month follow-up.
2. Anger and anger expression were measured using the Trait Anger – Anger Expression

Inventory (TA-AEI), Turkish version adapted by Özer (1994) from Spielberger's State–Trait Anger Scale, at four time points: pretest (Week 1, immediately before the first session's therapeutic content), posttest (Week 6, immediately after the last session's therapeutic content), 1-month follow-up, and 3-month follow-up.

Completion date
07/12/2021

Eligibility

Key inclusion criteria
1. Aged between 15 and 17 years.
2. Having previously been involved in a forensic investigation (e.g., having testified in law enforcement or prosecutor's office, being criminally prosecuted or convicted).
3. Not diagnosed with any psychiatric disorder.
4. No speech, hearing, or intellectual impairment that would interfere with communication or participation.
5. Not having received any Acceptance and Commitment Therapy (ACT)-based intervention previously or currently.
6. Having participated in all six intervention sessions.

Participant type(s)
Learner/student, Service user

Healthy volunteers allowed
No

Age group
Child

Lower age limit
15 Years

Upper age limit
17 Years

Sex
Male

Total final enrolment
24

Key exclusion criteria
1. Being outside the 15–17 age range.
2. Having no history of involvement in a criminal investigation (e.g., no police or prosecutor testimony, prosecution, or conviction).
3. Having a diagnosed psychiatric disorder or currently receiving psychiatric treatment.
4. Having cognitive, speech, hearing, or intellectual impairments that would prevent participation in the sessions or completion of data collection tools.
5. Having previously received any Acceptance and Commitment Therapy (ACT)-based

intervention.
6. Insufficient Turkish literacy to complete questionnaires or understand intervention content.
7. Failure to provide written informed consent from the participant and/or legal guardian.
8. Inability to attend all six sessions or scheduled assessments (e.g., due to relocation, detention, or chronic absenteeism).

Date of first enrolment
03/08/2021

Date of final enrolment
07/12/2021

Locations

Countries of recruitment
Türkiye

Study participating centre
Karamanoğlu Mehmetbey University, Faculty of Health Sciences
Yunus Emre Campus
Karaman
Türkiye
70100

Sponsor information

Organisation
Istanbul University-Cerrahpaşa

ROR
https://ror.org/01dzn5f42

Funder(s)

Funder type
Other

Funder Name
Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan
The individual participant data (IPD) collected during the study will not be made publicly available due to ethical and privacy considerations involving adolescent participants. De-identified summary data may be shared upon reasonable request from the corresponding author (mehtap_coplu@kmu.edu.tr).

IPD sharing plan summary
Not expected to be made available