

Metadata

Title

Effectiveness and public health impact of walk-in Youth mEntal heAlth support centres: a hybrid (cost-)effectiveness-implementation study in 7 European countries and Australia (YEAH)

Description

Mental disorders predominantly emerge in adolescence and early adulthood, causing a significant burden of disease that has worsened due to increased vulnerability and heightened care needs, especially with the COVID-19-pandemic. Yet young people face major barriers to timely, appropriate care. Integrated Youth Mental Health Services (IYMHS), inspired by Australia's headspace model, offer integrated holistic support across mental, physical, and vocational domains to reduce these barriers. Inspired by headspace, several Youth MEntal HeAlth support centres (YEAH) have been tailored to fit distinct cultural settings, healthcare funding structures, and workforce environments and introduced across several European countries. This prospective, multi-country, multi-site quasi-experimental study with a non-equivalent control group pretest–posttest design of help-seeking people aged 12-25 years with clinically relevant distress evaluates the clinical effectiveness of IYMHS/YEAH in reducing psychological distress as the primary outcome as well as the impact on further secondary outcomes, e.g., subjective quality of life and well-being, as well as user satisfaction across seven European countries and Australia. The study is funded by the European Union in the scope of the EU Horizon project YOUTHreach (Grant number: 101156514) to the YOUTHreach Consortium. Views and opinions expressed are those of the author(s) only and do not necessarily reflect those of the European Union or European Health and Digital Executive Agency. Neither the European Union nor the granting authority can be held responsible for them. The present study details YEAH as part of the YOUTHreach project. The overarching aim of the multi-country, multi-site quasi-experimental study with a non-equivalent control group pretest–posttest design is to assess the effectiveness and the public health impact of YEAHs in seven European countries (Estonia, Germany, Ireland, Italy, Netherlands, Spain, and United Kingdom) and Australia. The primary objective will be to examine clinical effectiveness of YEAHs on reducing psychological distress, assessed by the CORE10, compared with Care-As-Usual, at 6-month (t2) follow-up. Secondary objectives of the study will be to examine the clinical effectiveness including psychological distress at 3-month (t1) and 12-month (t3), as well as quality of life and well-being, and user satisfaction at 3-month (t1), 6-month (t2), and 12-month (t3) follow-up using standardised and validated outcome measures. To determine the Public Health Impact of YEAHs, an evaluation according to the RE-AIM framework will focus on a range of outcomes relating to Reach, Effectiveness, Adoption, Implementation, and Maintenance of the YEAH intervention, covering service user experience, implementation success, and health outcomes (including service user safety). Furthermore, we will investigate the cost-effectiveness of walk-in centers in a health economic evaluation from a societal and health system and payer perspective alongside the study. Please see the preregistration of the economic analyses in YOUTHreach for more details. The current statistical analysis plan covers the primary and secondary objective of the study on clinical effectiveness.

Contributors

[Jule Leickert,](#)

[Jan R. Boehnke,](#)

[Sophie Leijdesdorff,](#)

[Anita Schick,](#)

Andreas Bechdorf,

[Covadonga M. Díaz-Caneja,](#)

[Ulrich Reininghaus,](#)

[YOUTHreach consortium](#)

License

Subjects

Social and Behavioral Sciences Medicine and Health Sciences

Tags

mental health

Overview

Research questions or hypotheses

To meet the primary and secondary objectives of the study on effectiveness of the YEAHs (as set out in the current statistical analysis plan), we will test the following hypotheses:

1. Primary hypothesis:

It is hypothesized that, compared with the control condition (care as usual (CAU)), psychological distress, assessed with the CORE10, will, on average, be lower in the experimental condition (YEAH+CAU) at 6-month follow-up (t2) (primary outcome) in help-seeking people aged 12-25 years with clinically relevant distress at baseline, controlling for design covariates and after propensity score matching.

2. Secondary hypotheses:

It is hypothesized that, compared with the control condition (CAU) the experimental condition (YEAH+CAU) will, after controlling for design covariates and propensity score matching, demonstrate, on average, a) higher subjective quality of life and well-being assessed with the MyLifeTracker as well as user satisfaction assessed with adapted items of the Youth Mental Health Services Satisfaction Scale at 3-month (t1), 6-month (t2), and 12-month (t3) follow-up, b) lower psychological distress at 3-month (t1) and 12-month (t3) follow-up in young help-seeking people aged 12-25 years with clinically relevant distress at study baseline.

Foreknowledge of data or evidence

Data exists but the authors cannot observe it yet. At least some of the data that will be used for this analysis plan exists but is inaccessible to the authors and will remain so until after this plan is registered.

Explanation of foreknowledge and managing unintended influences

The clinical study was registered on the ISRCTN Clinical Study Registry prior to collecting any outcome data on 09/12/2025. The registration number is ISRCTN13725260. Recruitment started on 9 February 2026 with the first enrolment on 12 February 2026.

Research Design

Study type

Non-randomized study: Does not include random assignment of subjects to treatments or conditions. This usually includes correlational studies, observational studies, surveys, natural experiments, real-world evidence studies, regression discontinuity designs, and descriptive studies.

Intention for causal interpretation

Direct inference on causal relationship(s): This study is intended to infer or estimate a causal relationship between two or more variables. It is designed specifically for the purposes of causal inference or identification.

Blinding of experimental treatments

No blinding is involved.

Additional blinding during research or analysis

No additional blinding is involved in this study.

Study design

The clinical effectiveness of YEAH will be tested at the operational sites in a prospective, multi-country, quasi-experimental study with non-equivalent groups. Participants of the YEAH trial will form part of one of two conditions: (a) the experimental condition, in which participants receive YEAH and care as usual (YEAH+CAU), or (b) the control condition (CAU). Self-reported and YEAH related (e.g., number and type of visits) outcome data in youth will be collected at four time points: at baseline (t0), and at 3-months (t1), 6-months (t2), 12-months (t3) follow-up. The control group will be recruited from the catchment area of the respective YEAH. Assessments of the intervention group as well as control group at each site will not be blinded. As the primary outcome and most of the secondary outcomes are assessed using self-report measures, risk of bias is considered to be minimal.

No files selected

Randomization

Random assignment of help-seeking young people with mental problems to a control group, in other words rejecting care could have serious detrimental effects on young people (as a particularly vulnerable group) and their social contexts. Also, implementing a randomization procedure for a low-threshold walk-in centre is unlikely going to be feasible, since it would undermine the principle of easy, unbureaucratic access, and would be hard to maintain given the target group's unstable circumstances and high fluctuation. Therefore, participants are not randomly assigned, and the study is based on naturalistic conditions. However, we monitor the distribution of gender (female vs. male vs. diverse), psychological distress (CORE-10 score: medium 11-19 vs. high >19) and age categories (12-16 vs. 17-18 vs. 19-20 vs. 21-25 years) across both groups to ensure comparability. Furthermore, we emulate randomisation by conducting propensity scoring (see Analysis Plan). Additionally, to ensure efficient recruitment of the control group, data from control conditions of two other independent randomized controlled trials (RCTs) from the YOUTHreach Consortium will be used. Both of these RCTs also evaluate interventions in a similar population regarding age and psychological distress: 1) SELFIE, a transdiagnostic, blended ecological momentary intervention for improving self-esteem in young people exposed to childhood adversity (see <https://doi.org/10.1186/ISRCTN61299413>), and 2) MOST, a hybrid intervention involving technology (i.e., online platform) in combination with both professional and peer support (see <https://doi.org/10.1186/ISRCTN11049965>).

Sampling

Data collection procedures

Participants are eligible for study inclusion if they fulfill the following criteria: - Aged 12-25 years, - Experimental condition only: First presentation to YEAH, earlier or consecutive counselling or mental health service use is allowed, Presence of clinically meaningful psychological distress operationalized as a score of >10 on the CORE-10 (Barkham et al., 2013; O'Reilly et al., 2016), - Willingness to participate, - Ability to give informed consent as determined by mental health professionals, with signed informed consent obtained, - Parental consent for minors. Participants will be excluded if at least one of the following criteria is applicable: - Insufficient command of the local study languages to provide valid answers to self-report questionnaires (Estonian, German, Italian, English, Spanish or Dutch) or - They present with acute suicidality or acute threat to others. Self-reported clinical data will be directly collected in a centralised eCRF at the clinical facilities, or participants can fill in the questionnaires wherever they feel comfortable using their tablets, mobile phones or computers. The digitised questionnaires and the eCRF will be linked with a GDPR compliant secure database hosted at the sponsor's institution. Participants in the experimental condition will be recruited consecutively by project staff and staff at YEAHs with educational and professional backgrounds in (mental) health sciences from among young people who are approaching the YEAH for the first time. In the control condition, young people will be recruited via (1) digital outreach, including targeted online advertisements and social media invitation to young people living in these areas, (2) school psychologist, student and education counselling services within these catchment areas, (3) local mental health services from geographically defined catchment areas around each of the participating sites in Tartu (Estonia), Berlin (Germany), Milan (Italy), Birmingham (UK), Galway (Ireland), Amsterdam and SAP YOUTHreach YEAH

Maastricht (both the Netherlands) and Melbourne (Australia), In , and (4) population registers available from local councils and/or statistics offices for inviting young people living in our catchment areas to ensure that we exceed our minimum sample size to test our primary outcome of effectiveness. Incentives and increasing participant engagement: Participants will receive compensation in some countries for their participation, if local authorities have given approval. Type (e.g., gift vouchers) and value depend on the study location. Mitigation measures will include extending recruitment to our partners of IYMHS, population registers, online advertisements, and social media of academic and clinical partners in neighbouring regions, where the consortium have previously successfully recruited for similar clinical studies. Also, the Youth Advisory Group (YAG) may be consulted to implement additional participant engagement activities. In case a site is recruiting less than expected, Chief Investigators together with WP leads and TSC can decide to initiate contingency strategies. These contingency strategies may include comparative recruitment (i.e., that sites can recruit more than their target number to balance out the slow recruitment rate at another site).

Data collection procedures - File upload

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Sample size

A total sample size of $n=1,220$ (rounded) young people ($n=610$ in YEAH and $n=610$ in CAU) is required at baseline (t_0). $N=610$ and $n=274$ participants for the YEAH intervention and control group, respectively, will be recruited. For resource efficient recruitment, $n=336$ participants for the control group will be obtained from other clinical studies conducted by the YOUTHreach consortium (see Randomisation).

Sample size rationale

The sample size calculation yielded a required sample size of $n=779$ for testing our primary hypothesis in a linear regression model with a target effect size of $d=0.20$ and a power of 80% (assuming a 2-sided significance level of $\alpha=0.05$), while controlling for 5 covariates (i.e., baseline CORE-10 scores, use of mental health service before study participation, age, gender, study site). Further, the sample size is corrected upward to control for potential inefficiency in this regression model when weighing for the propensity score to adjust for potential differences between the two groups due to a lack of overlap in propensity score distributions ($n=844$) (Austin, 2021). Finally, we assume a 30% loss to follow-up rate at 6-month follow-up (t_2) based on loss to follow up rates of two naturalistic cohorts in young people at clinical high risk for psychosis (CHR-p) (Ruhrmann et al., 2010; Stowkowy et al., 2018) and meta-analytic findings of attrition rates of interventions in the CHR-p population (Farris et al., 2020). After allocation across sites and rounding, this results in the target sample size of $n=1,220$.

Starting and stopping rules

Participant recruitment will be discontinued once the target sample size has been reached.

Variables

Manipulated variables

Control condition (CAU):

Participants in the control condition will be provided with CAU (i.e., continue to receive and have access to all public mental health services they received prior to the start of the study). CAU will include all public mental health care delivered according to local and national service guidelines and protocols by general practitioners (primary care doctors), psychiatrists, clinical psychologists, school psychologists, social workers, psychological counsellors, and other public mental health practitioners available in the catchment areas of YEAH. The comparator for the current trial is purposefully selected to reflect CAU, broadly defined, to mirror the naturalistic service landscape and practice to which beneficial effects ought to generalise.

Experimental condition (YEAH + CAU):

YEAHs are easy-access (i.e., soft-entry, stigma-free, and free of charge) walk-in youth mental health support service systems. These services have been set up in co-creation with young people. Most YEAH offer brief therapeutic interventions, peer-to-peer support, family engagement, and access to social work or supported education and supported employment. These youth mental health initiatives have a common mission aiming at reaching young people as early as possible to increase resilience and promote mental well-being, and consequently the chance of a healthy development. The naturalistic intervention is delivered by multidisciplinary teams, including clinical specialists (e.g., psychiatrists, psychologists, mental health nurses) and/or other clinical/non-clinical staff (e.g., counsellors, peer support workers, social workers, nurses, general practitioners, alcohol and drug workers and vocational workers).

Condition

Individuals are recruited for either the experimental condition (YEAH+ CAU) or the control condition. The YEAH intervention will involve appointments in walk-in centers. Condition will be treated as a 2-level factor with the following labels:

0 – CAU

1 – YEAH + CAU

No files selected

Measured variables

Psychological distress: Psychological distress is used as the primary outcome measure in the test of the primary hypothesis at t2 and will be measured with CORE-10, one of the most relevant and widely used measures of mental health in young people (Barkham et al., 2010; O'Reilly et al., 2016). It is a 10-item self-report measure with very good internal consistency, reliability, and predictive validity. The 10 items were derived from the longer CORE-OM (Clinical Outcomes in Routine Evaluation – Outcome Measure) and cover key domains of psychological well-being, including anxiety, depression, trauma, and functioning. Each item is scored on a 5-point Likert scale (0 = not at all, 4 = most or all of the time). Higher scores indicate greater levels of distress. A score of 11 or higher is typically considered indicative of clinically significant distress yielding in the following categories: mild psychological distress (11-14), moderate psychological distress (15-19), moderate to severe psychological distress (20-24), and severe psychological distress (25-40). The CORE-10 shows good internal reliability ($\alpha =$

.90). The CORE-10 correlates strongly with the CORE-OM, both in a clinical sample (.94) as in a non-clinical sample (.92).

The following secondary outcomes will be assessed at t0, t1, t2, and t3 among others: -

Psychological distress:

Psychological distress is measured with the CORE-10 (Barkham et al. (2013)) at t1 and t3 (see above)

Quality of life and wellbeing:

Quality of life and wellbeing will be assessed with the total score of the MyLifeTracker (MLT), which is a short population specific instrument to evaluate quality of life (Kwan et al., 2018). MLT has been specifically designed with and for youth and validated among youth aged between 12 and 25 years. The instrument is focused on five domains relevant for youth: relationships with friends, relationships with family, day-to-day activities, general wellbeing, and general coping. Participants are asked to give a score, from 0 to 100, to each domain of their life in the previous three months. It has been shown to be a reliable (coefficient test-retest reliability of 0.78), valid and appropriate tool for this group, and sensitive to change over time in a large sample of Australian youth. Validity is tested by comparing outcomes with the outcomes of multiple mental health outcomes measures for psychological distress (correlation coefficient -0.68), life satisfaction (0.74), well-being (0.64) and social and occupational functioning (0.21). The MLT total score has been used to evaluate quality-of-life improvements in young people accessing mental health services at Australia's headspace centres, demonstrating significant positive effects.

- User satisfaction:

User satisfaction will be measured using the adapted item form the established instrument of the Youth Mental Health Services Satisfaction Scale (YSSS) (Rickwood et al., 2017). The YSSS is a fourteen-item scale which rates statements on a five-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The development of the YSSS was informed by 213 headspace service users aged 12-25 years. Cronbach's alpha for the scale showed very good internal consistency ($\alpha = .890$). The psychometric properties of the YSSS were also examined in mental health services in Ireland. Those findings suggest that the YSSS is a reliable measure for monitoring satisfaction with youth mental health services in an Irish context (Doyle et al., 2021, 2024). The user satisfaction will be assessed using the item: "I was generally satisfied with [name of the YEAH]."

Furthermore, socio-demographic characteristics of participants (at t0) are assessed for sample descriptions:

- age
- gender (male, female, diverse)
- sex at birth (male, female)
- current employment (study/school, work, nothing)
- subject of study, if applicable
- profession, if applicable
- finished level of education (no finished education, primary education, (lower/upper) secondary education, A-levels, secondary vocational - education, university of applied sciences, university)

- school drop-out
- total school years, if dropped out
- highest educational level of parents/guardians (see above)
- current living situation (with parents, with caregivers/foster parents, with peers, alone, with partner, homeless, temporarily living with friends/family, in an institution/clinic/shelter/assisted living facility, other)
- current source of income (salary/wage, social benefits, family/friends/partner support, student loan/grants, other)
- country of birth
- Migration by parents and/or grandparents (yes, no)
- Migration from non-EU or EU-country/UK - Migrant/ethnic group status (white/majority group in respective country, other ethnic group) - Use of mental health services before study participation (yes, no)
- Type of mental health service, if applicable (inpatient services, outpatient services) - Parents with mental health issues (yes vs. no)

Anxiety:

Anxiety symptoms, measured with the General Anxiety Disorder-7, which is a widely used, brief screening tool for generalized anxiety disorder (Spitzer et al., 2006).

-Overall functioning: Functioning is assessed with the WSAS-Y, an adapted version of the Work and Social Adjustment Scale (WSAS) for adults, which is a brief global measure of functional impairment (Jassi et al., 2020).

-Alcohol consumption: Alcohol consumption is measured with the AUDIT, which is a 10-item questionnaire developed by the WHO to assess alcohol consumption, drinking behaviors, and alcohol-related problems (WHO, 2001).

-Substance use: Substance use is measured with the DUDIT, which is an 11-item self-report screening tool developed to identify patterns of drug use and potential drug-related problems (Berman et al., 2003).

-Co-created outcome: The Co-created outcome measure, which was co-developed with the YAG and assesses overall Quality of Life across seven subthemes: Happiness and wellbeing, Social relationships and connectedness, Sense of purpose, Mood, Sleep, Motivation, and Goals and hope.

-Healthcare resource use, measured with the co-developed and country-specific Resource Use Measurement, which captures resource use related to primary, community, emergency and secondary health care services, as well as mental health specific services in schools and workplaces (e.g., Use of services in education, Use of informal care, Number of different types of medication, Healthcare resource use outside the hospital).

Measured variables - File upload

No files selected

Indices

See section on measured variables.

Indices - File upload

No files selected

Analysis Plan

Statistical models

Descriptive statistics will be used to summarize baseline characteristics, and differences between the intervention and control groups at baseline will be described using d-type effect sizes for continuous variables and Cramer's V for categorical variables.

Primary outcome analysis:

It is hypothesized that, compared with the control condition (care as usual (CAU)), psychological distress, assessed with the CORE10 at 6-month follow-up (t2) (primary outcome), will, on average, be lower in the experimental condition (YEAH+CAU), in help-seeking youth aged 12-25 years with clinically relevant distress at baseline. The analysis will control for design covariates and use propensity score matching (see both below). The analysis will include all randomised participants irrespective of intercurrent events (treatment policy approach, intention to treat). For the analyses data of all included participants from the YEAH study (see Data collection procedures for inclusion criteria) (n=610 intervention group, n=274 control group) will be combined with the data from n=336 participants randomised to the control groups of the MOST and SELFIE studies. All analyses will be conducted using R, using lavaan (Rosseel 2012) for the effectiveness analyses. The primary outcome is the difference in mean severity of psychological distress (as measured by the total score of the CORE-10, higher scores indicating higher levels of distress) between participants in YEAH+CAU compared with CAU, at 6-months (t2) follow-up.

For the primary outcome analysis a linear regression model will be estimated (using Full Information Maximum Likelihood) with the target coefficient of the variable coding the intervention (YEAH+CAU vs. CAU), while controlling for five design covariates (i.e., baseline CORE-10 scores, use of mental health services (MHS) before study participation, age, gender, study sites).

$$CORE10_{t1} = b_0 + b_1 CORE10_{t0} + b_2 Intervention + b_3 MHS + b_4 age + b_5 gender1 + b_6 gender2 + b_{(7-(7+m-1))} Site_{(7-(7+m-1))} + \varepsilon$$

The intervention (YEAH+CAU) will be interpreted as having a statistically significant effect if the associated z-test (b2) is significant at a significance level of $\alpha < .05$ and the coefficient indicates lower levels of psychological distress in the experimental condition (YEAH+CAU).

Otherwise, the intervention will be interpreted as having no effect in this evaluation ($\alpha \geq .05$) or as having a statistically significant effect opposite to the hypothesized direction if the estimated coefficient indicates higher levels of psychological distress in the experimental condition and the associated z-test is significant at $\alpha < .05$. This is the only test that provides evidence for a difference between the two interventions, as the study's sample size and testing strategy were prospectively planned for this test. All other tests provide supporting evidence and/or information for future research.

To evaluate the potential effect of YEAH+CAU compared to CAU on the secondary outcomes (psychological distress measured with the CORE-10 (at t1 and t3); quality of life and wellbeing measured with MyLifeTracker; user satisfaction using adapted items from the Jigsaw satisfaction survey), we will use separate (multilevel) linear regression models with the secondary outcomes at 3-months (t1), 6-months (t2), and 12-months (t3) follow-up as dependent variables and respective outcomes at baseline and the other four control variables (use of mental health services before study participation, age, gender, study sites), as well as time as a categorical variable.

$$\text{Secondary}_{ij} = \beta_0 + \beta_1 \text{Secondary}_{i0} + \beta_2 \text{Condition} + \beta_3 \text{MHS} + \beta_4 \text{age} + \beta_5 \text{gender1} + \beta_6 \text{gender2} + \beta_7 \text{time.t2} + \beta_8 \text{time.t3} + \beta_{(9-(9+m-1))} \text{Site}_{(9-(9+m-1))} + u_{0j} + \varepsilon_{ij}$$

A random effect for participants will be included and residuals within subjects will be allowed to be correlated with an unstructured variance-covariance matrix. The model will be fitted using REML and using nlme (Pinheiro & Bates, 2000) and the analysis of contrasts and marginal effects via emmeans (Lenth & Piaskowsky, 2026). The models for the primary and secondary analysis will be adjusted using a propensity score (via inverse probability weighting). With this we aim to adjust for differences in distributions of baseline variables between the intervention and control group to reduce the potential effects of confounding. The YOUTHreach consortium ran a Delphi exercise to identify those variables that were most likely seen as potential causal influences on the choice of services. Across sites and with stakeholders the following were identified as the ones that achieved largest consensus: Age, Migration status (no vs. yes, if non-EU in 1st, 2nd and/or 3rd generation), Gender (female vs. male vs. diverse), Education level, Living situation, Parents with mental health issues (yes vs. no) Distress indicator (grouping psychological distress + anxiety + alcohol consumption + drug use + MLT+ co-created outcome measure + WSAS → principal component analyses) Healthcare resource use (Use of services in education, Use of informal care, Number of different types of medication, Healthcare resource use outside the hospital) The propensity score will be developed independent of the outcome data: In a first tranche of data, only baseline data will be made available to develop the propensity score. Only once the development of it is finished and it can be logged as a linkable variable, the outcome data (t1 and later) will be shared for analysis of the primary and secondary outcomes. The aim of the use of the propensity score is to estimate the average treatment effect (ATE) and will be implemented via augmented inverse probability weighting (e.g., Zhang et al., 2026).

Statistical models - File upload

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Transformations

Please see section on statistical models. If there are fewer than 10 participants in one of the three gender categories, this smallest category will be merged with the second smallest one.

Inference criteria

Please see section on statistical models.

Data inclusion and exclusion

After study completion, Data of participants will be excluded if their survey completion time was less than 5 minutes. This threshold was chosen based on the estimated minimum reading time required to complete the survey. For further details on data exclusion, please see section on missing data below.

Missing data

Missing subscale scores will be computed based on the manual/ guidelines of the measures (incl. handling of missingness in the score calculation). In all cases where the manuals do not offer guidance, we will calculate subscale scores for participants that filled out a minimum of 70% of all items on these subscales via individual mean imputation for that particular scale. In all other cases, the data will be treated as missing. We will investigate the amount of missing data per variable and timepoint as well as descriptive differences between participants with and without data for all variables that are part of primary or secondary data analyses. This will include statistical approaches as well as visual review (e.g., pattern plots), and consider differences across trial arms and sites. The main analysis of the primary outcome is conducted based on the observed data, using full information maximum likelihood estimation. This has the advantage that, assuming the data are missing at random (MAR) given included predictors and completeness of baseline data, the analysis accounts for drop-out and missingness. Nevertheless, although three central variables are included as predictors (condition, sites, and baseline level of the outcome), there are only few variables included which may not sufficiently reflect missing at random processes or miss out variables with high predictive power for missingness. If more than 10% of the primary outcome data at t2 are missing, we will therefore conduct a sensitivity analysis using “fully conditional specification” (van Buuren, 2018; using the R package mice, van Buuren & Groothuis-Oudshoorn, 2011). The imputation will proceed by trial arm, and include in addition to the control variables in the outcome analysis all non-ESM variables at baseline (for baseline and t2 imputation) and at t2 (for t2 imputation). We will impute 20 datasets and analyse these jointly in lavaan using the primary outcome model. Based on this set of imputed datasets we will also conduct a sensitivity analysis for not missing at random data (MNAR) using the delta method for a tipping point analysis (e.g., Little, 2025). Here, we will add a constant to the imputed missing values in the intervention group (see previous paragraph) to evaluate if a specific effect of the treatment group among those who have been treated would change the conclusion about treatment effectiveness. While the concrete final result may suggest other scenarios as more plausible, the current plans are to evaluate constants ranging from the equivalents of $d=-0.30$ to $d=0.30$, i.e. from slightly larger negative effects than the assumed absolute effect size when planning the trial (see Sample Size calculation) to slightly larger positive effects than originally assumed among those who are not observed at follow-up. This allows to evaluate the degree to which conclusions about the effect of YEAH hold under different assumptions about the effect of the treatment for participants whose scores are not observed at follow-up.

Other planned analysis

No data

Other

Context and additional information

For an overview of all studies involved in the YOUTHreach project, please see our webpage: <https://youth-reach.eu/>

YOUTHreach consortium collaborator list:

Thérèse van Amelsvoort Sophie Leijdesdorff Ricky Janssen Ghislaine van Mastrigt Silvia Evers Dorothee Horstkötter Raquel Lopez Garcia Ayshe Yaylali Casper Crombach Rianne Pellemans-van Rooijen Flore Joskin Zjulier Rutten Anouk Boonstra David McDaid A-La Park Giovanni de Girolamo Miriam D'Addazio Laura Iozzino Armando D'Agostino Angelo Bertani Federick Trisolini Anna-Kaisa Oidermaa Mari-Liis Kaldoja Kristel Habicht-Spriit Mariann Märtsin Matthew R. Broome Camilla Carr Carla Searle Sian Lowri Griffiths Rebekah Amos Balachandran Kumarendran Milan Antonovic Sophia Kaur Badhan Karim Lekadir Esmeralda Ruiz Pujadas Carlos Martin Isla Cristian Izquierdo Maria Bulgheroni Elena Novelli Gary Donohoe Maeve Dwan O'Reilly Tom Freeney Jeff Moore Jim Lyng Ulrich Reininghaus Anita Schick Anna Kessler Leonie Burghoff Frederike Schirmbeck Jan R. Boehnke Arne Popma Sascha Struijs Fenna Hellegers Marilon van Doorn Esmee Otten Claudi Bockting Covadonga M. Díaz-Caneja Celso Arango Raquel Rodríguez Laura Roldán Andreas Bechdorf Jule Leickert Florina-Marieta Neagu Mónica Romão Patrick McGorry Mario Alvarez Jimenez Shaminka Mangelsdorf Shane Cross Nina Moss Mille Sophie Regner Nielsen

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