

Statistical Analysis Plan
Pilot Randomized Controlled Trial
Improving Adolescent mental health by reducing the Impact of poVErty (ALIVE)
20 May 2025

This Statistical Analysis Plan (SAP) follows Guidelines for the Content of Statistical Analysis Plans in Clinical Trials (Gamble et al, 2017).

Administrative information

1. Title and trial registration

Combining self-regulation and poverty reduction to prevent depression and anxiety amongst adolescents experiencing multi-dimensional poverty in Colombia, Nepal and South Africa: Study protocol of a pilot 4-arm cluster Randomized Controlled Trial.
ISRCTN 14601588. Retrospectively registered. Date: 19 May 2024.

2. SAP version

First version, 01.02.2025

3. Protocol version

Version 1.0 This study received ethics approval on 18 March 2024 from the King's College London's Health Faculty Research Ethics Subcommittee (reference HR/DP-23/24-40543). Ethics approval was subsequently obtained by each of the data collection sites' Institutional Review Boards: The Faculty of Health Sciences' Human Research Ethics Committee at the University of Cape Town (South Africa) (reference number HREC315/2022), Innovations for Poverty Action's Institutional Review Board (Colombia) (reference number 4062), and the Ethical Review Board of the Nepal Health Research Council (Nepal) (reference number 1938, protocol reg. no. 167_2024).

4. SAP revisions

None

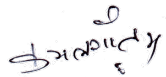
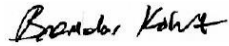
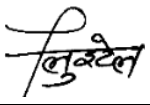
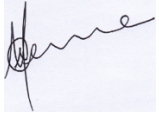
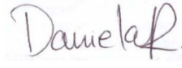
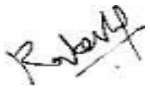
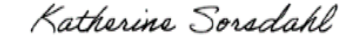
5. Roles and responsibilities

Mark Jordans*; co-Principal Investigator
Crick Lund*, co-Principal Investigator
Emily Garman, Lead Statistician
Manuel Seifert Bonifaz, Programme Coordinator
Mauricio Avendano, co-Investigator
Annette Bauer, co-Investigator
Juan Jose Castellanos Piedrahita, co-Investigator
María Cecilia Dedios, co-Investigator
Georgia Eleftheriou, co-Investigator
Sara Evans-Lacko, co-Investigator
Sandra García Jaramillo, co-Investigator
Juan Felipe García, co-Investigator
Kamal Gautam, co-Investigator
Martin Gevonden, co-Investigator
Roxanne Jacobs, co-Investigator
Brandon Kohrt, co-Investigator
Lydia Krabbendam, co-Investigator
Nagendra Luitel, co-Investigator
Nicci van der Merwe, co-Investigator
Daniela Rojas, co-Investigator

Sanchari Roy, co-Investigator
 Rakesh Singh, co-Investigator
 Mohammadamin Sinichi, co-Investigator
 Katherine Sorsdahl, co-Investigator
 Wietse Tol, co-Investigator
 Daniela Trujillo, co-Investigator
 Santiago Vargas, co-Investigator
 Paula Yarrow, co-Investigator

6. Signatures

Name	Date	Signature
Mark Jordans	20 May 2025	
Crick Lund	20 May 2025	
Emily Garman	23 May 2025	
Manuel Seifert	21 May 2025	
Mauricio Avendano	21 May 2025	
Annette Bauer	21 May 2025	
Juan Jose Castellanos	20 May 2025	
María Cecilia Dedios	10 June 2025	
Georgia Eleftheriou	20 May 2025	
Sara Evans-Lacko	20 May 2025	
Sandra García	20 May 2025	
Juan Felipe García	28 May 2025	

Kamal Gautam	22 May 2025	
Martin Gevonden	22 May 2025	
Roxanne Jacobs	21 May 2025	
Brandon Kohrt	11 June 2025	
Lydia Krabbendam	22 May 2025	
Nagendra Luitel	21 May 2025	
Nicci van der Merwe	27 May 2025	
Daniela Rojas	28 May 2025	
Sanchari Roy	27 May 2025	
Rakesh Singh	21 May 2025	
Mohammadamin Sinichi	26 May 2025	
Katherine Sorsdahl	21 May 2025	
Wietse Tol	20 May 2025	
Daniela Trujillo	28 May 2025	
Santiago Vargas	9 June 2025	
Paula Yarrow	21 May 2025	

Introduction

7. Background and rationale

Poverty is associated with depression and anxiety among adolescents, but evidence of interventions that prevent adolescent depression and anxiety among adolescents living in

poverty is weak. Interventions either focus on reducing poverty or addressing depression and anxiety, but an approach that combines both may offer larger benefit. This multi-site parallel pilot cluster Randomised Controlled Trial (cRCT) evaluates the feasibility and acceptability of intervention and research procedures before engaging in a fully powered cRCT of a selective prevention intervention for depression and anxiety that intervenes on both poverty and self-regulation among adolescents living in urban poverty in Bogotá (Colombia), Kathmandu (Nepal) and Cape Town (South Africa).

8. Objectives

The aim of this study is to evaluate the feasibility and acceptability of an intervention that combines an economic intervention with a self-regulation intervention among adolescents living in urban poverty, and to test the feasibility and acceptability of the trial procedures. Sensitivity to change on the adolescent and caregiver study outcomes will also be assessed.

Study Methods

9. Trial design

We will conduct a pilot parallel 4-arm cluster Randomized Controlled Trial (cRCT). The pilot cRCT will include the following four arms: (i) self-regulation intervention, (ii) economic intervention, (iii) combined (self-regulation + economic) intervention, and (iv) control group. A cluster design was selected because of the potential contamination of implementation strategies among adolescents within the same school. The assessment of the acceptability and feasibility criteria is the primary outcome of the study. Semi-structured qualitative interviews will also be conducted with key informants to assess perspectives on the study procedures, as well as intervention content and delivery. Note, the qualitative analyses plan is included in Annex 2.

10. Randomization

A simple random sampling approach was employed by the lead statistician (EG) to randomly allocate eight schools to the four arms in each site, on a 1:1:1:1 ratio. The randomization sequence was computer-generated using a pseudo-random number generator on Stata version 14 and completed before baseline assessments.

11. Sample size

We aimed to recruit a sample of 240 adolescents (13-15 years) and one of their caregivers, living in poor urban communities and areas (Colombia and South Africa) and households (Nepal) in each country, with an equal sample size in each of the four trial arms (n=60). We followed recommendations for sample size requirements to estimate key design parameters for pilot trials, which suggest at least 60 participants per group when estimating the Experimental Event Rate (Teare et al, 2014). Thus, we aimed to recruit 30 adolescents and their caregivers per school in each site, for a total of 60 adolescents and their primary caregiver per arm. In line with standard practice for pilot RCTs, this study is not powered to evaluate effectiveness (Leon et al, 2011), but instead aims to test trial and intervention procedures. Results can help inform some of the parameters for sample size calculations for the fully powered cRCT.

12. Framework

We will conduct analyses:

1. To evaluate *a priori* defined criteria (criteria #1-8 under section 26 below) for progression to a fully powered trial. These criteria will be scored using a 'red' (study cannot progress 'as-is' but will require major adaptations to content or procedure), 'amber' (progression can happen, but small adaptations should be considered to improve content of procedure) and 'green' scoring (progression can happen without any adaptations). The criteria are listed in Table 3, and pertain to the feasibility of randomisation, data collection, masking and retention, as well as fidelity and adherence to ALIVE interventions, (severe) adverse events and safety of the cash transfers.

2. To evaluate the sensitivity to change (criteria #9 under section 26 below) on all participants outcome data through within-group comparisons (i.e. per arm) between T0-T1, T0-T2 and T0-T3. The primary comparison of interest for the adolescent in a future fully powered trial is the difference in cumulative incidence rate of depression and anxiety over 18 months post-baseline, defined as the proportion of adolescents in each group scoring above the depression and/or anxiety cut-off at any follow-up point. We will also conduct a set of additional and exploratory analyses, as stated in the protocol (see below for details).
3. Cost analysis (criteria #10 under section 26 below) aim is to get an initial understanding of potential cost offsets from the ALIVE interventions (if any), thus gaining some insights into the economic value of the interventions.

13. Statistical interim analyses and stopping guidance

Although the primary time point for analysis will be 18-months post-baseline assessments, interim analyses will be conducted following the 12 months post-baseline assessments, and unblinded results made available to the PIs. This will allow to make a preliminary case for progression to full trial to the Funder of the current study, and for the research team and program to stay intact.

The Data Safety Management Board has the mandate to recommend stopping the study if it is determined that the risks of the study outweigh the benefits.

14. Timing of final analysis

For final analysis, all data will be analysed after the final data collection, i.e., after 18 months post baseline.

15. Timing of outcome assessment

Adolescents and caregivers will be assessed on four occasions: baseline (T0), post-intervention (T1), 12 months post-baseline (T2), and 18 months post-baseline (T3). Cost analysis will only be based on data collected at T1, T2 and T3.

Statistical Principles

16. Level of statistical significance

A significance level of $\alpha = 0.05$ will be applied for within-group differences over time [T0-T1, T0-T2, T0-T3].

17. Adjustments for multiplicity

We will adjust for multiple testing, using the Bonferroni or other correction strategies, e.g., apply a significance level of $\alpha = 0.013$ given 4 comparisons.

18. Confidence intervals

We will apply 95% CIs for all analyses.

19. Adherence and protocol deviations

Adherence is one of the progression to full trial criteria. It will be monitored using TeamPact, a mobile app that can be used offline, which helps facilitators collect information on attendance and length of sessions. Adherence to the intervention is defined as adolescents and caregivers attending $\geq 75\%$ of sessions. All protocol deviations have been listed.

20. Analysis populations

All outcome analyses will use an intention-to-treat (ITT) approach, dealing with missing values at any timepoint with multiple imputation. Subsequently, we will also run per protocol (PP) analyses on all the outcomes, including only adolescents and caregivers with data at all

timepoints for each of the comparison analyses (T0-T1, T0-T2, T0-T3). For the caregiver-reported Client Service Receipt Inventory this will be T1-T2, T2-T3 and T1-T3. We will descriptively report the loss to follow-up rates per arm.

21. Clustering

For sensitivity to change and exploratory analyses, a common method of standard error correction, such as wild cluster bootstrapping will be used to account for within-group dependence, given the small number of clusters (schools) (Cameron, Gelbach & Miller, 2008).

Trial population

22. Screening data

Adolescents meeting eligibility criteria and selected for a cross-sectional study before the baseline assessment (phase 1), were screened again using the Patient Health Questionnaire – Adolescent version (PHQ-A) (for depression) and Generalized Anxiety Disorder (GAD-7) (for anxiety). Participants who screened negative for depression and anxiety were then enrolled in the study; those who screened positive on either of the scales were excluded. When it was not possible to conduct repeat assessments due to time constraints (in South Africa only), adolescents who screened negative on the PHQ-A and GAD-7 during Phase 1 were considered eligible, without a repeat screening assessment before enrolment. We will compare demographic characteristics of those recruited vs those not recruited.

23. Eligibility

For adolescents: (1) Living in poverty-affected areas; in Colombia and South Africa this was defined by the geographical catchment area of the selected schools. In Nepal, children attending public schools come from diverse backgrounds; thus, a short poverty screening instrument was used during Phase 1 (see below under 'Recruitment'); (2) Aged between 13 and 15 years at the time of Phase 1 recruitment; (3) Fluent in the predominant local language (Spanish in Colombia, Nepali in Nepal, and English in South Africa); (4) Screening below validated, country-specific, cut-offs for depression and anxiety on the PHQ-A and GAD-7 instruments; (5) Whose primary caregiver is enrolled in the pilot study (in Colombia and South Africa).

For caregivers: The inclusion criteria for caregivers, defined as the legal guardian living with the adolescent, (assessed during phase 1) include: (1) Being fluent in the local language (Spanish in Colombia, Nepali in Nepal, and English, Afrikaans or isiXhosa in South Africa); (2) Aged 18 years or more; with their consent to participate in the study; (3) Their child (biological or foster) is enrolled in the study.

24. Recruitment

The recruitment of adolescents within clusters (schools) took place in two phases. In phase 1, approximately n=500 adolescents and their caregivers per country site were enrolled from the eight schools in each country, after selecting classes (per grade) representing the study age range of 13-15 years; this was performed as part of a cross-sectional study that aimed to identify associations among mental health, self-regulation and economic indicators and to examine psychometric properties of instruments. The second phase involved randomly selecting 30 participants per school who were not at-risk of depression (< 14, <15, <16 on PHQ-A in Colombia, Nepal and South Africa, respectively) or anxiety (<12 on GAD-7 for Colombia and South Africa, and <10 for Nepal) among those who were enrolled in the first phase cross-sectional survey. Again, the randomised selection of participants was completed by the statistician using a computer-based pseudo-random number generator.

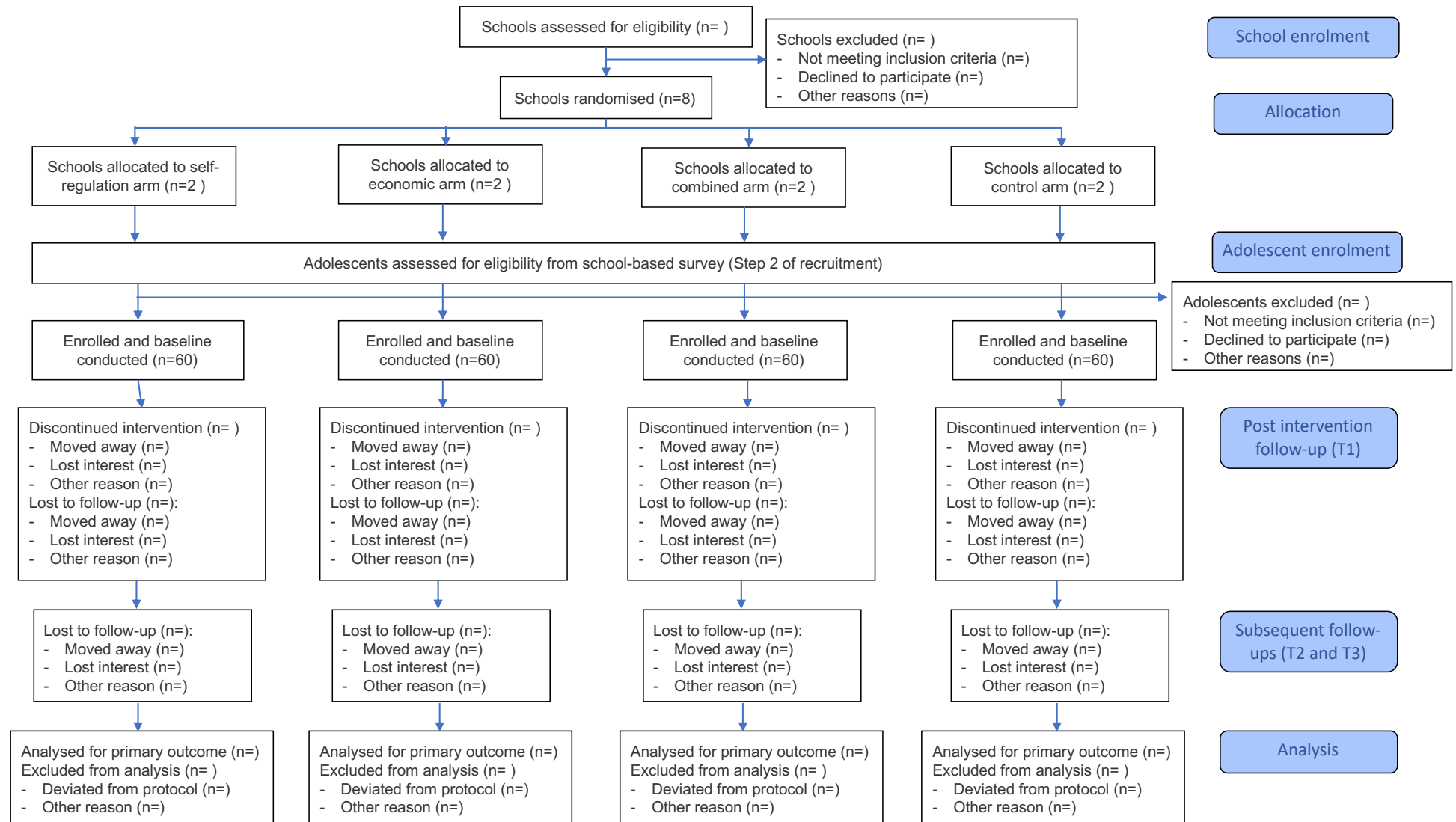
25. Withdrawal / follow-up

Participants are free to withdraw from the intervention and/or study at any time without consequence. Details regarding loss to follow up during the intervention and after every assessment will be provided in the CONSORT flow chart (Figure 1) and reasons for loss of participants will be specified in the final report.

26. Baseline participants characteristics

Adolescent and caregivers' baseline characteristics will be presented in Table format. See Tables 1 and 2 below as an example.

Figure 1: CONSORT flowchart for each site



Analysis

27. Outcome definitions

Assessment of intervention and study procedures

The primary objective of the pilot (assessing feasibility and acceptability of the intervention and trial procedures) will be addressed by assessing the following 10 criteria: (1) fidelity across intervention arms (using self-developed instruments designed to assess the implementation of the ALIVE intervention (all three arms) to intervention protocols); (2) adherence to intervention (using the TeamPact mobile app); (3) presence of adverse events (reported across intervention arms compared to control arm); (4) safety relating to cash transfers; (5) adequacy of randomization (baseline differences in demographic variables across arms); (6) adequacy of masking; (7) feasibility of data collection (missing values on outcome instruments); (8) feasibility of retention (loss to follow-up across timepoints); (9) sensitivity to change on adolescent and caregiver outcomes ; (10) cost and cost consequences of the interventions. Only criteria #1-8 will be used for progression to full trial.

Though not formulated as a progression to full trial criterion, trainers/supervisors will also assess facilitators' competencies, using the WHO-UNICEF Ensuring Quality in Psychosocial and Mental Health Care Platform (EQUIP), using 8 items of the Working with Children Assessment of Competencies Tool (WeACT) and the 15-item Enhancing Assessment of Common Therapeutic factors (ENACT) tool. Similarly, we will analyse the feasibility of recruitment (% who agree to participate, contamination across schools, % considered poor on local MPI), and acceptability of study procedure and intervention (based on qualitative interviews).

Outcome instruments for adolescents

The Measurement of Mental Health among Adolescents and Young People at the Population level Tool (MMAPP) will be used to generate equivalency scores for the Patient Health Questionnaire (PHQ-9) Adolescent version (PHQ-A); and Generalised Anxiety Disorder Scale (GAD-7). For a future fully powered trial, the primary outcome is a binary categorical outcome based on scoring above the locally validated cut-off on either scale at any of the follow-up time points (i.e., cumulative incidence). Co-primary outcomes also include continuous scores on the equivalency PHQ-9 and GAD-7. Secondary outcomes include the Disruptive Behaviour International Scale; the Identifying Depression Early in Adolescence Risk Score; the Difficulties in Emotion Regulation Scale – Short form; the Children's Hope Scale; the Child and Youth Resilience Measure - Revised (in Nepal only); and the Rugged Resilience Measure (in Nepal only); and additional questions covering: demographics, school enrolment/education, school readiness, aspirations and beliefs, life satisfaction, child labour and financial education, negotiation skills, risk preferences. The adolescent assessment will also include heart rate variability (HRV), which is the variation between beat-to-beat intervals. Three neuropsychological tasks will also be administered: the Balloon Analogue Risk Task – Youth version (BART-Y), the Emotional Go No-Go Task (in Colombia and South Africa) and the Delay Discounting Task.

Outcome instruments for caregivers

The caregiver assessment includes the positive parenting, parental involvement and corporal punishment subscales of the Alabama Parenting Questionnaire, the PHQ-9, political efficacy, and additional questions covering household members, migration background, contextual stressors, adverse life events, welfare benefits, income, debt, household expenditure, aspirations and beliefs for index child/self, country-adapted Multi-Dimensional Poverty Index, food insecurity, and social security (e.g., pensions, health insurance).

Outcome instrument for exploratory economic evaluation

The Client Service Receipt Inventory (CSRI) will be used for the exploratory economic evaluation. The CSRI is a research instrument to collect information on service utilisation, income, accommodation and other cost-related variables. Its primary purpose is to allow resource use patterns to be described and support costs to be estimated using an appropriate unit cost.

28. Analysis methods

We follow multiple steps for our analyses.

Step 1: analyses of progression to full trial (criteria #1-8) – See Table 3

Step 2: sensitivity to change analyses (criteria #9)

- Step 2.1 We will first report summary statistics for continuous outcomes (mean and standard deviation) and for categorical outcomes (proportions and inter-quartile range) per country sample. We will conduct assumptions checks and provide descriptive statistics given:
 - Check distribution of primary and secondary outcomes
 - Normality tests of continuous variables
 - Intra-cluster correlation coefficients were estimated using 1-way random effects analysis of variance
 - Mean, SD, median, IQR (inter-quartile range) for outcomes
 - Table with descriptive statistics per intervention group and per time point, in the format of table 1.
- Step 2.2 The following comparative analyses will be conducted for each country sample:
 - For the primary outcome (cumulative incidence of depression) of a future fully powered trial, we will run descriptive comparisons between all arms, for each of the time points while not testing for statistical differences. We hypothesize that the cumulative incidence rate will be higher in the control arm when compared to each of the intervention arms.
 - For secondary outcomes we will explore the difference in change in each outcome within each trial arm from baseline to each follow-up, using linear mixed effects regression models (i.e. assessment of sensitivity to change).
 - These models will account for clustering. All models will cluster standard errors at the school level and will control for variables included in the random selection of schools (district (Colombia), school size (Nepal) and language (South Africa – as one school was Afrikaans speaking compared to the other schools isiXhosa speaking)).
 - For each outcome, we will present the model-predicted means and corresponding 95% confidence intervals for each trial arm and timepoint.
 - No formal between-group statistical testing will be conducted as this pilot cRCT is not designed to detect effects – and in line with guidance for pilot RCTs (Leon et al, 2011).
 - See Table 4 for example presenting all comparisons for adolescent and caregiver outcomes.
- Step 2.3 The same models as step 2.2 will be estimated to estimate the effect of the treatment on the treated (those who adhered to the intervention, defined as having attended >70% of the 20 intervention sessions). The same format as Table 4 will be used to summarize these findings.

Table 1. Unadjusted comparisons of adolescent demographics at baseline between each intervention arm and control arm

	Total (N=)	Control (N=)	Self-regulation (N=)		Economic (N=)		Combined (N=)	
	N (%)	N (%)	N (%)	<i>β</i> or <i>OR</i> (95% <i>CI</i>)	N (%)	<i>β</i> or <i>OR</i> (95% <i>CI</i>)	N (%)	<i>β</i> or <i>OR</i> (95% <i>CI</i>)
Sex								
Male								
Female								
Age (Mean, SD)								
VAR 3								
VAR 4								
VAR 5								

Table 2. Unadjusted comparisons of caregiver demographics at baseline between each intervention arm and control arm

	Total (N=)	Control (N=)	Self-regulation (N=)		Economic (N=)		Combined (N=)	
	N (%)	N (%)	N (%)	<i>β</i> or <i>OR</i> (95% <i>CI</i>)	N (%)	<i>β</i> or <i>OR</i> (95% <i>CI</i>)	N (%)	<i>β</i> or <i>OR</i> (95% <i>CI</i>)
Sex								
Male								
Female								
Age (Mean, SD)								
VAR 3								
VAR 4								
VAR 5								

Table 3. Indicators and analysis to assess progression to full trial

Criteria item	Indicator/measure	Source of data [Variable name] (where appropriate)	Alternative traffic light system		
			Red	Amber	Green
Feasibility of the study procedures					
Feasibility of randomisation	Differences in socio-demographic characteristics of adolescents between arms and between individuals from two schools within each arm (education, economic status, age, gender)	Self-report data (demographic information from adolescent baseline assessment)	Significant difference on >3 variables	Significant difference on 1-3 variables	No significant difference
Feasibility of masking research assistants	Fieldworkers indicate which study arm they think participants belong to	Self-report data (at the end of each assessment), across all timepoints and arms [correct_allocation]	>50% guess correct arm	35-50% guess correct arm	<35% guess correct arm
Feasibility of data collection	Proportion of missing items on the GAD-7 and PHQ-A items across all assessments and arms	Self-report data, across all timepoint and arms [mmapp_propmiss]	>20% missing	10-20% missing	<10% missing
Feasibility of retention	Proportion of recruited adolescents lost to follow-up (LTFU) at 18-month follow-up	Administrative data	>30% LTFU	20-30% LTFU	<20% LTFU
Feasibility of intervention					
Fidelity to ALIVE interventions	Average fidelity across intervention arms, based on fidelity checklists completed for 10-15% of the sessions by trainer/facilitator	TeamPact [combined_avg_percentcompleted] [sr_avg_percentcompleted] [econ_avg_percentcompleted] [all_avg_percentcompleted]	<60% fidelity	60-75% fidelity	>75% fidelity
Adherence to ALIVE interventions	Attendance data at each session	TeamPact [total_sessions] [completed_intervention]	<50% of participants complete intervention (i.e.>70% of sessions) in each intervention arm	50-70% in each intervention arm	>70% in each intervention arm
Presence of (severe) adverse events (SAE)	Across all intervention arms compared to control arm	SAE reports	>20% increase	10-20% increase	<10% increase
Safety of cash transfers	Reports of any negative event due to cash transfer (theft, fights, arguments, drug use etc.)	Qualitative interviews; SAE reports	>30% report a negative event	10-30% report a negative event	<10% report a negative event

29. Missing data

The multilevel models utilize maximum likelihood estimation and thus allow for missing outcome data under the missing at random (MAR) assumption. Associations between post-randomization variables and missingness will be dealt with by multiple imputation (MI), again under the MAR assumption. Departures from this assumption will be assessed with a sensitivity analysis.

Table 4. Means, standard deviations, mean difference scores, and 95% CIs.

		T0		T1		T2		T3	
		Mean (SD)		Mean (SD)	M_{diff} (95% CI) T0-T1	Mean (SD)	M_{diff} (95% CI) T0-T1	Mean (SD)	M_{diff} (95% CI) T0-T1
Outcome 1	Self-regulation								
	Economic								
	Combined								
	Control								
Outcome 2	Self-regulation								
	Economic								
	Combined								
	Control								

30. Additional analyses

Step 3: Cost analyses

We will assess feasibility of using the CSRI reported by the caregiver or adolescents to understand which one is more accurate/ whether we need to use both in full trial. Cost analyses will consist of calculating the costs of delivering the interventions in each country. For this, we will gather data on staff time inputs to different parts of the intervention training and delivery and apply unit costs to time inputs of staff to calculate workforce costs. Similarly, we will gather data on resource inputs such as material, travel and equipment and apply market prices to each item. Where bottom-up costing is not feasible, we will allocate budget data to items, informed by some assumptions. Total costs of delivering the interventions in each country will be aggregated. Sensitivity analysis will be conducted to reflect uncertainty of some of the parameters.

Step 4: exploratory analyses

- Step 4.1 We will run subgroup analyses on the primary outcome: (1) split by adolescent gender; (2) split by household's monthly expenditure; (3) only including children with high scores PHQ/GAD.
 - We will conduct sensitivity analyses depending on anomalies found during data analyses (post-hoc).
 - The same models and outputs as presented under step 2 will be used for these analyses.
- Step 4.2 Cross-country analyses will be conducted (i.e. pooled outcome analyses assessing change over time). We will conduct heterogeneity analyses to assess differences in the impact of the intervention across sites, employing interaction effects in regression models on a pooled dataset of all three sites.

- We test all four arms in a linear mixed effects regression model (for continuous outcomes) and logistic regression model (for incidence outcome), taking clustering at the school and country level into account, with interaction effects of group x time (with the reference category being control at baseline), to compare (i) all intervention arms to control, (ii) SR vs Combined, (iii) Econ vs Combined, and (iv) Econ vs SR, for T0-T1, T0-T2, T0-T3 – for abovementioned primary and secondary outcomes (T0-T3 being the primary analyses). We test for superiority of the Combined intervention over control, and over the other active intervention arms (SR and Econ), for the primary outcome measure, as well as secondary measures. Correction for multiple comparisons will be applied.
- Mediation analyses to investigate whether self-regulation (measures through the self-report instrument [DERS] and the neuropsychological tests) mediates the impact of the Combined intervention on reduced cumulative incidence of depression and anxiety (primary outcomes).

31. Harms

Serious Adverse Events—harm to self, harm to others, family violence, undesirable events related to the cash transfer and other events identified by the study team in the course of the study have been carefully monitored and reported on and reviewed by the Data Safety Management Board. Number and types of events will be reported. Referral and follow-up of individual cases will be done as indicated.

32. Statistical software

The software used for the analyses is STATA (version 17) and Python.

33. References

Cameron, A. C., Gelbach, J. B., & Miller, D. L. (2008). Bootstrap-based improvements for inference with clustered errors. *The review of economics and statistics*, 90(3), 414-427.

Gamble C, Krishan A, Stocken D, et al. (2017). Guidelines for the Content of Statistical Analysis Plans in Clinical Trials. *JAMA*. 2017;318(23):2337–2343. doi:10.1001/jama.2017.18556

Leon AC, Davis LL, Kraemer HC. The role and interpretation of pilot studies in clinical research. *J Psychiatr Res*. 2011;45(5):626-9.

Teare MD, Dimairo M, Shephard N, Hayman A, Whitehead A, Walters SJ. Sample size requirements to estimate key design parameters from external pilot randomised controlled trials: a simulation study. *Trials*. 2014;15(1):264.

34. Annex 1.

Outcomes and Additional Variables of Interest: This section deals with data manipulation of key variables and computation of summaries from outcome measures for analysis including how missing data will be dealt with. Outcomes are presented in order of their importance in relation to trial aims and objectives. (Taken from phase 1 (Survey) SAP.)

Table 1. Outcomes of interest for adolescents: indexes and stand-alone

Outcome	Number of items	Variable	Variable type	Scoring	Description
<i>Self-report instruments</i>					
Internalizing Symptoms	25	mmapp_1-mmapp_25	Continuous	Sum all items in the scale to obtain a total scale score, taking the highest score of sleep items (12a, b, c)	The Measurement of Mental Health among Adolescents and Young People at the Population level Tool (MMAPP); frequency of symptoms (4 options, 0 never to 3 always)
Depressive symptoms	15	mmapp_1-mmapp_4, mmapp_11-mmapp_21	Continuous	Sum all items in the scale to obtain a total scale score	MMAPP
Anxiety symptoms	12	mmapp_5-mmapp_10 mmapp_19-mmapp_25	Continuous	Sum all items in the scale to obtain a total scale score	MMAPP
Depressive symptoms	9	mmapp_phqa_1-mmapp_phqa_9	Continuous and categorical	Sum all items in the scale to obtain a total scale score; categorical depression status based on locally validated cut-off	Patient Health Questionnaire – Adolescent version (PHQ-A). Depression status if score ≥ 16 (South Africa), ≥ 15 (Nepal), ≥ 14 (Colombia)
Anxiety symptoms	7	mmapp_gad_1-mmapp_gad_7	Continuous	Sum score equivalency for GAD-7 & and categorical depression status based on locally validated	Generalised Anxiety Disorder – 7 item (GAD-7). Anxiety status if score ≥ 12 (Colombia and South Africa), ≥ 10 (Nepal)
Sleep disruption	5	12a, b, c, 13, 28	Continuous	Sum all items in the scale to obtain a total scale score	MMAPP
Composite risk for depression	11	gender, ethnicity, failed_year, repeated_year, droppedout, kickedout, idea_1, idea_2, idea_3, idea_3_guardian, idea_4, idea_4_morethanone, idea_4_guardian,	Continuous	Total score	Identifying Depression Early in Adolescence (IDEA) Risk Score

		idea_4b, idea_5, idea_6, idea_7, idea_8, idea_9, idea_10, idea_11, idea_12, idea_13, abuse_emo, abuse_phys, abuse_sexual, marijuana_ever, harddrugs_ever, abuse_ever, anydrugs_ever			
Emotional dysregulation- total score	15	ders_1-ders_15	Continuous	Item 1, 4, 6 should be reversed and then sum all items in the scale to obtain a total scale score	Difficulties in Emotion Regulation Scale – Short form (DERS)
Positive emotional regulation	3	ders_1, _4, _6	Continuous	Sum all items in the scale to obtain a total scale score	DERS
Negative emotional regulation	12	ders_2, _3, _5, _7, _8, _9, _10, _11, _12, _13, _14, _15	Continuous	Sum all items in the scale to obtain a total scale score	DERS
Hope (pathways and agency thinking)	6	hope_1-hope_6	Continuous	Sum all items in the scale to obtain a total scale score	The Children’s Hope Scale
Externalising disorders	8	dbis_1-dbis_8	Continuous	Sum all items in the scale to obtain a total scale score	Disruptive Behaviour International Scale (DBIS)
Socio-ecological (external) resilience	17	cyrn_1-cyrn_17	Continuous	Sum all items in the scale to obtain a total scale score	The Child and Youth Resilience Measure – Revised (CYRM-R) (in Nepal only)
Internal resilience	10	rrm_1-rrm10	Continuous	Sum all items in the scale to obtain a total scale score	The Rugged Resilience Measure (RRM) (in Nepal only)
Child demographics	9	age dob	Categorical and continuous		

		gender ethnicity res_city res_district/res_nb res_years/res_months city_before nb_before			
<i>School enrolment/education ^a</i>					
Grade	1	grade	Categorical	Individual outcome	School grade
Academic achievement	1	edu_meangrade	Continuous	Individual outcome	Point average of participant's grade over the 18-month period (as reported by school)
Repetition	1	repeated_year	Binary	Individual outcome	Ever repeated a grade (1=yes)
Adverse schooling events [adverse_schooling_scaleZ]	3	failed_year	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of adverse schooling events (failed, dropped out and kicked out)
		droppedout			
		kickedout			
Continuity	1	continue_school	Binary	Individual outcome	School continuity next year (1=yes)
<i>Aspirations & beliefs ^a</i>					
Better temporary migration aspirations	1	eco_migrate_temp_rec*	Binary	Individual outcome	Expectation to relocate somewhere else temporarily [eco_migrate_temp] (No; Yes, within and outside district=0 Yes, outside country=1)

Better permanent migration aspirations	1	eco_migrate_perm_rec*	Binary	Individual outcome	Expectation to relocate somewhere else permanently [eco_migrate_perm] (No; Yes, within and outside district=0 Yes, outside country=1)
High educational expectation	1	schooling_expect_rec*	Binary	Individual outcome	High educational expectations [schooling_expect] (1= university or beyond)
High labour aspirations by educational level	1	eco_jobwant_cat_rec*	Binary	Individual outcome	High labour aspirations by educational level [eco_jobwant (technician and beyond = 1)
Not marrying by 25	1	eco_marry25_rec*	Binary	Individual outcome	Marrying by 25 [eco_marry25] (Definitely yes and Probably yes=0 Definitely not and probably not=1)
No children by 25	1	eco_children25_rec*	Binary	Individual outcome	Children by 25 [eco_children25] (Definitely yes and Probably yes=0 Definitely not and probably not=1)
High general aspirations [aspirations_scaleAdd] [aspirations_scaleZ]	4	schooling_expect_rec* eco_jobwant_cat_rec* eco_marry25_rec*	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of high general aspirations (high educational expectations, high laboural aspirations, not being married by 25 and not having children by 25).

		eco_children25_rec*			
High returns of education on labour	1	eco_beliefs_1_rec*	Binary	Individual outcome	Chances of someone having a paid job after high school graduation [eco_beliefs_1] (Same chances and less chances=0 More chances = 1)
High returns of education on income	1	eco_beliefs_2_rec*	Binary	Individual outcome	Chances of someone earning more in lifetime after high school graduation [eco_beliefs_2] (Same chances and less chances=0 More chances = 1)
<i>Financial education ^a</i>					
Any consumption	1	eco_consumption	Binary	Individual outcome	Any consumption last month (yes = 1)
Number of items bought	1	eco_consumption_num	Continuous	Individual outcome	Number of items bought last month
Entertainment consumption	1	eco_consumption_entertainment	Binary	Individual outcome	Entertainment consumption (yes = 1)
Celebration and party consumption	1	eco_consumption_celebration	Binary	Individual outcome	Celebrations and party consumption (yes = 1)
Dinning out	1	eco_consumption_dining out	Binary	Individual outcome	Dinning out consumption (yes = 1)
Food consumption	1	eco_consumption_food	Binary	Individual outcome	Food and groceries consumption (yes = 1)
Personal items consumption [consum_personalZ]	4	eco_consumption_clothing eco_consumption_shoes	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point	Addition and Z-score of personal items consumption (clothing, shoes, beauty and jewellery).

		eco_consumption_beauty		and the mean, then dividing by the standard deviation to obtain the z-score.	
		eco_consumption_jewellery			
Books for children's school	1	eco_consumption_books	Binary	Individual outcome	Books for children's school consumption (yes = 1)
School supplies	1	eco_consumption_school	Binary	Individual outcome	School supplies consumption (yes = 1)
Digital devices	1	eco_consumption_digital	Binary	Individual outcome	Digital devices consumption (yes = 1)
Not borrowing money	1	eco_borrowed_rec*	Binary	Individual outcome	Not borrowing money [eco_borrowed] (Frequency of borrowing: Never = 1; Otherwise=0)
No difficulty not borrowing money	1	eco_borrowedavoid_rec*	Binary	Individual outcome	No difficulty not borrowing money [eco_borrowedavoid] (Difficulty to not borrow: Very and extremely diff= 0 Not and somewhat diff= 1)
Spending control [spending_control_scaleZ]	3	eco_desire	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of spending control (Avoid waste (eco_desire: yes = 1), saved in the last 2 months (eco_saved: yes = 1) and control over spending (eco_control: yes = 1)).
		eco_saved			
		eco_control			
No difficulty to save money	1	eco_savediff_rec*	Binary	Individual outcome	No difficulty to save money [eco_savediff] (Difficulty to save: Very diff and extremely = 0 Not diff and somewhat= 1)

Able to buy things after saving	1	eco_buythings	Binary	Individual outcome	Able to buy things after saving (yes = 1)
No need to borrow after saving	1	eco_saveborrow_rec*	Binary	Individual outcome	No need to borrow after saving [eco_saveborrow] (Need to borrow after saving: No=1)
Budgeting [budgeting_scaleZ]	4	eco_budget	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of budgeting skills (budget (eco_budget: yes =1), no difficulty to track spending (eco_track: Very diff and extremely = 0 Not diff and somewhat= 1), no difficulty to not waste (eco_manage: Very diff and extremely = 0 Not diff and somewhat= 1) and actual perceived skill at budgeting: (eco_goodatbudget: Not good at all and somewhat good = 0 Very good and extremely good= 1).
		eco_track_rec* (Difficulty to track spending)			
		eco_manage_rec* (No difficulty to not waste)			
		eco_goodatbudget_rec* (Good perceived skill at budgeting)			
Risk preference					
High risk preferences	1	eco_risk*	Binary	Individual outcome	Amount of financial risk propensity. 1= 20,000 (Col); 400 (Nep); 200 (SA)
Sharing					

Possibility of not sharing	1	eco_share2_rec*	Binary	Individual outcome	Possibility to not share transferred money [eco_share2] (probably or definitely not = 1 definitely or probably yes = 0)
<i>Time at home</i>					
Hours spent on homework per day	1	time_homework	Continuous	Individual outcome	Time spent on homework each day
Homework/Chores	1	homeworkchores*	Continuous	Individual outcome	Ratio of time spent between homework [time_homework] and household chores [eco_chorestime]
<i>Psychophysiological measure</i>					
Resting state	2	rr timestamp	Continuous	Computed	Heart rate variability
<i>Neuropsychological tasks</i>					
Emotion Regulation	8	Goface Nogoface Sequence Stimuli Userinput Correct Start_time (ms) End_time (ms)	Continuous	Computed	Emotional Go No-Go task (EGNG) Measures of d-prime (primary index of emotion recognition), False alarm rate, Miss rate, Reaction time, Speed/accuracy
Impulsivity	7	Trialsequence ChoiceA ChoiceB Delay_duration User_input Start_time (ms) End_time (ms)	Continuous	Computed	Delay Discounting Task (DDT) Indifference points: Immediate reward (Choice A), Delay reward (Choice B) Reaction time

Risk taking propensity	7	Trialsequence Pumpcount Explosion Trail_reward Total_reward Start_time (ms) End_time (ms)	Continuous	Computed	Balloon Analogue Risk Task – Youth version (BART-Y) Adjusted average number of pumps on unexploded balloons
------------------------	---	---	------------	----------	--

*New variables; ^a for variables demonstrating a normal distribution and consistent variance over time, Z transformations will be considered. For variables with a non-normal distribution, interquartile ranges will be used to determine outliers and extreme outliers.

Table 2. Outcomes of interest for caregivers: indexes and stand-alone

Outcome	Number of items	Variable	Variable type	Scoring	Description
<i>Non-economic outcomes</i>					
Parental involvement, Positive parenting, Corporal punishment	16	apq_1-apq_10 apq_11-apq_14 apq_15-apq_16	Continuous	Use subscale scores rather than adding all to calculate the total score	Alabama Parenting Questionnaire (parental involvement, positive parenting and corporal punishment subscales)
Depressive symptoms	9	phq_1-phq9	Continuous	Sum all items in the scale to obtain a total scale score. Participant screens positive on the PHQ-9 ≥ 12 [South Africa], ≥ 9 [Colombia], ≥ 10 [Nepal]	Patient Health Questionnaire
Internal political efficacy		pol_1 pol_2 pol_3 pol_4 pol_5	Continuous	Sum all items in the scale to obtain a total scale score.	Internal political efficacy measured using 5 items
<i>Migration^a</i>					
Migration	1	migration	Continuous	Individual outcome	Time in current location
Migration from	1	migrate_from	Categorical	Individual outcome	Family moved from elsewhere (No, Yes, from within district, yes, from outside district, yes, from outside country)
External migrant	1	migrate_from_rec*	Binary	Individual outcome	Migrant from other country [migrate_from] (No, yes , within same district, yes, outside district = 0 Yes, outside country = 1)
Displaced age	1	displaced_age	Continuous	Individual outcome	Age of forced displacement

Migration due to armed conflict	1	reasons_migration1	Binary	Individual outcome	Migration due to armed conflict (yes = 1)
Migration due to local crime	1	reasons_migration3	Binary	Individual outcome	Migration due to local crime (yes = 1)
Non-violent forced displacement [migration_nonviolentshocksAdd] [migration_nonviolentshocksZ]	4	reasons_migration2 reasons_migration4 reasons_migration5 reasons_migration9	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of non-forced displacement (Crop damaged (reasons_migration2: yes = 1), natural disaster (reasons_migration4: yes = 1), economic conditions (reasons_migration5: yes = 1) and health problems (reasons_migration9: yes = 1)
Family & opportunity reasons for migration [migration_opportunitiesAdd] [migration_opportunitiesZ]	5	reasons_migration6 reasons_migration7 reasons_migration8 reasons_migration10 reasons_migration11	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of opportunities and family (better job opportunities (reasons_migration6: yes = 1), better educational services (reasons_migration7: yes = 1), better health services (reasons_migration8: yes = 1), marriage and family matters (reasons_migration10: yes = 1)
Internal forced displacement	1	internal_forced_displacement *	Binary	Individual outcome	Victim of internal forced displacement ([migrate_from] No, yes from outside country = 0 Yes from within or outside district = 1) , violent

					(migration_violentschocksDum: yes = 1) or non-violent (migration_nonviolentschocksDum: yes = 1)
Internal non-forced displacement	1	internal_nonforced_displacement *	Binary	Individual outcome	Internal migrant displacement ([migrate_from] No, yes from outside country = 0 Yes from within or outside district = 1) due to opportunities or family matters (migration_opportunitiesDum: yes = 1)
<i>Household welfare benefits^a</i>					
Welfare benefits	1	programme	Binary	Individual outcome	Beneficiary of any social program (yes = 1)
Cash transfer programs beneficiary [cashtransfers_programmeAdd] [cashtransfers_programmeZ]	6 (Col)	programme1 (Familias en Acción)	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of cash transfer program beneficiary (depends on country)
		programme2 (Programa para adultos mayores)			
		programme3 (Ingreso solidario)			
		programme4 (Ingreso mínimo garantizado)			
		programme24 (Subsidio al desempleo)			
		programme25 (Caja de compensación (subsídios/préstamos))			
	6 (Nep)	programme5 (Senior citizens's allowance)			
		programme7 (Disabled and destitute allowance)			

		programme8 (Single women's allowance)			
		programme9 (Disability allowance)			
		programme10 (Child nutrition allowance)			
		programme11 (Endangered indigenous people allowance)			
	5 (SA)	programme13 (Child Support Grant)			
		programme14 (Foster grant)			
		programme15 (Government old age/pension)			
		programme16 (Disability grant)			
		programme17 (Social relief grant)			
In-kind programs [inkind_programmeAdd] [inkind_programmeZ]	10 (Col)	programme18 (PAE)	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of In-kind program beneficiary
		programme19 (Comedores comunitarios)			
		programme20 (Subsidio de TM/SITP)			
		programme21 (SENA)			
		programme22 (Red Juntos)			
		programme23 (ICBF)			
		programme26 (Caja de compensación (salud/recreación)			

		programme27 (Ayudas para emergencias)			
		programme28 (Ayudas para desplazados)			
		programme29 (Subsidio de vivienda)			
<i>Income</i>					
Monthly household income	1	hh_income_col hh_income	Categorical (Col) Continuous (Ne & SA)	Individual outcome	Household monthly income (in local currency) For Colombia ranges are: 0-700,000; 700,001-1,100,00; 1,100,001-1,500,000; 1,500,001-2,000,000; 2,000,001-2,500,000; 2,500,000 or more pesos
Household income	1	hh_income_PPP_cat*	Categorical (PPP dollars)	Individual outcome	Proposed monthly household income, according to Colombian ranges (0-469.8 dollars; 469.8-738.2 dollars; 738.3-1,006.7 dollars; 1006.7-1,342.3 dollars; 1,342.3-1,677.8 dollars; 1,677.9 dollars or more)
Household income	1	hh_income_eq*	Continuous (PPP dollars)	Individual outcome	Proposed continuous transformation according to middle point for Colombias ranges, in PPP and equivalized according to OCDE scale
Breadwinner	1	breadwinner	Categorical	Individual outcome	Main breadwinner in household (No one, Self, Spouse/partner, Other relative in household, Other)
Breadwinner earnings	1	bw_earnings	Categorical	Individual outcome	Montly income of main breadwinner (in local currency)
Breadwinner PPP earnings	1	hh_bwearings_PPP*	Continuous	Individual outcome	Proposed continuous transformation according to ranges middle points in PPP

Monthly household income	1	hh_income_col	Categorical (Col)	Individual outcome	Household monthly income (in local currency) For Colombia ranges are: 0-700,000; 700,001-1,100,00; 1,100,001-1,500,000; 1,500,001-2,000,000; 2,000,001-2,500,000; 2,500,000 or more pesos
<i>Lender^a</i>					
Household borrows	1	cg_borrowed	Binary	Individual outcome	Household borrowed money in past 5 years (yes = 1)
Formal lender [cg_formallender_Add] [cg_formallenderZ]	3	cg_borrowed1 (Bank)	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of formal lenders (Bank (cg_borrowed1: yes = 1), microfinance (cg_borrowed2: yes = 1) and cooperatives (cg_borrowed8: yes = 1)
		cg_borrowed2 (Microfinance)			
		cg_borrowed8 (Cooperatives and employee funds)			
Informal lender [cg_informallender_Add] [cg_informallenderZ]	4	cg_borrowed4 (Employer)	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of Informal lenders (Employer (cg_borrowed4: yes = 1), friends (cg_borrowed5: yes = 1), relatives (cg_borrowed6: yes = 1) and commercial houses or pawn shops (cg_borrowed7: yes = 1)
		cg_borrowed5 (Friends)			
		cg_borrowed6 (Relatives)			
		cg_borrowed7 (Commercial houses or pawn shops)			
Illegal lender	1	cg_borrowed3	Binary	Individual outcome	Illegal money lender used (yes = 1)
<i>Debt</i>					
Household total debts	1	total_debts_col	Categorical (Col)	Individual outcome	Total household debt (in local currency). For Colombia ranges are: 0-700,000; 700,001-1,100,00; 1,100,001-1,500,000; 1,500,001-
	1	total_debts	Continuous (Ne & SA)		

					2,000,000; 2,000,001-2,500,000; 2,500,000 or more pesos
Total debts in household	1	hh_debts_PPP_cat*	Categorical	Individual outcome	Proposed categorization according to Colombia's ranges in PPP (0-469.8 dollars; 469.8-738.2 dollars; 738.3-1,006.7 dollars; 1006.7-1,342.3 dollars; 1,342.3-1,677.8 dollars; 1,677.9 dollars or more)
Largest loan	1	largest_loan_col	Categorical (Col)	Individual outcome	Largest loan in the past five years (in local currency)
		largest_loan	Continuous (Ne & SA)		
Interest on largest loan	1	interest_loan	Continuous	Individual outcome	Interest rate on this largest loan
Loan interest time	1	interest_loan_time	Categorical	Individual outcome	Monthly or yearly interest rate
Monthly interest rate	1	monthly_interest_rate*	Continuous	Individual outcome	Adjusted interest rate to monthly values
Paid-off	1	paid_off	Binary	Individual outcome	Paid-off (yes = 1)
High proportion paid off	1	prop_paid_rec*	Binary	Individual outcome	Proportion paid [prop_paid] (Half or more = 1)
<i>Consumption ^a</i>					
Any consumption	1	cg_eco_consumption	Binary	Individual outcome	Any consumption last month (yes = 1)
Caregivers entertainment consumption	1	cg_eco_consumption_entertainment	Binary	Individual outcome	Caregivers entertainment consumption (yes = 1)
Caregivers celebration and party consumption	1	cg_eco_consumption_celebration	Binary	Individual outcome	Caregivers celebrations and party consumption (yes = 1)
Caregivers dinning out	1	cg_eco_consumption_food	Binary	Individual outcome	Caregivers dinning out (yes = 1)
Caregivers food consumption	1	cg_eco_consumption_diningout	Binary	Individual outcome	Caregivers food consumption (yes = 1)

Personal items consumption [cg_consum_personal_Add] [cg_consum_personalZ]	4	cg_eco_consumption_adultclothing	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of personal items consumption (clothing (cg_eco_consumption_adultclothing: yes = 1), shoes (cg_eco_consumption_adultshoes: yes = 1), beauty (cg_eco_consumption_beauty: yes = 1) and jewellery (cg_eco_consumption_jewellery: yes = 1))
		cg_eco_consumption_adultshoes			
		cg_eco_consumption_beauty			
		cg_eco_consumption_jewellery			
Child clothing consumption	1	cg_eco_consumption_childclothing	Binary	Individual outcome	Child clothing consumption (yes = 1)
Child shoes consumption	1	cg_eco_consumption_childshoes	Binary	Individual outcome	Child shoes consumption (yes = 1)
School books consumption	1	cg_eco_consumption_books	Binary	Individual outcome	School books consumption (yes = 1)
School supplies consumption	1	cg_eco_consumption_school	Binary	Individual outcome	School supplies consumption (yes = 1)
Digital devices consumption	1	cg_eco_consumption_digital	Binary	Individual outcome	Digital devices consumption (yes = 1)
General consumption [cg_consumption_scaleAdd] [cgconsumption_scaleZ]	13	cg_eco_consumption_entertainment	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of general consumption (entertainment (cg_eco_consumption_entertainment: yes = 1), celebration (cg_eco_consumption_celebration: yes = 1), food (cg_eco_consumption_food: yes = 1), dining out (cg_eco_consumption_diningout: yes = 1), adult clothing (cg_eco_consumption_adultclothing:
		cg_eco_consumption_celebration			
		cg_eco_consumption_food			
		cg_eco_consumption_diningout			
		cg_eco_consumption_adultclothing			

		cg_eco_consumption_adultshoes cg_eco_consumption_beauty cg_eco_consumption_jewellery cg_eco_consumption_childclothing cg_eco_consumption_childshoes cg_eco_consumption_books cg_eco_consumption_school cg_eco_consumption_digital			yes = 1), adult shoes (cg_eco_consumption_adultshoes: yes = 1), beauty (cg_eco_consumption_beauty: yes = 1), jewellery (cg_eco_consumption_jewellery: yes = 1), children clothing (cg_eco_consumption_childclothing: yes = 1), children shoes (cg_eco_consumption_childshoes: yes = 1), books (cg_eco_consumption_books: yes = 1), school supplies (cg_eco_consumption_school: yes = 1) and digital devices (cg_eco_consumption_digital: yes = 1))
Monthly total expenditure	1	total_expenditure_col	Categorical (Col)	Individual outcome	Monthly total expenditure (in local currency). For Colombia ranges are: 0-700,000; 700,001-1,100,00; 1,100,001-1,500,000; 1,500,001-2,000,000; 2,000,001-2,500,000; 2,500,000 or more pesos.
Monthly total expenditure in PPP dollars (%)	1	total_expenditure	Continuous (Nep & SA)	Individual outcome	Proposed categorization according to Colombia's ranges in PPP
Monthly total expenditure in PPP dollars (%)	1	hh_expenditure_PPP_cat*	Categorical	Individual outcome	Proposed categorization according to Colombia's ranges in PPP (0-469.8 dollars; 469.8-738.2 dollars; 738.3-1,006.7 dollars; 1006.7-1,342.3 dollars; 1,342.3-1,677.8 dollars; 1,677.9 dollars or more)

Monthly total PPP expenditure	1	hh_expenditure_median_PPP2*	Continuous	Individual outcome	Proposed continuous transformation according to Colombia's ranges middle points in PPP
Monthly total equivalised PPP expenditure in quintiles	1	hh_expenditure_q5	Categorical	Individual outcome	Proposed household monthly expenditure equivalized in quintiles
Food expenditure	1	food_expenditure	Continuous	Individual outcome	Original food expenditure variable: all continuous but in local currencies
Food expenditure in PPP	1	food_expenditure_PPP*	Continuous	Individual outcome	Proposed food expenditure in PPP dollars
Enough money for food	1	foodmoney	Categorical	Individual outcome	Enough money for food (None, A little, Some, A lot)
Medical expenditure	1	medical_expenditure	Continuous	Individual outcome	Medical expenditure (in local currency)
Medical expenditure in PPP	1	medical_expenditure_PPP*	Continuous	Individual outcome	Proposed medical expenditure in PPP dollars.
Schooling expenditure	1	school_expenditure	Continuous	Individual outcome	Schooling expenditure (in local currency)
School expenditure in PPP	1	school_expenditure_PPP*	Continuous	Individual outcome	Proposed monthly school expenditure in PPP
Affiliation to health insurance	1	health_insurance_affiliation*	Binary	Individual outcome	Affiliation to health insurance [health_insurance] (No health insurance=0 Full amount, subsidied and special regime=1)
<i>Difficult life events ^a</i>					
Any difficult life events (6 months)	1	cg_life_events	Binary	Individual outcome	Difficult life events in the past 6 months (yes = 1)
Adverse life events	8	cg_event_death			

[cg_adverseevents_scale Add] [cg_adverseevents_scale Z]		cg_event_illness	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of Difficult life events (death (cg_event_death: yes =1), illness (cg_event_illness: yes =1), jobloss (cg_event_jobloss: yes =1), decrease in cash (cg_event_decreaseincash: yes =1), decrease in grant (cg_event_decreasegrant: yes =1), destruction of house (cg_event_destruction: yes =1), problems with relationship (cg_event_relationship: yes =1) and economic hardship (cg_event_hardship: yes =1))
		cg_event_jobloss			
		cg_event_decreaseincash			
		cg_event_decreasegrant			
		cg_event_destruction			
		cg_event_relationship			
		cg_event_hardship			
Stressor ^a					
Any stressor in community	1	cg_stressor	Binary	Individual outcome	Stressor in community: any traumatic event (yes = 1)
Contextual stressor [cgstressors_community Add] [cgstressors_community Z]	7	cg_stressor_floods	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of Stressor in community (floods (cg_stressor_floods: yes =1), landslides/mudslides (cg_stressor_landslides: yes =1), other natural disasters (cg_stressor_naturaldisaster: yes =1), violence in community (cg_stressor_violence: yes =1), political protests (cg_stressor_protests: yes =1), major car accident (cg_stressor_accident: yes =1), major fires (cg_stressor_fires: yes =1))
		cg_stressor_landslides			
		cg_stressor_naturaldisaster			
		cg_stressor_violence			
		cg_stressor_protests			
		cg_stressor_accident			
		cg_stressor_fires			

Stressor affected caregiver	1	cg_stressor_effect_rec*	Binary	Individual outcome	Stressor affected caregiver [cg_stressor_effect] (Not at all, somewhat = 0 Very much, extremely = 1)
Sharing money					
Not sharing money	1	cg_eco_share2_rec*	Binary	Individual outcome	Not sharing transferred money [cg_eco_share2] (probably or definitely not = 1 definitely or probably yes = 0)
Financial education ^a					
High risk preferences [cgeco_risk_scaleAdd] [cgeco_risk_scaleZ]	3	risk_preference_1_rec*	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of Better risk preferences (monthly timeframe (risk_preference1, 240NPR/R120/12,000COP in one month's time = 1), semester timeframe (risk_preference2, 240NPR/R120/12,000COP in 7 months' time = 1) and 50/50 investment preference cg_eco_finance_percent, 100% = 1)
		risk_preference_2_rec*			
		cg_eco_finance_rec*			
General aspirations for child ^a					

Child not marrying by 25	1	cg_eco_marry25_rec*	Binary	Individual outcome	Expectation of child marrying by 25 [cg_eco_marry25] (Definitely yes and Probably yes=0 Definitely not and probably not=1)
Child not having children by 25	1	cg_eco_children25_rec*	Binary	Individual outcome	Expectation of child having children by 25 [cg_eco_children25] (Definitely yes and Probably yes=0 Definitely not and probably not=1)
High general aspirations for child [cg_aspiration_scaleAdd] [cg_aspirations_scaleZ]	7	scholarships	Continuous and z-score	Sum all items and divide by the number of items to obtain the average scale score & take the difference between a data point and the mean, then dividing by the standard deviation to obtain the z-score.	Addition and Z-score of high general aspirations for child (scholarships (scholarships, applied to any schooling financial help: yes = 1), enrolling child next year (cg_enrol, yes = 1), high educational expectations (cg_schooling_expect, university and beyond = 1), expectation to migrate (cg_eco_migrate: Yes, outside country = 1), high laboural expectation (cg_eco_jobwant: technician and beyond = 1), child not being married by 25 and child not having children by 25.
		cg_enrol			
		cg_schooling_expect_rec*			
		cg_eco_migrate_rec*			
		cg_eco_jobwant_cat_rec*			
		cg_eco_marry25_rec*			
		cg_eco_children25_rec*			
Monthly income expected child to earn after college at 25	1	cg_eco_earn_maxedu	Categorical	Individual outcome	Average monthly income child would earn when finish their maximum level of education (in local currency)

Monthly PPP income expected child to earn after college at 25	1	cg_eco_earn_maxedu_rec*	Continuous	Individual outcome	Proposed continuous transformation according to ranges middle points and in PPP
Monthly income expected child to earn at 25 with secondary school	1	cg_eco_earn_secondary	Categorical	Individual outcome	Average monthly income child would earn when finish secondary schooling (in local currency)
Monthly PPP income expected child to earn at 25 with secondary school	1	cg_eco_earn_secondary_rec*	Continuous	Individual outcome	Proposed continuous transformation according to ranges middle points and in PPP
High chances of having a paid job with secondary school vs not	1	cg_eco_beliefs_1_rec*	Binary	Individual outcome	Chances of having a paid job ater high school [cg_eco_belief1] (Same chances and less chances=0 More chances = 1)
High chances of earning more with secondary school vs not	1	cg_eco_beliefs_2_rec*	Binary	Individual outcome	Chances of earning more in lifetime after high school [cg_eco_belief2] (Same chances and less chances=0 More chances = 1)
<i>Beliefs for someone</i>					
Income expectation for someone with high school	1	cg_eco_salary_secondary	Categorical	Individual outcome	Average monthly income of someone who completes secondary school (in local currency)
Income expectation for someone with high school	1	cg_eco_salary_secondary_rec*	Continuous	Individual outcome	Proposed continuous transformation according to ranges middle points and in PPP
Income expectation for someone with college degree	1	cg_eco_salary_tertiary	Categorical	Individual outcome	Average monthly income of someone who completes tertiary education (in local currency)

Income expectation for someone with college degree	1	cg_eco_salary_tertiary_rec*	Continuous	Individual outcome	Proposed continuous transformation according to ranges middle points and in PPP
Income expectation for someone without high school degree	1	cg_eco_salary_noschool	Categorical	Individual outcome	Average monthly income of someone who doesn't complete secondary school (in local currency)
Income expectation for someone without high school degree	1	cg_eco_salary_noschool_rec*	Continuous	Individual outcome	Proposed continuous transformation according to ranges middle points and in PPP
<i>Aspirations for self</i>					
Aspirational monthly income for self	1	aspiration_income_rec*	Categorical	Individual outcome	Highest income caregiver wants to achieve monthly in lifetime [aspiration_income] (highest category for each country = 1)
Aspirational asset for self (lifetime)	1	aspiration_asset	Continuous	Individual outcome	Level of asset caregiver would like to achieve in lifetime (in local currency)
Aspirational asset for self in PPP (lifetime)	1	aspiration_assets_PPP*	Continuous	Individual outcome	Proposed aspirational assets in PPP dollars
<i>Cost consequences</i>					
Caregiver and adolescent service use	60	cg_emergency cg_emergency_times cg_emergency_why cg_emergency_pay cg_emergency_cost cg_admitted cg_admitted_days	Continuous and categorical	Individual outcome	Client Service Receipt Inventory. Asked in relation to caregiver and in relation to proxy child

cg_admitted_why
cg_admitted_pay
cg_admitted_cost
cg_outpatient_physical
cg_phys_times
cg_phys_type
cg_phys_long
cg_phys_timespent
cg_phys_cost
cg_phys_travel
cg_outpatient_mh
cg_mh_times
cg_mh_type
cg_mh_long
cg_mh_timespent
cg_mh_cost
cg_mh_travel
cg_outpatient_other
cg_other_times
cg_other_type
cg_other_long
cg_phys_cost
cg_phys_travel

*New variables; ^a for variables demonstrating a normal distribution and consistent variance over time, Z transformations will be considered. For variables with a non-normal distribution, interquartile ranges will be used to determine outliers and extreme outliers.

35. Annex 2.

Qualitative Data Analysis Plan

Post Intervention Qualitative Data – ALIVE Pilot Trial

All post-intervention interviews will be transcribed and then analysed using NVivo software. First, an initial coding framework was developed (please see the coding framework tables below for each type of research participant) focusing on the main research questions of the ALIVE pilot trial and the set of questions asked during the post-intervention qualitative interviews. Based on the initial coding framework, two individual coders will then code randomly selected 10% of the interviews using both deductive and inductive coding. During this process, any emergent themes and codes will be discussed between the two coders and then added to the framework to develop a comprehensive, consistent, and refined coding framework. Based on the refined coding framework, the two coders will further code another 10% of the interviews. The inter-rater reliability (IRR) will be assessed between the two coders, based on the coding of the later 10% of the interviews and if the value of *Cohen's kappa* is found to be an acceptable/substantial value (>0.6), then the coders will independently split the remaining interview transcripts and code the remaining interviews using the refined themes and codes. However, during the process, any emergent themes not covered in the framework will be added and coding will be done both deductively and inductively following discussions between the coders. Once the coding of all interviews is completed, the final coding framework will be presented as one of the outputs of the analysis. In addition, the data will be analysed based on the core concepts in terms of acceptability, appropriateness, and feasibility of participating in the ALIVE pilot trial, as well as recommendations for improvement of future fully powered trials. The findings will be described both at the core concept level and thematic level. The findings will be described in terms of attributes such as type of intervention arms, type of research participants, gender, attendance status (i.e., completers versus non-completers), etc. as appropriate. We would also triangulate the relevant findings between the type of research participants across the intervention arms while drawing conclusions.

Note: Competencies of Facilitator related analysis and findings will be done separately (at least for Nepal) and the qualitative interviews done post training of facilitators and post-intervention will be used for the analysis.

Qualitative interview guides

Adolescents – Intervention arms

Core Concept	Themes	Description	Codes
Acceptability	Receptivity	What adolescents preferred about content, materials, group experience, delivery agents and structure of the program?	Experience with the content of the program
			Experience with the structure of the program
			Perception towards Facilitators
			Perception towards group intervention
			Perception towards duration of the session
			Perception towards the timing of the session
			Most liked/helpful knowledge and skills
			Least liked/helpful knowledge and skills
			Most enjoyed materials
	Cash transfer	How they mentioned about their experience with the cash transfer	Regular/irregular access to cash transfer (steps involved)
			Positive/Negative experiences with cash transfer
	Context: Safe Space	How they perceived being safe/unsafe and what made them feel safe/unsafe	Perception towards feeling safe/unsafe
			Experience of feeling safe
			Experience feeling unsafe
			Sharing feelings/emotions during sessions
			Facilitators response towards participants emotions and feelings
	Engagement	What did the adolescent feel regarding the materials/content in terms of their interest during the sessions; and how and what did the adolescent share about the program's material and information with non-participants, and	Sharing of program materials
			Program information/learnings sharing
			Interest and involvement in the programme materials/content during the session
			Involvement of non-participants

		involvement of caregivers and non-participants with adolescents regarding the program	
Appropriateness	Content	How do they find the content to be in terms of comprehension and relevancy	Content difficult to understand / content easy to understand
			Culturally irrelevant content/relevant content
	Mechanism of change	How they mention and/or experienced advantages related to the content of the intervention in their day-to-day life	Program learning
			Perceived/experienced benefits of session activities
			Program impact on individual emotions and behaviour
			Program impact on social relationship
			Perception towards usefulness of program for other adolescents
Feasibility	Enabling Factors	What supported them to use the skills in day-to-day life and what motivated them to attend the sessions including money factor and caregiver's role	External support to use the skills in day-to-day life
			Motivation towards attending weekly sessions
	Barriers	What are the challenges they faced to use the skills in day-to-day life and attend the sessions	Challenges faced while using the learnt skill in day-to-day life
			Challenges towards attending weekly sessions
	Attendance	How easy or difficult was it for adolescents to participate in the session, and why	Experience on attending weekly sessions (difficult or easy)
			Reasons for missing the session
			Perception towards other participant's absenteeism
			Gender perspective on attendance
	Integration into daily practice	How they reinforced learnt skills/knowledge into home practice between the sessions and how they utilized	Home practice
			Use of learned skills in day-to-day life
			Use of learnt skills to manage stress

		that skills/knowledge in their day-to-day life	
Recommendations for full trial	Recommendations	Recommendations regarding the improvement of materials, sessions, content, methods, timing and duration of the program and attendance of participants in the future	Recommendation for improving materials
			Overall recommendation for the program
			Recommendation towards improving participants' attendance

Adolescents – Control arm

Core Concept	Themes	Description	Codes
Acceptability	Receptivity: Control adolescents	This refers to the participants experience towards the length of questionnaire tool and the frequency of data collection, tool's comprehensibility, relevancy, appropriateness, and their perception towards the research assistants who collected it	Experience towards frequency of data collection
			Experience towards length of the tool
			Relevancy of the questions
			Comprehension of the questions
			Uncomfortable questions
			Perception toward research assistants

Caregivers – Intervention arms

Core Concept	Themes	Description	Codes
Acceptability	Receptivity: Caregivers	What caregivers preferred about content, materials, group experience, timing, duration, delivery agents, and structure of the program	Experience with the content
			Experience with the structure of the program
			Experience with the ALIVE facilitators
			Experience with the group intervention
			Perception about the duration of the session
			Perception about the timing of the session
			Most enjoyed materials
			Least enjoyed materials

	Engagement	What did the caregiver feel regarding the materials/content in terms of interest during the session; and how and what did the caregiver and adolescent share about the program's material and information with non-participants and caregivers involved with the adolescent regarding sessions.	Sharing of program information by adolescents
			Interest in the programme materials/content
			Sharing about the program outside the family (by adolescent or caregiver)
			Sharing of materials with others
Appropriateness	Mechanism of change: Adolescents	How they mentioned and/or observed advantages in adolescents after their participation in the intervention	Perception of the benefits of the programme for the adolescents
			Observed changes in adolescents' emotions/ behaviour
			Observed changes in adolescents' stress management, problem-solving skills
			Observed changes in adolescents' social relation
	Content: Caregivers	How do they find the content to be in terms of comprehension and relevancy	Comprehensibility of the caregiver's content
			Socio-cultural relevance of the caregiver program
	Mechanism of change: Caregivers	How they mention and/or experienced advantages related to the content of the intervention in their day-to-day life	Program learning
			Most useful knowledge and skills
			Least helpful knowledge and skills
			Benefits of the session activities
			Program impact on caregivers' personal emotions and behaviour
			Program impact on caregivers parenting skill

Feasibility			Program impact on problem-solving
			Program impact on social relationship
			Perception towards usefulness of program for other caregivers
	Enabling Factors: Caregivers	What supported them to use the skills in day-to-day life and what motivated them to attend sessions	External support to use the learned skills from the program
			Motivation towards attending sessions
			Perception towards other participants' motivation in attending the session
			Cash transfer as a motivator for attendance
	Barriers: Caregivers	What are the challenges the caregivers faced while using the learned skills in day-to-day life and attending the sessions?	Challenges towards attending sessions
			Challenges to use the learned skills from the program
			Perception towards other participants' challenges in attending sessions
	Integration into daily practice: Caregivers	How the caregivers reinforced learned skills/knowledge into home practice between the sessions and how they utilized that skills/ knowledge in their day-to-day life	Home practice of the learned skills
	Enabling Factors: Adolescents	What supported the adolescents to use the learned skills in day-to-day life	External Supporting factors to use the learned skills for your adolescent
	Barriers: Adolescents	What are the challenges the adolescents faced while using the learned skills in day-to-day life	Challenges faced by adolescents while using the learned skills
	Integration into daily practice: Adolescents	How the adolescents reinforced learnt skills/knowledge into home practice	Child's home practice

		between the sessions and how they utilized that skills/ knowledge in their day-to-day life	
	Attendance: Caregivers	How easy or difficult was it for the caregivers to participate in the session, and why	Reasons for not attending
			Perception about other participants' absenteeism
			Gender perspective on attendance of participants
			Perception towards occupational status of participants on their attendance
			Experience in attending sessions (difficulty or easy)
	Attendance: Adolescents	What they mentioned about the adolescents attending the weekly sessions	Perception towards adolescents attending weekly sessions
Recommendation for full trial	Recommendations	Recommendations for the improvement of materials, sessions, content, methods, timing, duration, delivery agents, and minimizing absenteeism of participants for improvement of the program in the future	Suggestions for minimizing absenteeism
			Recommendations for improvement of facilitators
			Recommendations towards materials
			Overall recommendation for the caregiver program
			Overall recommendation for the adolescent program

Headteacher – Intervention arms

Core Concept	Themes	Description	Codes
Acceptability	Receptivity: Head teacher	What and how they mentioned/perceived about ALIVE program implementation in their school	Relevancy of the ALIVE program to the school
Appropriateness	Mechanism of Impact: Head teacher	What and how they mentioned and/or observed advantages/challenges related to the content	Perceived positive/negative impact of intervention

		of the intervention in adolescents' life	
Recommendation for future study	Recommendation	Opinion about additional or different criteria for school selection in the future.	Perceptions about sampling/selection processes (What works/doesn't work).

Research Assistants

Concept	Themes	Description	Codes
Feasibility	Data collection: Positive	What they mentioned about their positive experience during data collection	Positive Experience about the data collection (what works)
	Data collection: Challenges	What they mentioned about the challenges they faced during recruitment of participants and data collection	Challenges of data collection (what doesn't work)
			Challenges of recruitment of study participants
			Challenges of administering instruments
	Implementation: Blinding	What they mentioned about being unaware/aware of allocation of participants and schools regarding different arms	Experience of being blind and/or contamination (for SA) (effectively maintained)
Recommendations for full trial	Recommendation	Recommendations regarding improvement of participants' enrolment, data collection method, and blinding	Suggestions to improve blinding
			Suggestions for improving data collection
			Recommendation to improve recruitment and enrolment

Trainers

Core Concept	Themes	Description	Codes
Appropriateness	Mechanism of change: Adolescents	How they mention and/or observed advantages related to the content of the intervention in adolescents	Perceived benefits for the adolescents of the ALIVE Program
			Observed changes among adolescents of the ALIVE Program
	Mechanism of change: Caregivers	How they mention and/or observed advantages related to the content of the intervention in caregivers	Perceived benefits for the caregivers of the ALIVE Program
			Observed changes among caregivers of the ALIVE Program
	Content: Adolescents	How do they find the content to be in terms of comprehension, relevancy, and repetitiveness for adolescents	Perception of the comprehension of the session content for adolescents
			Perception of the content relevancy for adolescents
			Perception of the repetitiveness of the session content for adolescents
	Content: Caregivers	How do they find the content to be in terms of comprehension and relevancy for caregivers	Perception of comprehension of the session content by caregivers
			Perception of the content relevancy for caregivers
Feasibility	Implementation: Supervision	What they mentioned/experienced regarding the positive aspect,	Experiences of the on-site supervision

		challenges, frequency, and variations in the supervisions including pre- and post-sessions and onsite supervision during actual implementation of the intervention session	Experience of the weekly supervision
			Challenges of the supervision
			Experience with the frequency of supervision
			Variation in actual vs planned supervision
	Implementation: Challenges	What they mentioned/experienced as challenges during the implementation of the intervention session	Challenges of session facilitation by single facilitator
			Overall challenges of the ALIVE implementation
	Implementation: Positive	What they mentioned/experienced as well conducted aspects during implementation of the intervention session	Aspects that work well while implementing ALIVE program
	Barriers: Adolescents	What they mentioned/observed as challenges that the adolescents faced to use the learned skills in day-to-day life	Perceived barriers in using learned skills for the adolescents of ALIVE program
	Barriers: Caregivers	What they mentioned/observed as challenges that the caregivers faced to use the learned skills in day-to-day life	Perceived barriers in using learned skills for the caregivers of ALIVE program
Recommendations for full trial	Recommendations	Recommendations regarding materials, sessions, content, methods, timing, duration, supervision for improvement of the program in the future	Recommendation for improvement of supervision session
			Recommendation for future ALIVE program
Competencies of Facilitators	Competencies Assessment	Their perception and experience including usefulness and challenges towards assessment and evaluation tools like ENACT and WEACTION using roleplays	Perception towards usefulness of competency assessment
			Perception towards challenges of competency assessment

Facilitators

Core Concept	Themes	Descriptions	Codes
Appropriateness	Mechanism of change: Adolescents	How they mention and/or observed advantages related to the intervention in adolescents	Perception towards adolescents' benefit of participation
			Perception towards adolescents' risks of participation
			Change in facilitator's perception towards people with psychosocial problems/ living in poverty
	Mechanism of change: Caregivers	How they mention and/or observed advantages related to the intervention in caregivers	Perception towards the benefit of participation for the caregivers
			Perception towards risks of participation for the caregivers
	Content: Adolescents	How do they find the content to be in terms of comprehension, relevancy, and repetitiveness for adolescents	Perception of comprehension of the session content of adolescents
			Perception of relevancy of the session content for adolescents
			Perception of repetitiveness of the session content of adolescents
	Content: Caregivers	How do they find the content to be in terms of comprehension for caregivers	Perception to comprehension of the session content for caregivers
Feasibility	Implementation: Challenges	What they mentioned/experienced as challenges during the implementation of the intervention session	Challenges faced during the implementation of sessions among adolescents

			Challenges faced during the implementation of sessions among caregivers
			Potential future barriers to the ALIVE program
	Implementation: Positive	What they mentioned/experienced as well conducted aspects during implementation of the intervention session	Aspects that work well while implementing the ALIVE program
	Implementation: Supervision	What they mentioned/experienced regarding supervision including pre- and post-sessions, and onsite supervision during actual implementation of the intervention session	Experience of onsite supervision (frequency, length)
			Experience of weekly supervision
	Attendance: Adolescents	How easy or difficult was it for the adolescents to participate in the session, and why	Reasons for adolescents not attending the session
			Reasons for adolescent dropout
	Attendance: Caregivers	How easy or difficult was it for the caregivers to participate in the session, and why	Reasons of not attending the session for the caregivers
			Reasons of dropout for the caregivers
Recommendation for full trial	Recommendations	Recommendations regarding materials, sessions, content, methods, timing, duration, supervision for improvement of the program in the future	Recommendation for supervision improvement
			Recommendation for improvement of the ALIVE intervention
Competencies of Facilitators	Competencies Assessment	The facilitator's perception and experience towards assessment and evaluation tool like ENACT and WEACT using roleplays	Experience of ENACT and WEACT
	Mechanism of change: Individual level	How they mention and/or experienced advantages related to the content of the training in individual level including perception towards people with psychosocial problem, people living with poverty, changes that	Liked experience of training (post-intervention)
			Training's impact on change of perception towards people with

		they experienced on self-related to personal, family, social aspect, changes that they observed in peer facilitators	psychosocial problems
			Changes in the facilitator's personal, behavioural, family, and social aspects
	Enabling Factor: Facilitation	What supported /encouraged them to engage as a facilitator	Motivation towards participation as a facilitator
	Mechanism of change: Competencies	How they mention and/or experienced advantages related to the content of the training towards competencies of facilitation	Post-training learning
	Recommendation: Training of Facilitators	Recommendations regarding the training content, methodology, and additional areas of training that needs to be included in facilitator's training program	Recommendation for training (ToF) improvement (post ToF)
			Further training needed (post ToF)
			Recommendation for training (ToF) improvement (post intervention)
			Further training needed (post intervention)