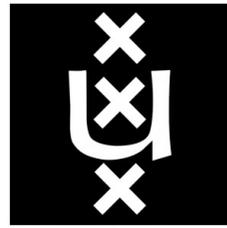


Developing an evidence-based mental health care system for children

Mark Jordans

*King's College London
University of Amsterdam
War Child Alliance*



Context



A photograph of a refugee camp. In the foreground, two young boys are sitting on the ground. One boy, wearing a blue shirt, is holding an open book. The other boy, wearing a red and blue shirt, is sitting next to him. They are in front of a row of white tents made of plastic or fabric. In the background, other people, including children, are visible walking around. A dark car is parked on a gravel path. The scene is set in a dusty, outdoor environment.

**How to promote the
mental health of
children?**

**160
MILLION**

**children today live in high-intensity
conflict zones. Over time, one in
eleven will have a moderate or
severe mental disorder.**

High intensity
conflict zones
(more than
1,000 battle-
related
deaths in a
year)

A photograph of a refugee camp. In the foreground, two young boys are sitting on the ground. One boy, wearing a blue shirt, is holding an open book and looking at it. The other boy, wearing a red and blue shirt, is sitting next to him, looking towards the right. They are sitting in front of a row of white tents made of plastic or fabric. In the background, other people, including children, are visible walking around. A dark car is parked on a gravel path. The scene is set in a dusty, outdoor environment.

**How to promote the
mental health of
children?**

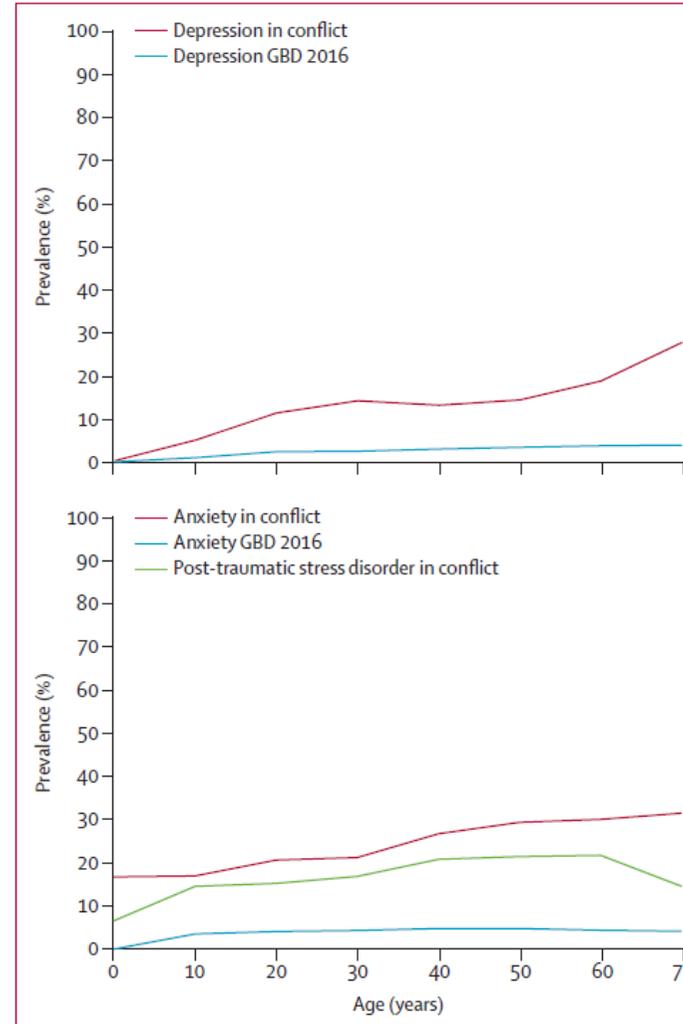
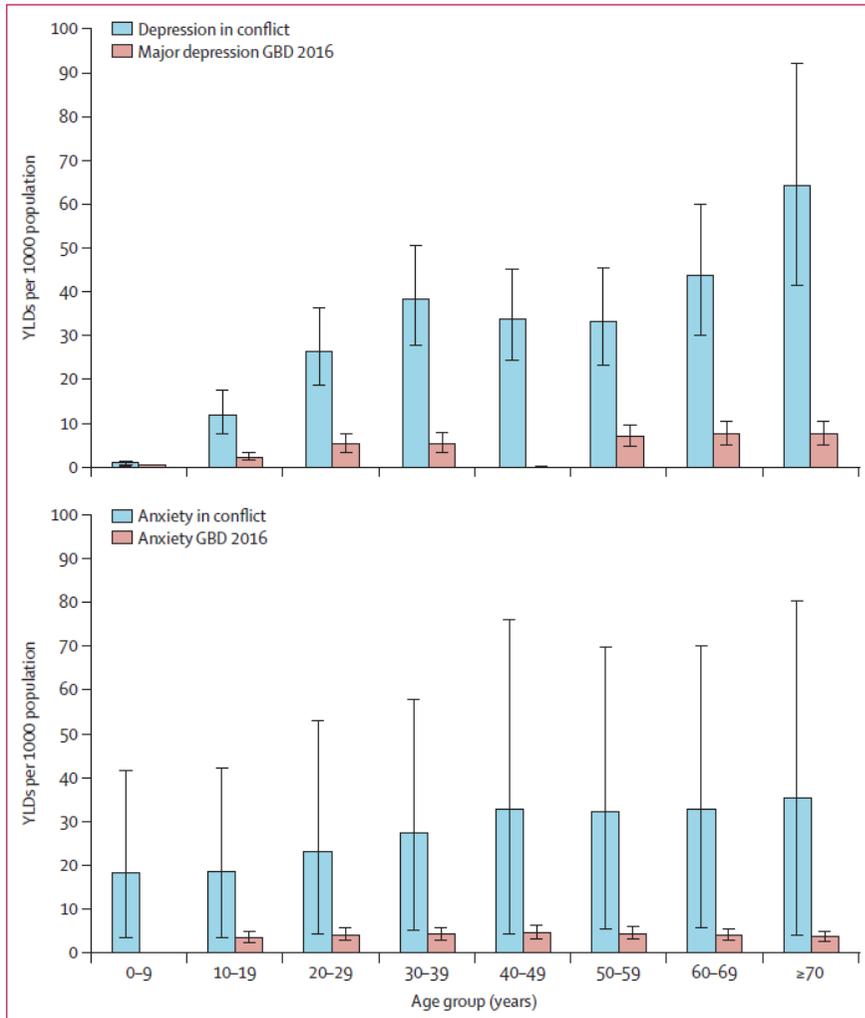
530

MILLION

**children today live in high-intensity
conflict zones. Over time, one in
eleven will have a moderate or
severe mental disorder.**

High intensity
conflict zones
(more than
1,000 battle-
related
deaths in a
year)

Conflict associated with multifold risk for depression and anxiety

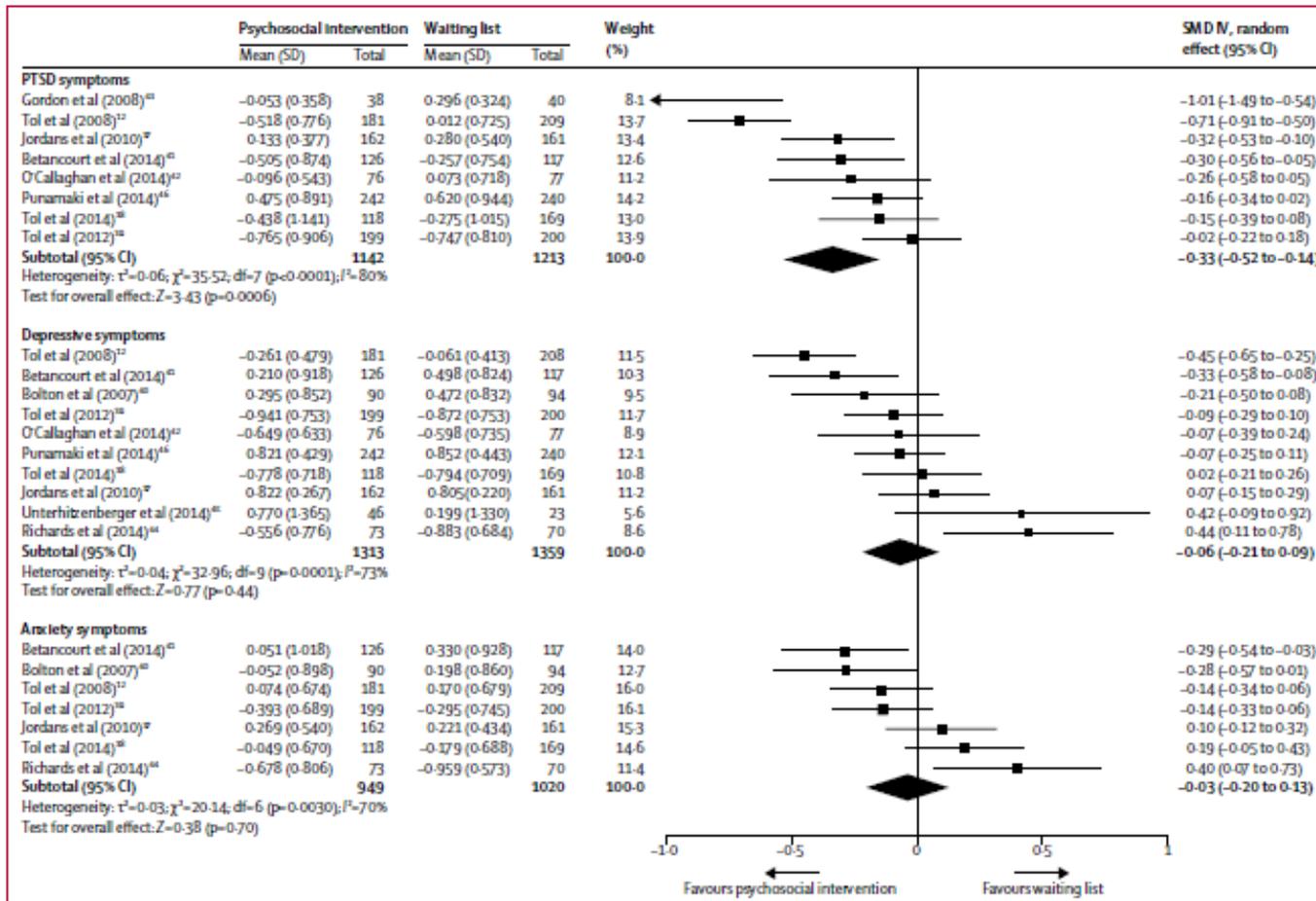


There is need to **explicitly** address the mental health needs of children affected by conflict

Response



Recommendation # 1: Strengthen evidence-base



There is a need for **more evidence** for interventions for children and adolescents (*beyond PTSD*)

Early Adolescent Skills for Emotions (EASE)

- Designed for young adolescents (10-14 years old) experiencing adversity, and impaired by distress
- Delivered in groups (around 8 adolescents)
- 7 Sessions for children, 3 for parents
- Non-specialist psychosocial support providers receiving a 8-10 day training
- Content:
 - Identifying feelings
 - Stress management
 - Behavioral activation
 - Problem solving



EASE trials

- Design

- Individually randomized group treatment trial

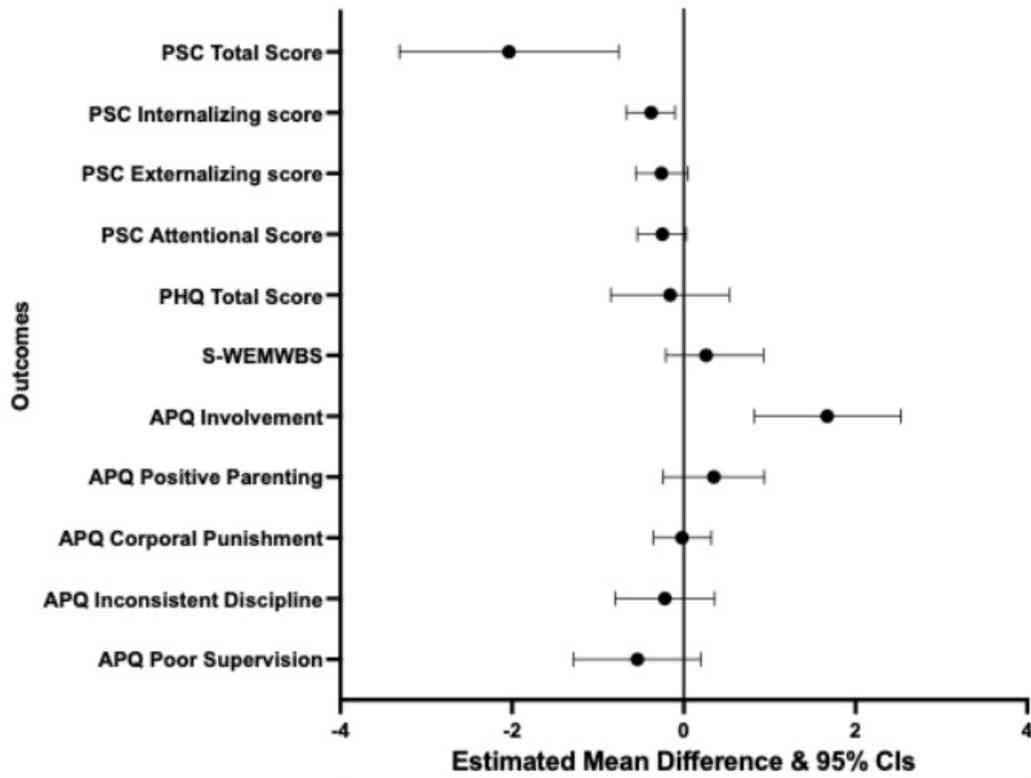
- Sample

- N=445 Lebanon
- N=471 Jordan
- N=566 Pakistan

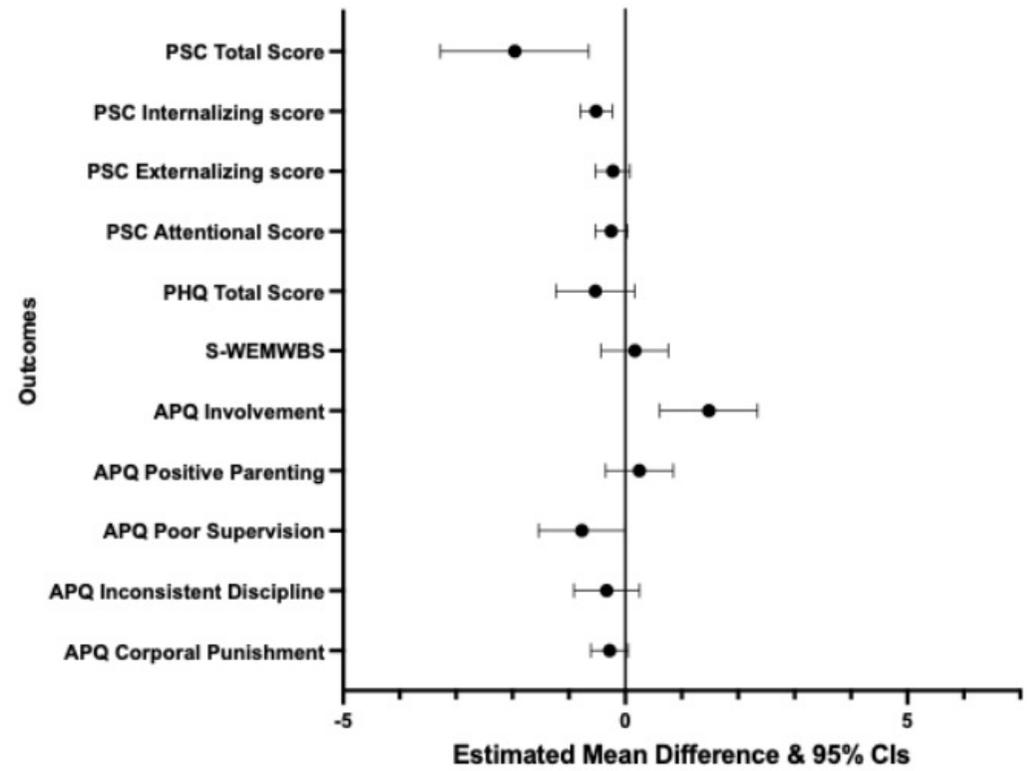
Domain	Tool	# items
Screening measures		
Child Symptoms	Pediatric Symptom Checklist	17
Outcome measures		
Primary		
Child-reported child psychological distress	Pediatric Symptom Checklist – youth version (Y-PSC)	35
Secondary		
Caregiver-reported child psychological distress	Pediatric Symptom Checklist – caregiver version (PSC)	35
Depression	Patient Health Questionnaire - adolescents (PHQ-9)	9
Posttraumatic stress	Children’s Impact of Events Scale (CRIES-13)	13
General functioning	Impairment in daily functioning	9
Well-being	Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS)	14
Caregiver		
General psychological distress	Kessler 6 (K6)	6
Parenting	Alabama Parenting Scale	42
Other		
Exposure to traumatic events (moderator)	Adapted from: Harvard Trauma Questionnaire (HTQ)	27
Strategy use (mediator)	Strategy Use Questionnaire (child & caregiver)	7, 8
Service use and barriers	CSRI and AHCS	

Results pooled analyses (n=1482)

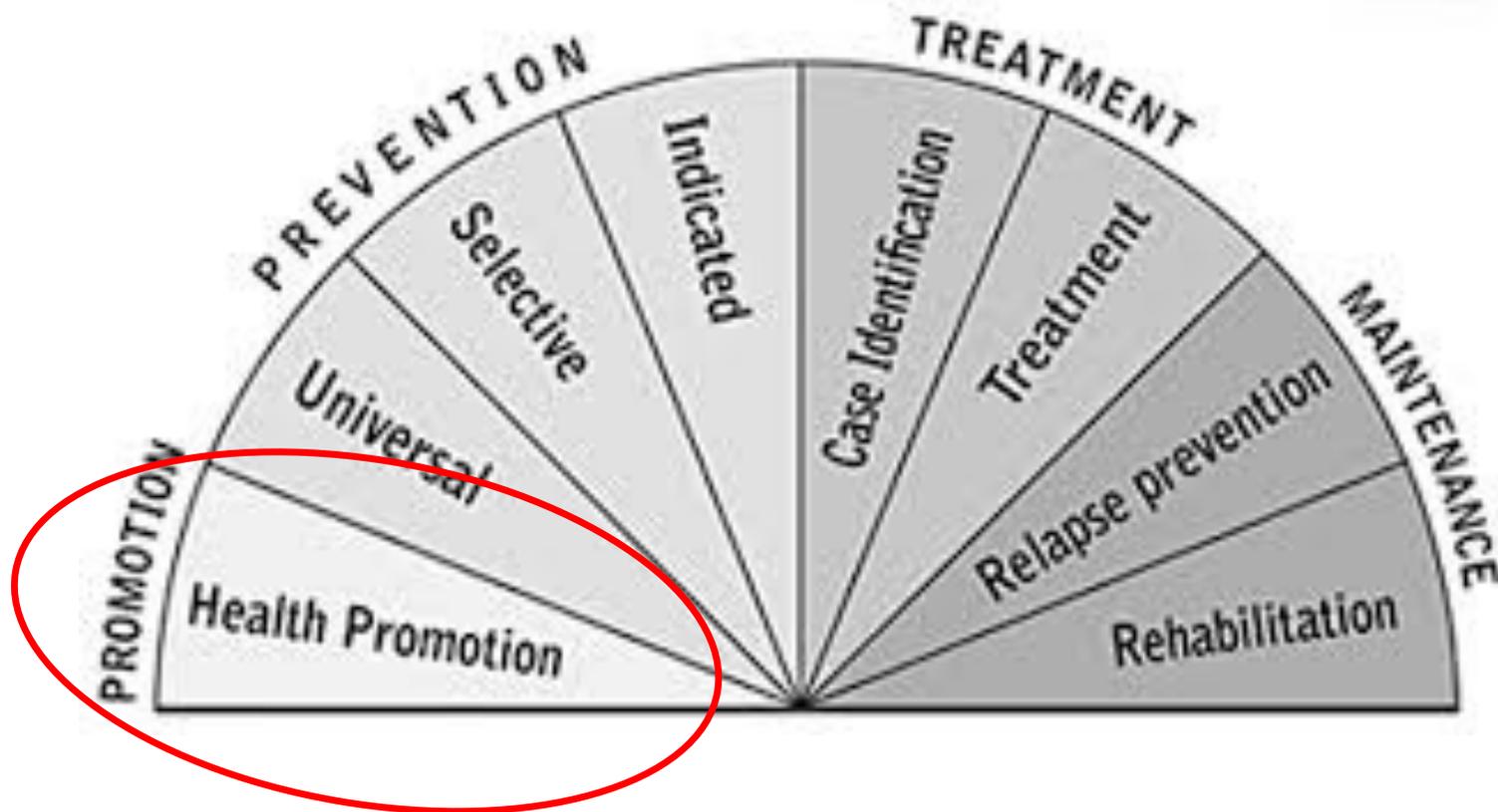
Change in Outcomes from T0 to T1 in Pooled Sample



Change in Outcomes from T0 to T2 in Pooled Sample

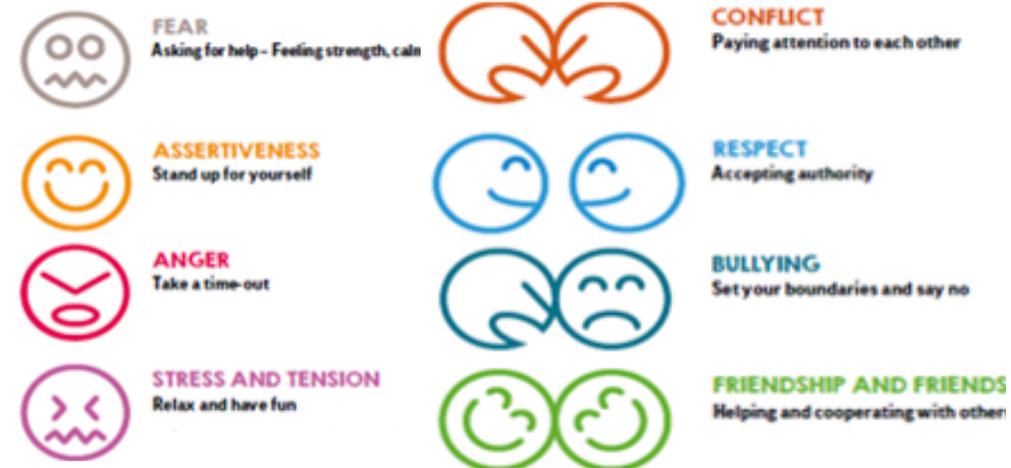


Recommendation # 2: mental health prevention and promotion



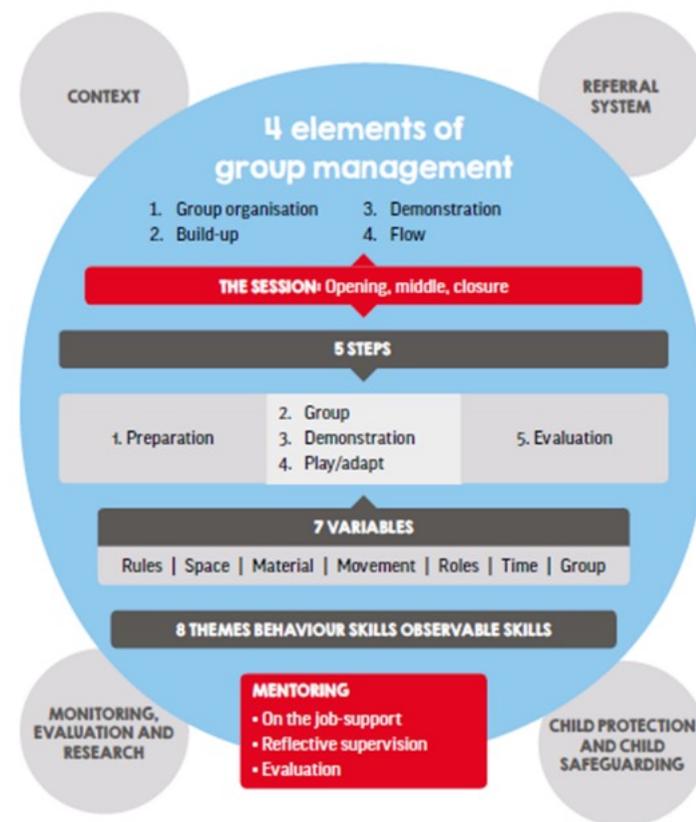
TeamUp: a mental health promotion intervention

- TeamUp is a **structured movement- and activity- based**, mainly non-verbal, psychosocial intervention (children 6-11; 12-17)
- Offers safety, structure and social interaction in order to improve **wellbeing, social connectedness, activation, self-regulation**



How is TeamUp implemented?

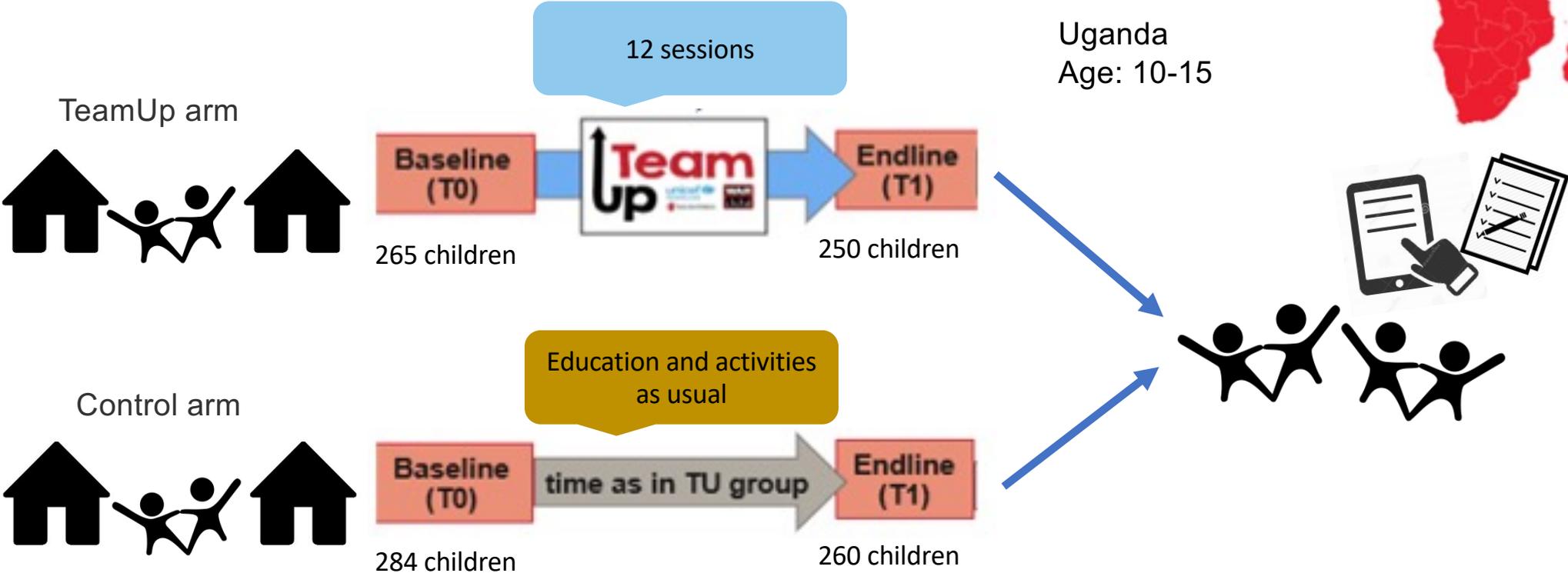
- Structured with opening, warm-up, main activities, cooling-down and closing routine
- 45-60-minute group sessions
- 20-40 children per group
- Aged 6-11 / 10-15 / 12-17
- Team of 2-3 trained facilitators per group



Quasi-experimental study amongst refugees (n=549)



Uganda
Age: 10-15

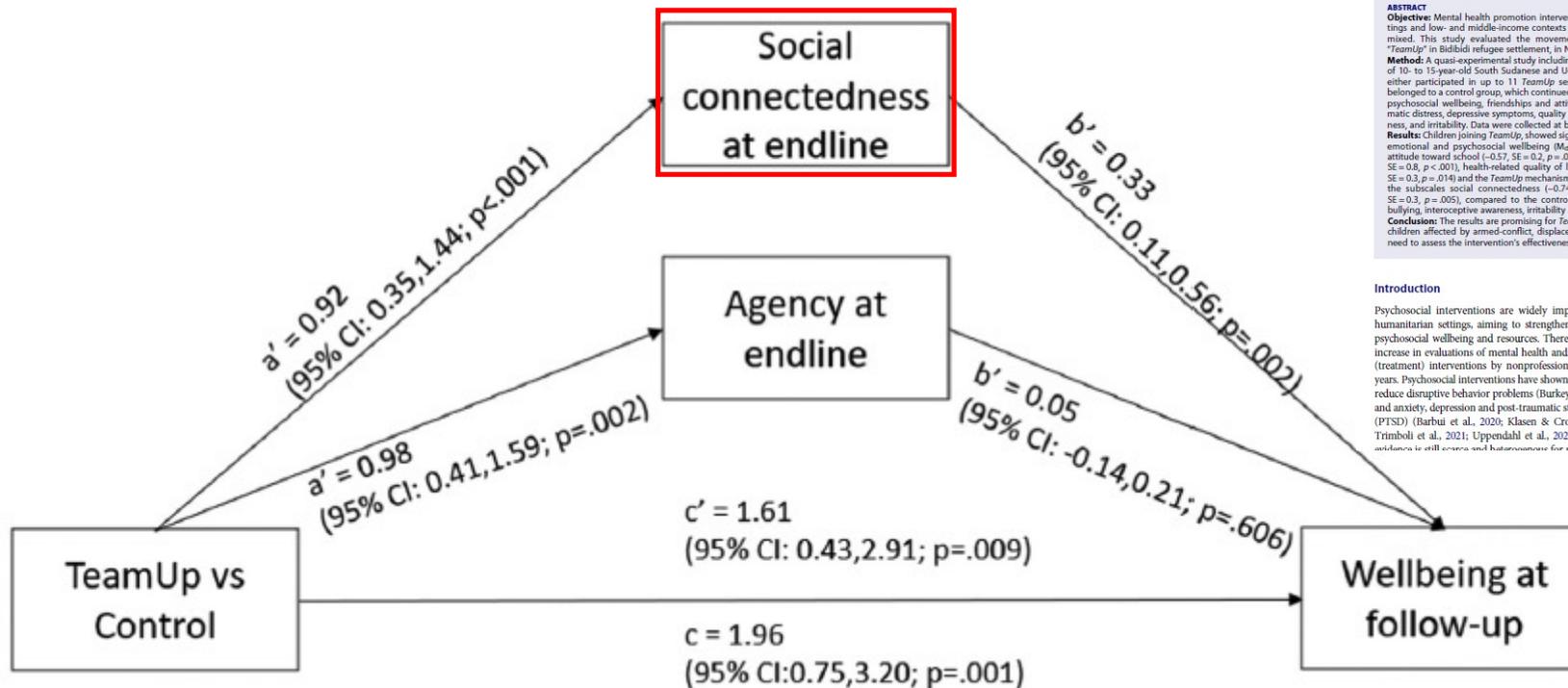


Results

Outcome measures	construct	Time point	Mean (SD)			Estimated Treatment Effect		
			Total (n = 549)	Control (n = 284)	TeamUp (n = 265)	Mean Difference* (95% CI)	Cohen's d	significance
Primary outcomes								
SCWBS	Emotional and psychological wellbeing	T0	30.50 (7.7)	30.89 (7.4)	30.09 (8.1)	-1.49 (-2.65;-0.33)	0.22	.012
		T1	30.49 (6.7)	29.83 (6.5)	31.18 (6.9)			
Positive outlook	Positive outlook	T0	14.88 (4.5)	15.25 (4.4)	14.48 (4.7)	-0.44(-1.14;0.26)	0.10	.222
		T1	14.84 (4.1)	14.69 (3.9)	15.01 (4.2)			
Emotional state	Emotional state	T0	15.62 (4.1)	15.64 (3.8)	15.60 (4.3)	-1.02 (-1.63;-0.42)	0.29	.001
		T1	15.64 (3.5)	15.15 (3.4)	16.17 (3.5)			
MSLSS Friends	Friendships	T0	25.12 (5.9)	24.88 (6.0)	25.39 (5.9)	-0.74(-1.70;0.22)	0.13	.085
		T1	24.98 (5.6)	24.57 (5.6)	25.42 (5.5)			
MSLSS School – positive items only	Satisfaction with and attitude toward school	T0	17.15 (2.6)	17.18 (2.4)	17.12 (2.8)	-0.57(-0.97;-0.18)	0.24	.004
		T1	17.21 (2.4)	16.94 (2.4)	17.51 (2.3)			

- Benefits on secondary outcomes
 - Traumatic stress (d=0.29)
 - Quality of Life (d=.30)
 - Irritability and anger management (d=.25)
- Small effects - in line with mental health promotion intervention

Mediation



Evaluating a Movement-Based Mental Health Promotion Intervention for Refugee Children in Uganda: A Quasi-Experimental Study

Alexandra C. E. Bleile^{a,b}, Gabriela V. Koppenol-Gonzalez^c, Bruce Orech^d, Katia Verreault^e, and Mark J. D. Jordans^{a,b}

^aResearch and Development Department, War Child; ^bAmsterdam Institute of Social Science Research, University of Amsterdam; ^cInternational Programmes Department, War Child

ABSTRACT

Objective: Mental health promotion interventions are widely implemented in humanitarian settings and low- and middle-income contexts (LMICs), yet evidence on effectiveness is scarce and mixed. This study evaluated the movement-based mental health promotion intervention “TeamUp” in Bidibidi refugee settlement, in Northern Uganda.

Method: A quasi-experimental study including four schools (two per arm) assessed the outcomes of 10- to 15-year-old South Sudanese and Ugandan children ($n = 549$). Randomly allocated, they either participated in up to 11 TeamUp sessions ($n = 265$) provided by trained facilitators; or belonged to a control group, which continued care as usual ($n = 284$). Primary outcomes measured psychosocial wellbeing, friendships and attitude to school; secondary outcomes included traumatic distress, depressive symptoms, quality of life, physical health, bullying, interceptive awareness, and irritability. Data were collected at baseline and endline.

Results: Children joining TeamUp, showed significantly more improvements on primary outcomes: emotional and psychosocial wellbeing ($M_{\text{diff}} = -1.49$, $SE = 0.6$, $p = .01$), satisfaction with and attitude toward school (-0.57 , $SE = 0.2$, $p = .004$); and secondary outcomes: traumatic stress (2.64, $SE = 0.8$, $p < .001$), health-related quality of life (-1.56, $SE = 0.4$, $p = .001$), physical health (-0.28, $SE = 0.2$, $p = .014$) and the TeamUp mechanisms of action scale (-3.34, $SE = 0.9$, $p < .001$), specifically the subscales social connectedness (-0.74, $SE = 0.3$, $p = .007$) and sense of agency (-0.91, $SE = 0.2$, $p = .005$), compared to the control group. No significant differences were found on bullying, interceptive awareness, irritability and depressive symptoms.

Conclusion: The results are promising for TeamUp as a mental health promotion intervention for children affected by armed-conflict, displacement and on-going adversity. Further research will need to assess the intervention’s effectiveness.

Introduction

Psychosocial interventions are widely implemented in humanitarian settings, aiming to strengthen individuals’ psychosocial wellbeing and resources. There has been an increase in evaluations of mental health and psychosocial (treatment) interventions by nonprofessionals in recent years. Psychosocial interventions have shown to effectively reduce disruptive behavior problems (Burkey et al., 2018), and anxiety, depression and post-traumatic stress disorder (PTSD) (Barbui et al., 2020; Klasen & Crombag, 2013; Trimboli et al., 2021; Uppendahl et al., 2020). However, evidence is still scarce and heterogeneous for mental health

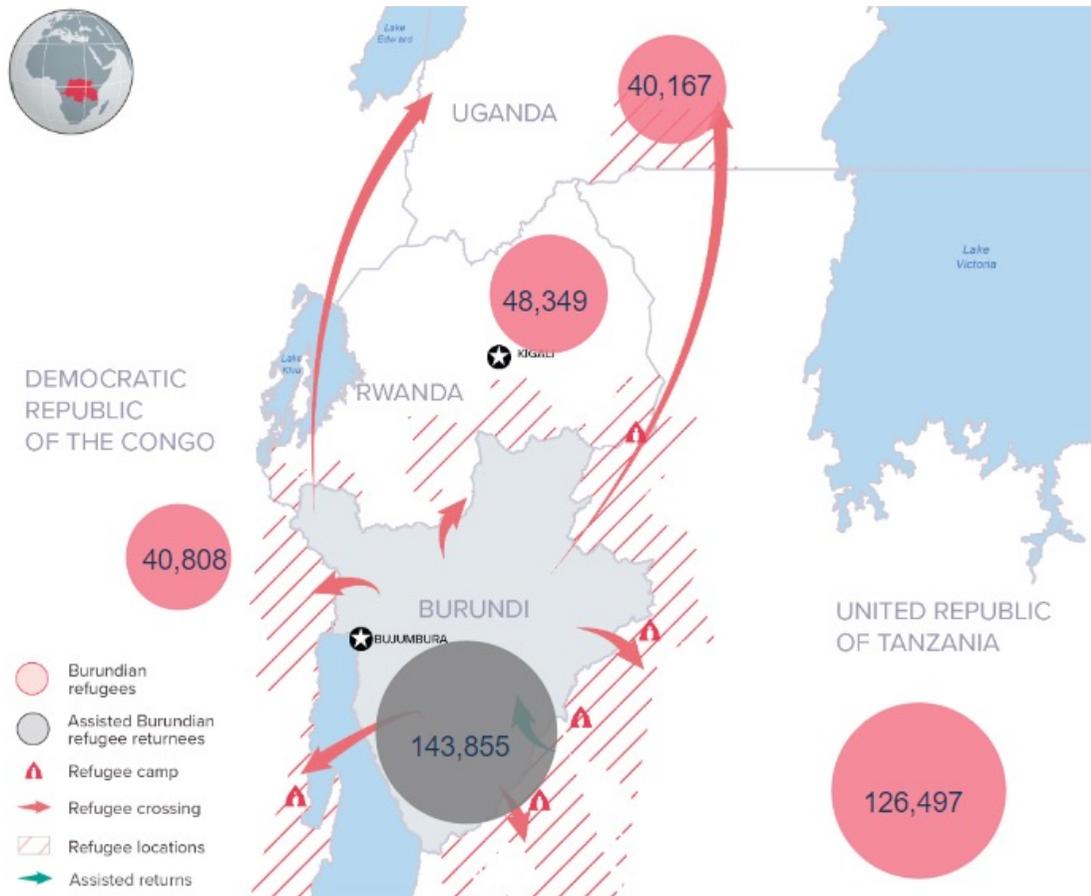
et al., 2022), conducted in LMICs are needed (Uppendahl et al., 2020; Venturo-Conerly et al., 2022). The Lancet Commission for Global Mental Health and Sustainable Development has called for an increased attention to mental health promotion and prevention, as treatments alone cannot reduce the overall burden of mental health problems (Patel et al., 2018; Tol, 2015).

Improving the mental health and wellbeing of young people is especially important, given that the majority of adult mental illness has its onset in childhood and adolescence (Kessler et al., 2007, 2009). The neuroplasticity in the first two decades of life provides for an important window of opportunity for promoting mental health

Recommendation # 3: going beyond effectiveness studies towards implementation science

- Implementation science research
 - Training and supervision
 - Delivery format
 - Delivery agent
 - Dosage 

Setting: Burundi - history of conflict and migration



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
Date: 31 August 2022 | Source: UNHCR, Government | Feedback: minuto@unhcr.org

* 255,821 represents the total # of Burundian RefAs hosted in the DRC, Uganda, Rwanda and Tanzania as of 31 March 2022.



320,670
REFUGEES AND ASYLUM-SEEKERS
IN NEIGHBOURING COUNTRIES

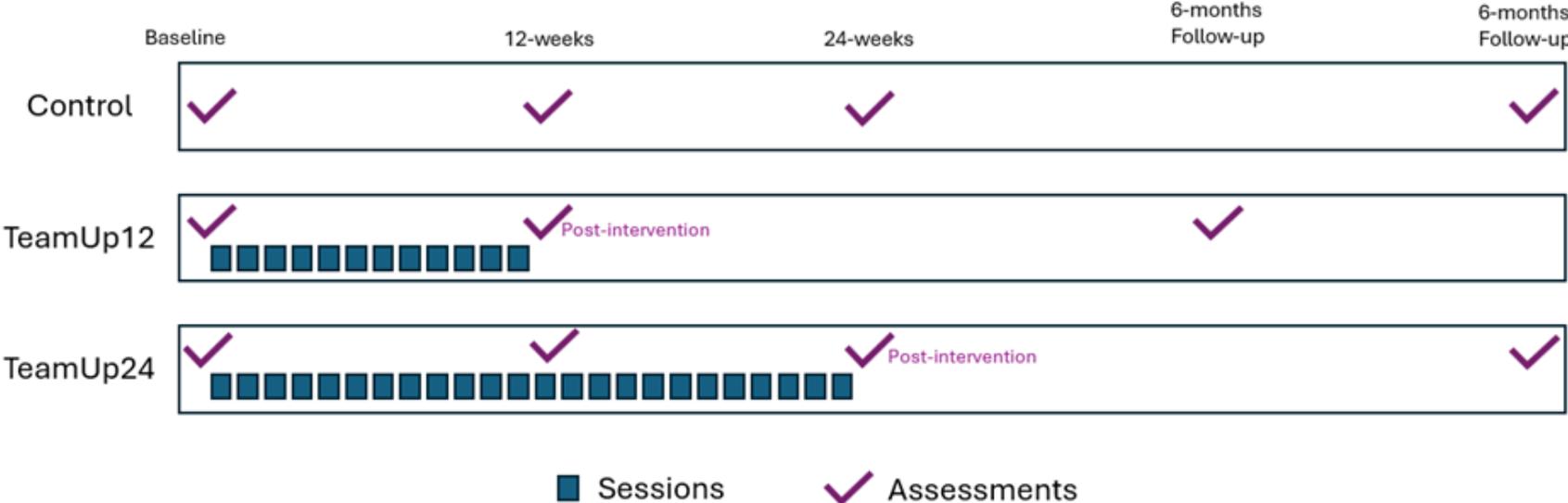
87,088
REFUGEES AND ASYLUM-SEEKERS
HOSTED IN BURUNDI

204,301
REFUGEE RETURNEES SINCE 2017

18,528
REFUGEE RETURNEES IN 2022

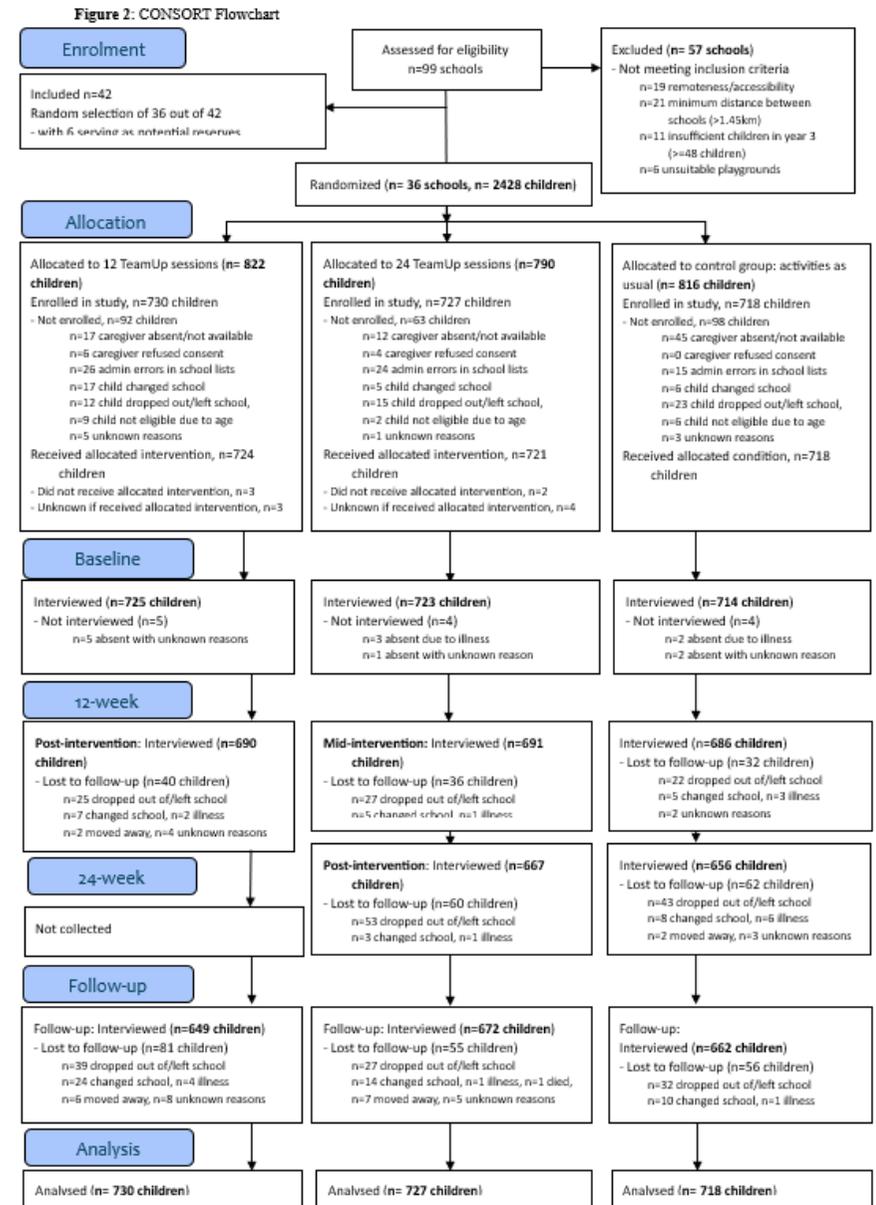
84,791
INTERNALLY DISPLACED IN
BURUNDI

Cluster RCT

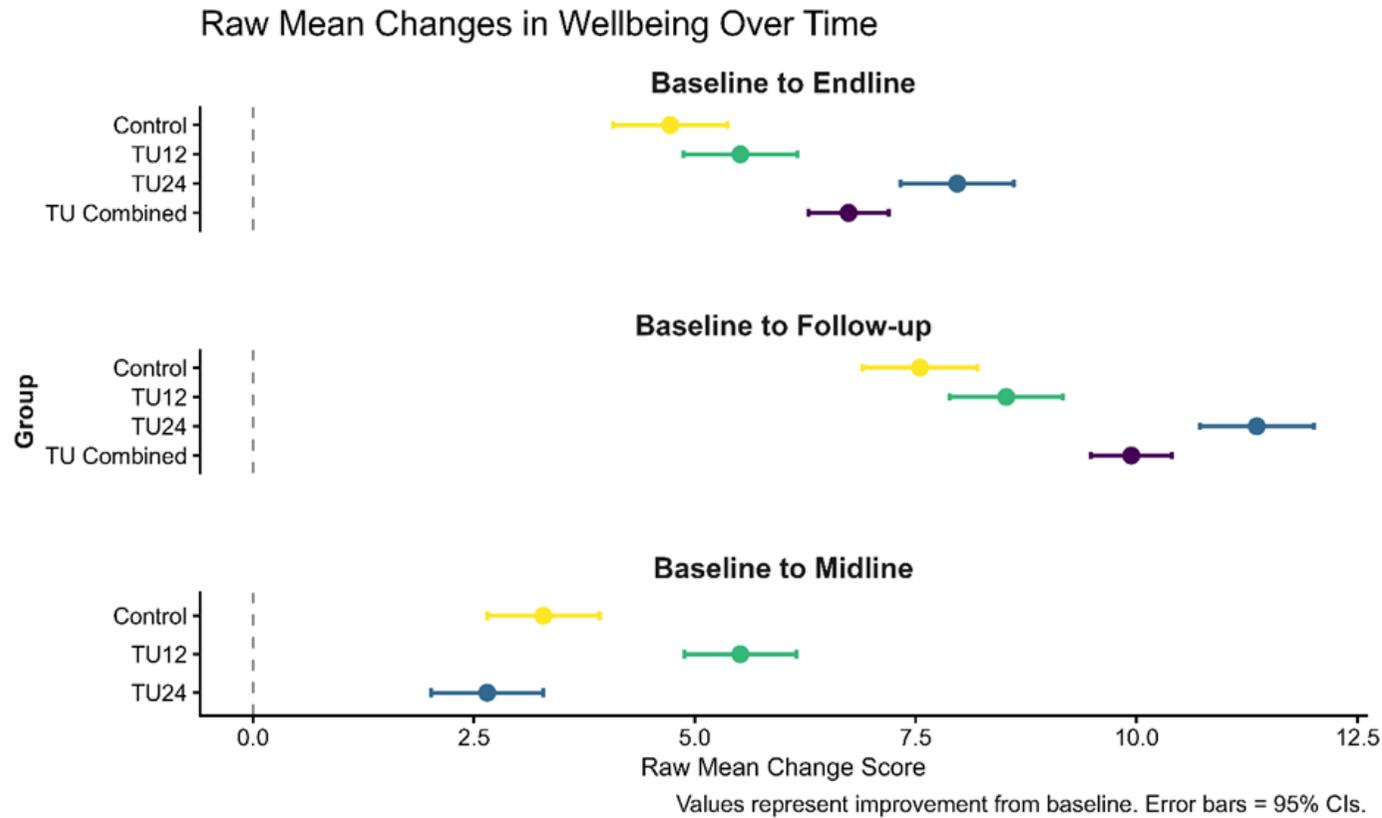


Study flowchart

- N=2428
 - N=730/ N=727/ N=718



Results on primary outcome (wellbeing)



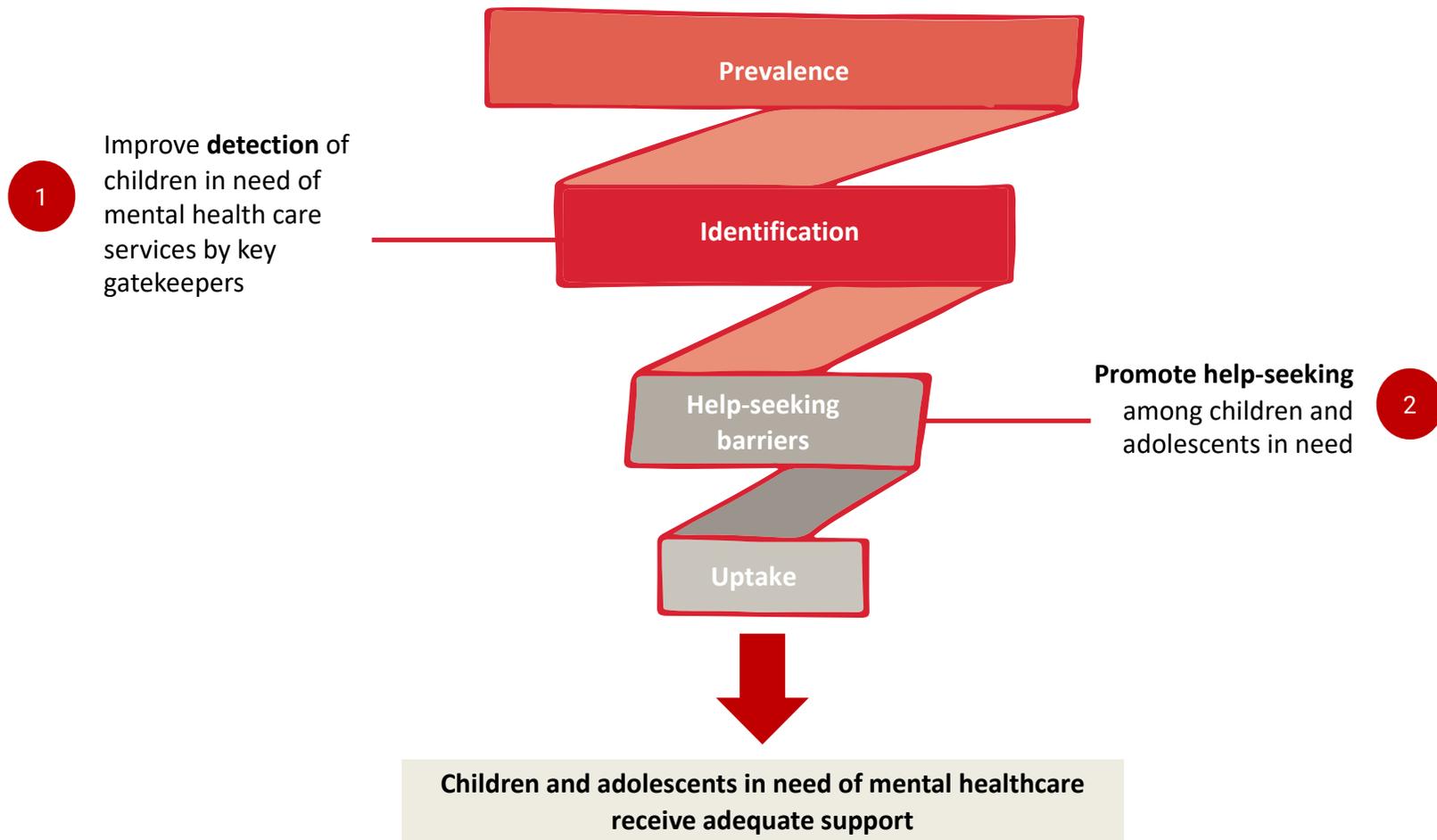
Note: Control group shows significant improvements

Results

	TU12		TU24	
	Endline	Follow Up	Endline	Follow Up
Wellbeing				
Traumatic stress				
School attitudes				
Friendships				
Quality of Life				
Hope				
Depression				
Social connected				
Physical health				
Emotion regulation				

- TeamUp is effective
 - TU12+24 > control
 - TeamUp effects are compatible with other mental health promotion intervention (Purgato et al, 2020)
- Dosage matters
 - TU24 > TU12 (at endline and follow-up)
 - TU12 > control (time-matched)
 - TU effects are larger and more outcomes

Recommendation # 4: address demand-side barriers

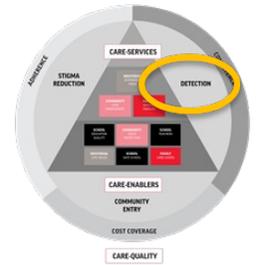




REACH NOW



Detection tool



DO YOU KNOW OR HAVE YOU HEARD ABOUT A CHILD OR ADOLESCENT WHO HAS SOME OR MANY SIMILAR PROBLEMS TO THESE?

REACH NOW
New Child Protection & Abuse Prevention

Arash is a 12-years old boy. He lives with his parents and four siblings and fled his home country with them a while ago. Since he joined his new school, he has been known as having difficulties following the rules. For some time now, Arash seems to feel angry. He started to bully his classmates and gets into fights with them more often. During the lessons, he constantly seeks attention by throwing things around the classroom. Since this has been increasing, his relationship with his old friends has deteriorated. Arash has been spending more time alone on his mobile phone and with others that have a bad influence on him. There are even rumours that he started drinking and smoking late at night with peers older than him. When his teachers or parents try to talk to him about his behaviour, Arash doesn't listen and insults them. Arash expresses that he doesn't care about anything they say and that he wants to quit school.



Do you know or have you heard about a child or adolescent (6-18 years old) who has some or many similar problems to these described above?

NO	YES I know a child with SOME of these problems	YES I know a child who has MANY of these problems
Stop	NO Do you think that these problems have been seriously affecting the child's daily functioning over the past month? (e.g. at school, in their family, or with friends?)	YES Encourage help-seeking

- Community Child Detection Tool (CCDT) developed aiming to increase helpseeking through pro-active case detection by community gatekeepers
- Overcoming demand-side barriers
- Prototype matching
- Simple decision algorithm
- *Encouragement* to seek help

Accuracy studies

How accurate are community gatekeepers in identifying children in need of mental health care (when compared to clinical interview)?

- In Palestine: **3 out of 4** children were correctly detected by teachers
- In Sri Lanka: **2 out of 3** children were correctly detected by community members



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Original article

Accuracy of a Proactive Case Detection Tool for Internalizing and Externalizing Problems Among Children and Adolescents

Myrthe van den Broek, M.Sc.^{a,b,*}, Lina Hegazi^c, Nisreen Ghazal, M.P.H.^d, Layaly Hamayel, M.Sc.^d, Anna Barrett, MPsych, Ph.D.^c, Brandon A. Kohrt, M.D., Ph.D.^e, and Mark J. D. Jordans, Ph.D.^{a,b}

^a Research and Development Department, War Child Holland, Amsterdam, The Netherlands

^b Amsterdam Institute of Social Science Research, University of Amsterdam, The Netherlands

^c War Child Holland, Jerusalem, Occupied Palestinian Territory

^d Clinical Unit, Palestinian Counseling Center, Jerusalem, Occupied Palestinian Territory

^e Department of Psychiatry and Behavioral Sciences, The George Washington University, Washington, DC

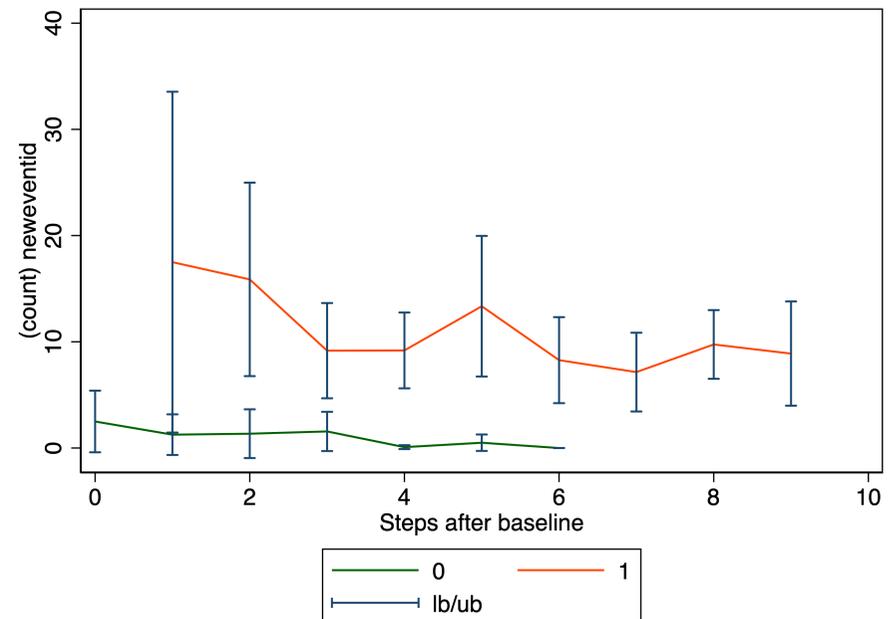
Article history: Received September 24, 2020; Accepted March 15, 2021

Keywords: Children; Adolescents; Detection; Mental health; Gatekeepers; Help-seeking; Occupied Palestinian territory

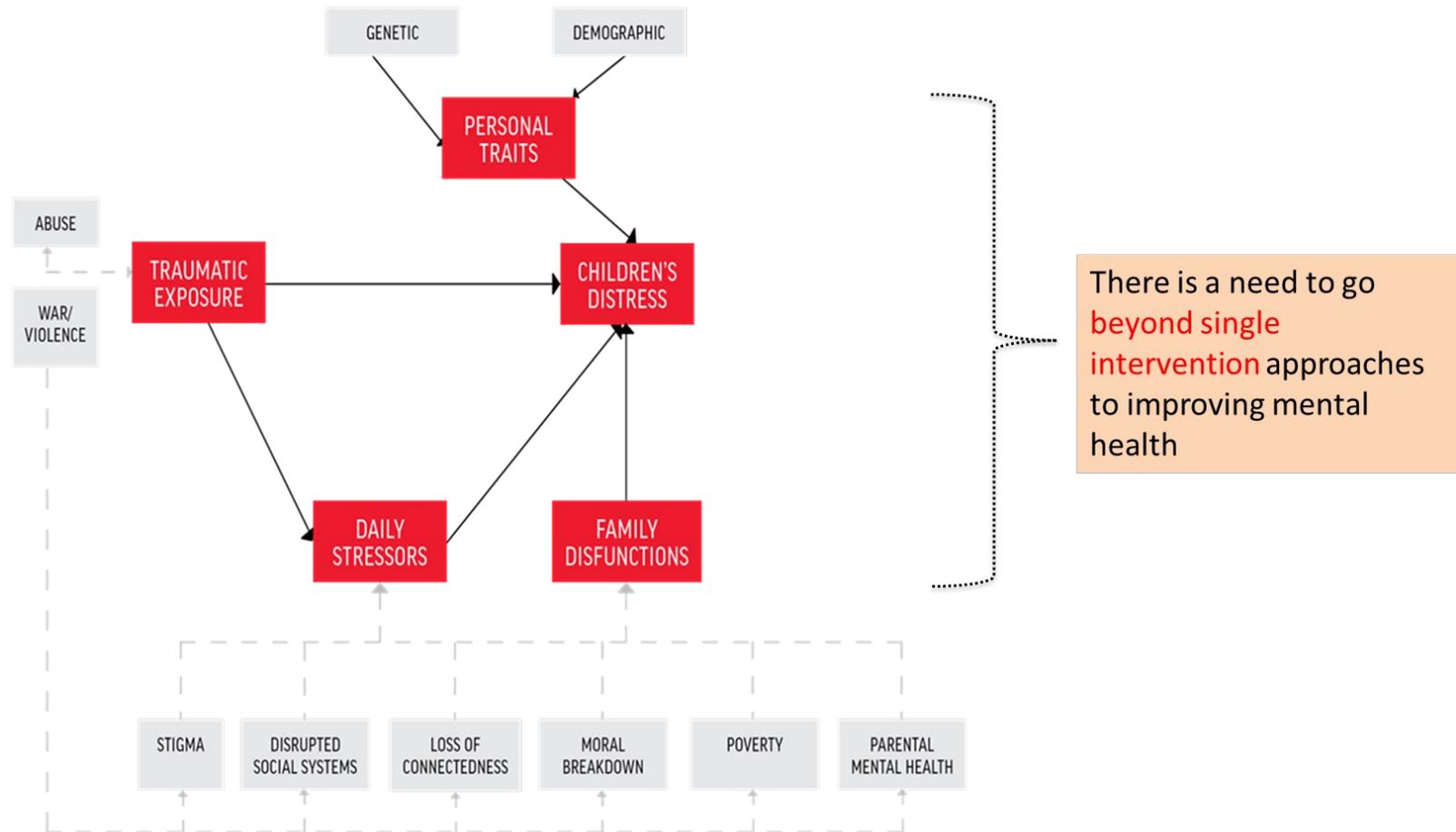
Effectiveness research

How effective is the use of the case detection strategy in improving help-seeking, when compared to available outreach methods?

- Stepped-Wedge Trial in Uganda, 28 clusters
- Time-averaged 17.69 fold (8.44, 37.11) increase in the utilization rate



Recommendation # 5: beyond singular or siloed interventions



OUR CARE SYSTEM APPROACH



• Is **socio-ecological**, taking into account the social environment surrounding each child, and supports not only children themselves but their peers, families, educators and communities as well.

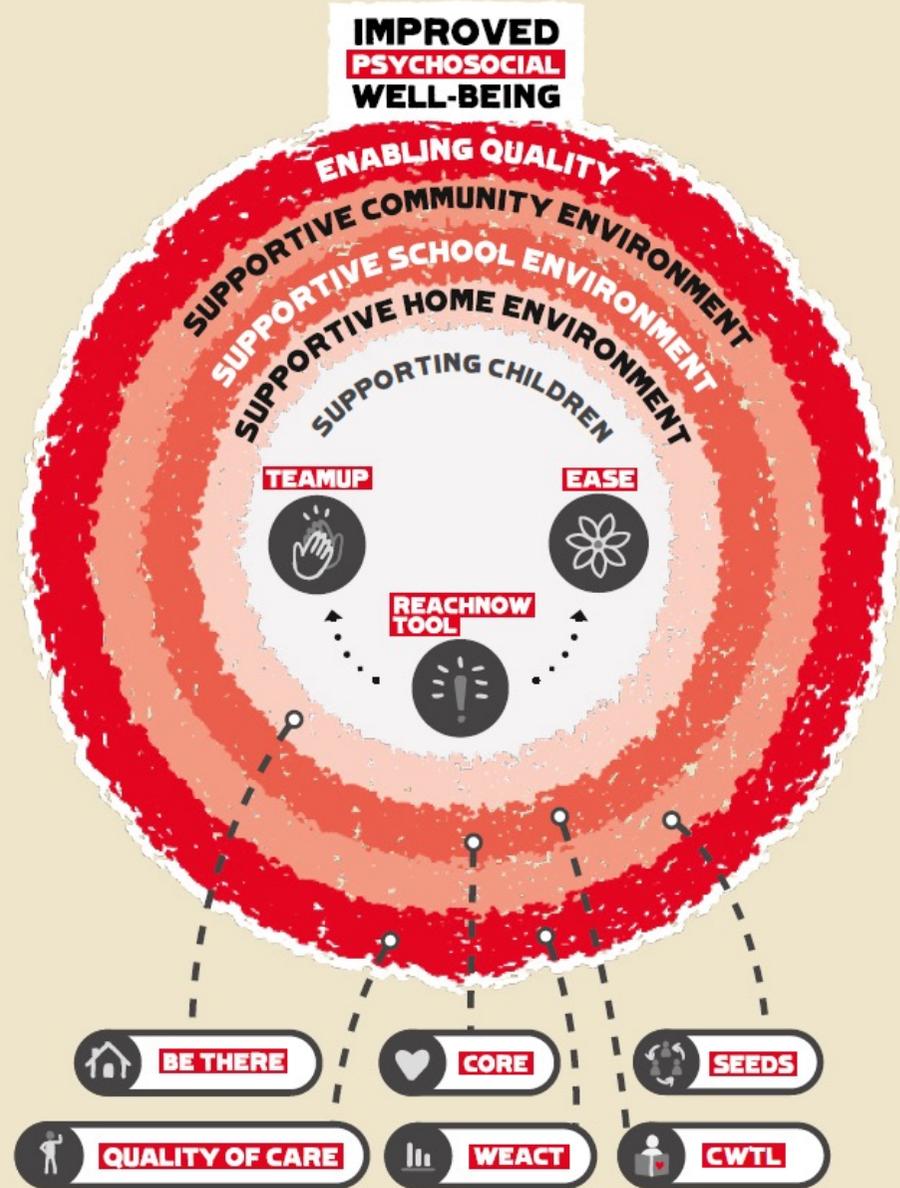


• Is **multi-disciplinary**, acknowledging the vast roles that various disciplines have to offer to children's wellbeing. War Child's strength lies in integrating education, child-protection, (youth) empowerment and mental health and psychosocial support.

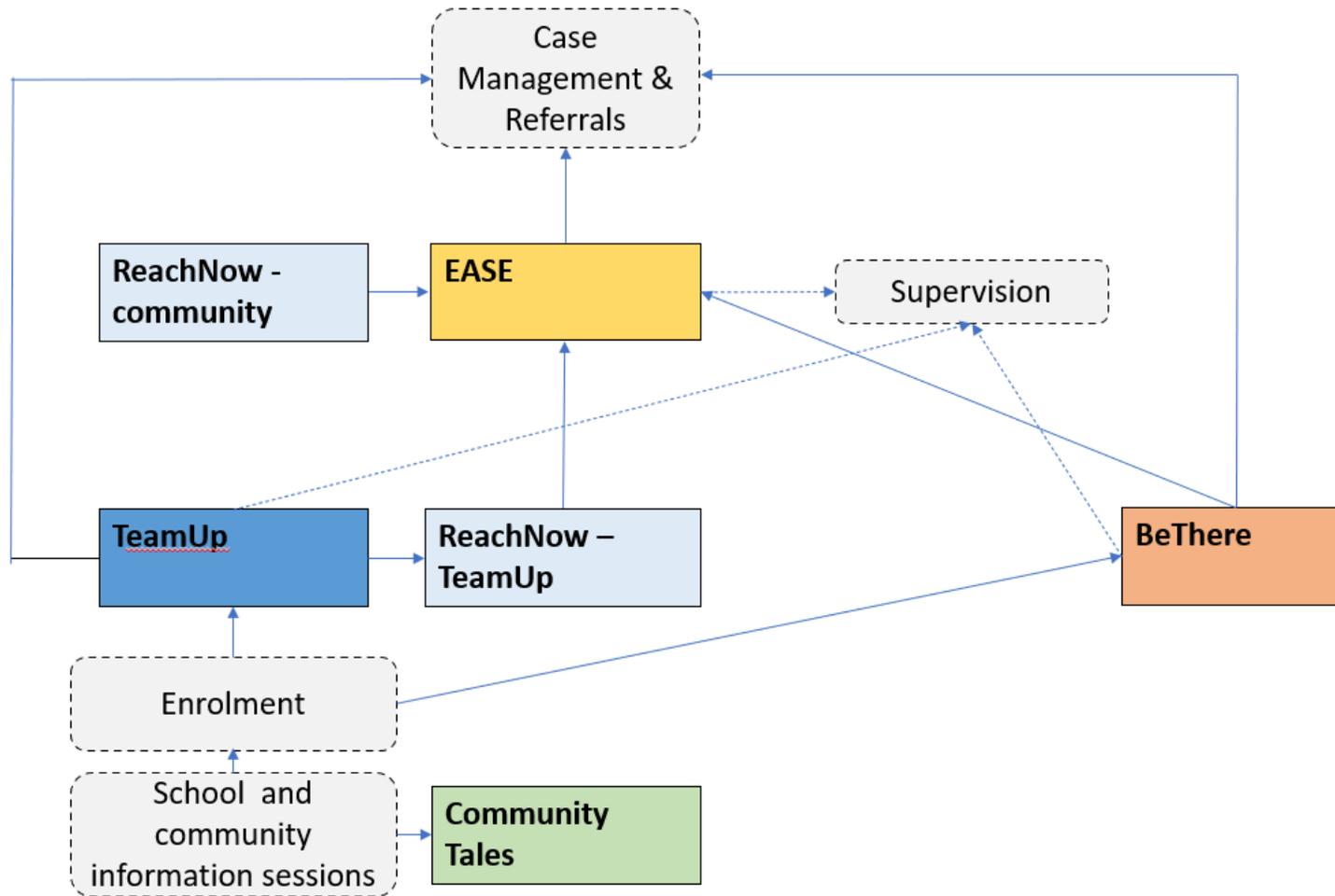


• Is **multi-levelled**, recognizing that conflict affects children and the people around them in different ways and they requires different kinds of supports. A multi-levelled approach refers to a layered system of complementary support that meets the needs of different groups, along a spectrum of severity.

Key features of a Care System approach include combining a set of **interconnected** methodologies to respond to multiple needs as opposed to a singular focus, addressing barriers to care, and ensuring the quality of care.

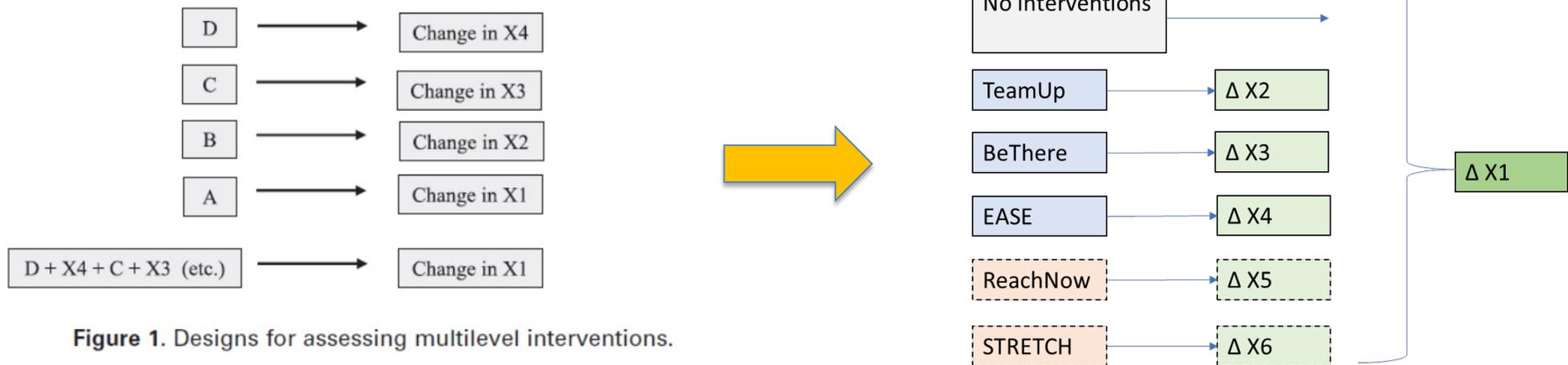


Pamoja: mental health care system for children



Pamoja a cluster RCT to evaluate population-level outcomes

[RQ] What is the effectiveness of a multi-level multi-component care system on reducing population level depression, anxiety and externalizing symptoms amongst adolescents, aged 11-16 years?

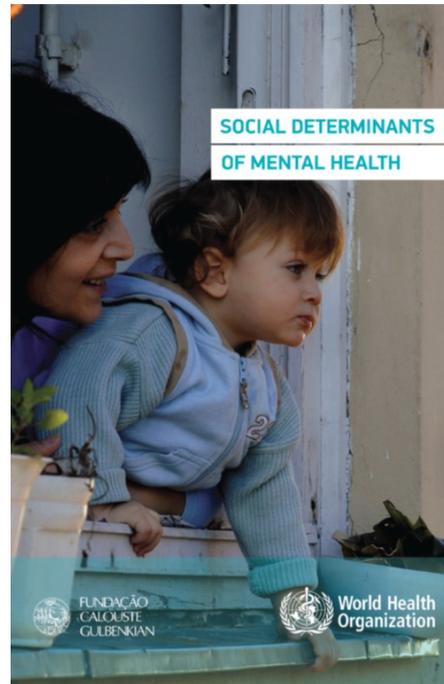




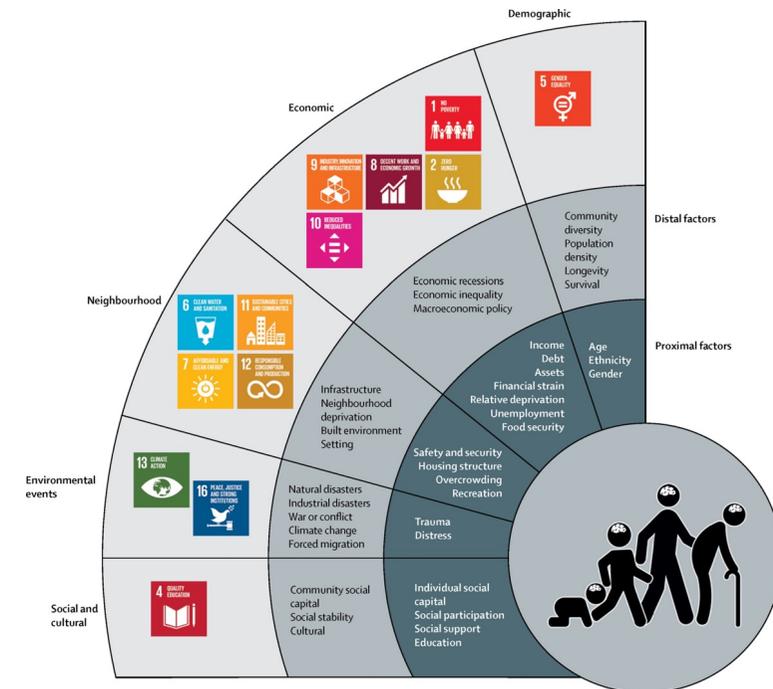
Recommendation # 6: Addressing social determinants and contextual factors



“Mental health is determined by a complex interplay of individual, family and community, and structural factors.”



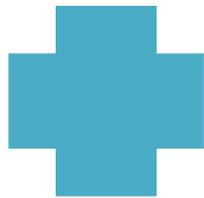
“Certain population subgroups are at higher risk of mental disorders because of greater exposure and vulnerability to unfavorable social, economic, and environmental circumstances, interrelated with gender.”



Evidence for proximal and distal social determinants of mental health (Lund et al, 2018)

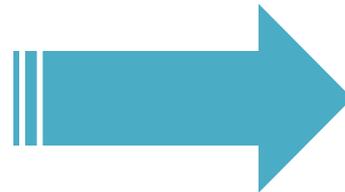
Integrated, intersectoral intervention

- Beyond bio-medical
- Beyond treatment
- Beyond scientific reductionism



ADDITIVE

E.g., in the same community:
community mobilization to
address gender norms and
scaled-up provision of stress
management interventions



MAINSTREAMING

E.g., providing family-based
livelihoods interventions with
principles of stress
management embedded in
every facet of delivery



COMBINED

E.g., a single intervention that
combines stress management
with poverty reduction
components

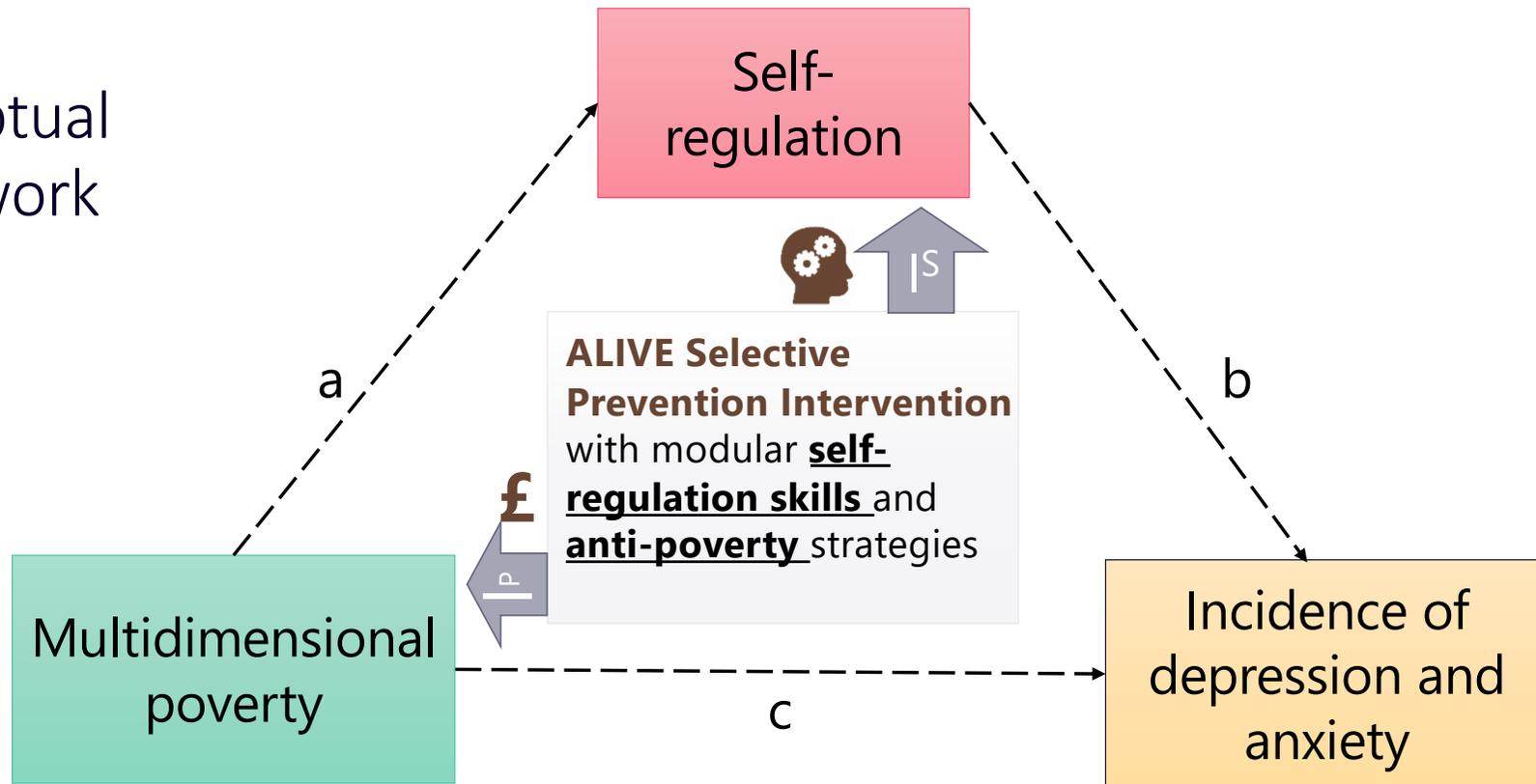
ALIVE



- 90% of the world's 1.2 billion adolescents live in low and middle-income countries
- Almost one third (30.5%) are multidimensionally poor, constituting a major risk for mental health conditions
- Depression and anxiety account for over a third (34.8%) of years lived with disability
- How can we prevent depression and anxiety among adolescents living in urban poverty in diverse low- and middle-income countries?



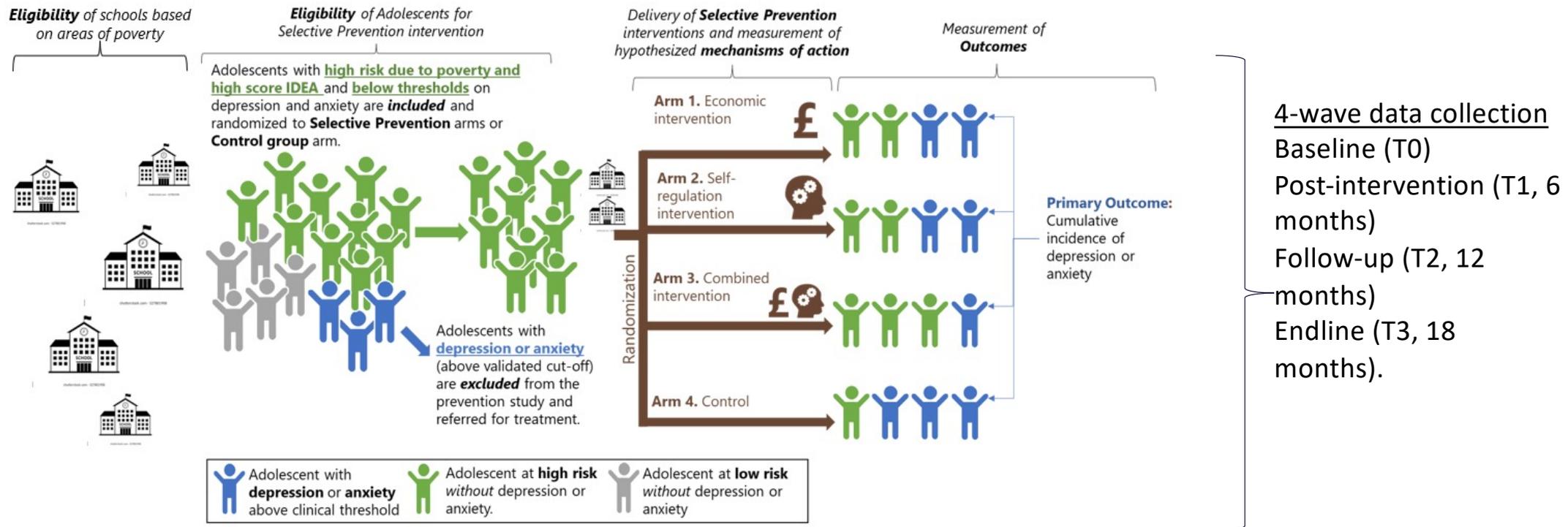
Conceptual framework



Footnote to Figure: Multidimensional poverty increases the risk of depression and anxiety among adolescents (c), and this association is mediated through the impact of poverty on self-regulation (a), and the association between self-regulation and depression and anxiety (b). The ALIVE intervention includes *self-regulation modules* (I^S) and *anti-poverty modules* (I^P); the combined effects of these interventions then reduce the risk of depression and anxiety among adolescents (b and c).

Design

- Parallel 4-arm cluster Randomized Controlled Trial



Thank you

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Recommendation # 7: quality of mental health care delivery

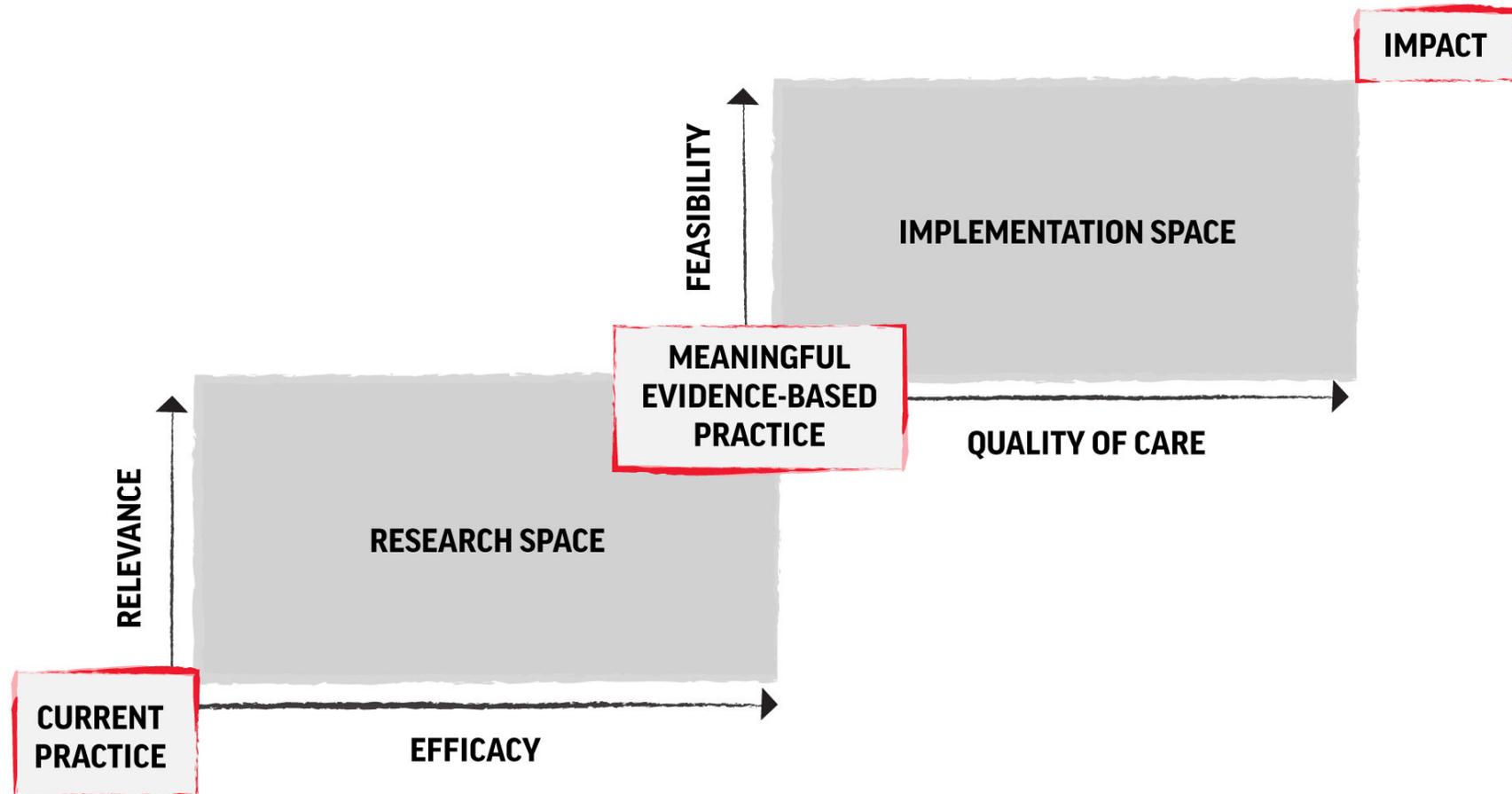


The Quality Mental Health Care Framework, Canada



QualityRights emphasizes agency, voice, and non-pathologizing approaches

Roadmap to Impact



QUALITY OF CARE

Measuring and maintaining the quality of interventions implemented at scale remains a challenge in the humanitarian sector. War Child has recognized this sector-wide issue and developed a Quality of Care framework that can provide a solution - using three simple-to-use indicators.

OBJECTIVE

To monitor, maintain and improve implementation quality at scale, by systematically collecting, assessing and interpreting three indicators.

QUALITY OF CARE INDICATORS



Attendance: measuring the number of sessions attended by participants using the attendance app.



Fidelity: evaluating the degree to which a methodology is implemented as designed.



Competency: assessing the competencies of community-level service providers, using the WeACT and ENACT tools.

QUALITY OF CARE DATABASE AND DASHBOARD



Quality of Care database and dashboard are in development. The database will store indicator data from War Child and our partners. The dashboard will summarize and visualize the data, to allow for data-driven supervision and quality assurance support.

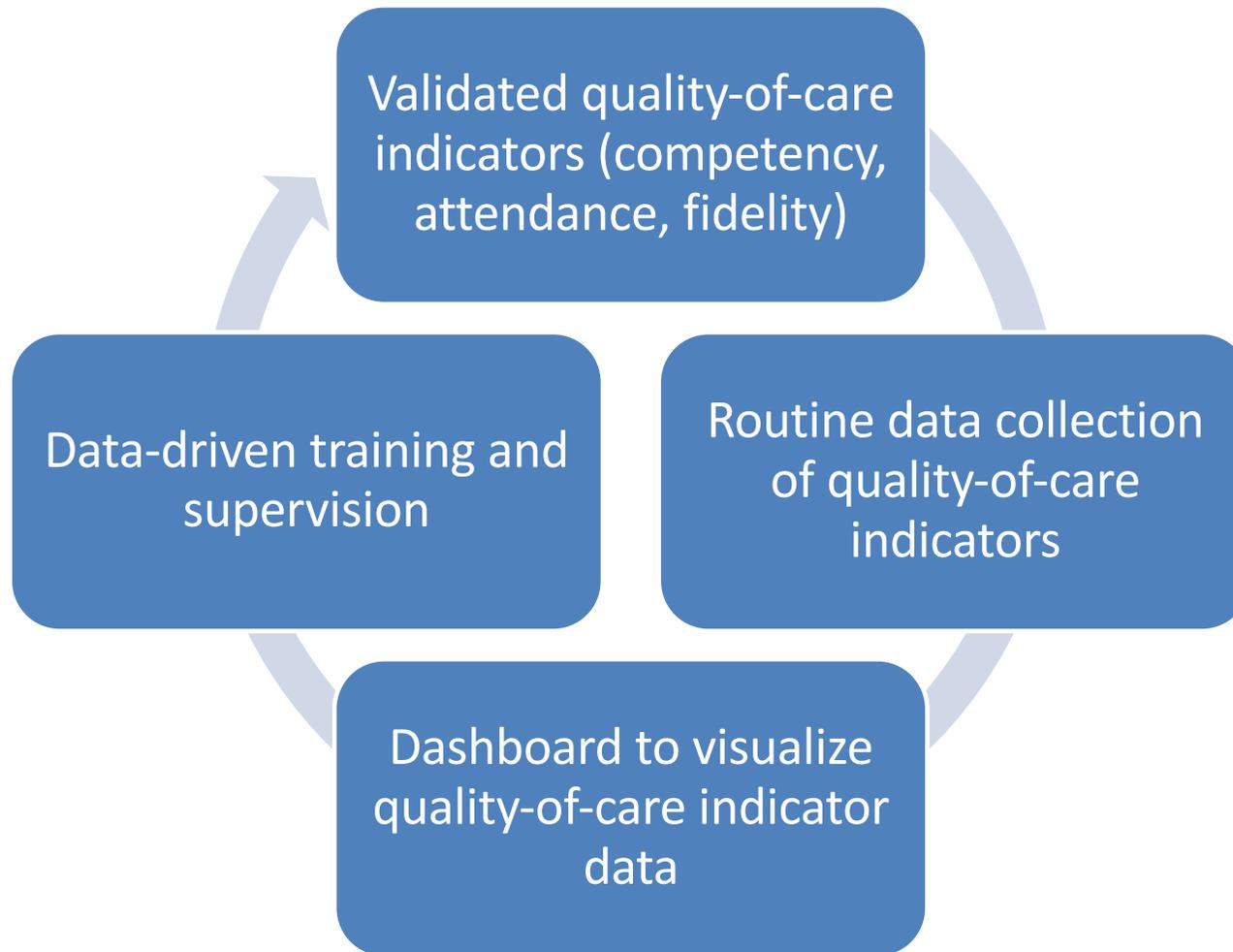
ATTENDANCE APP

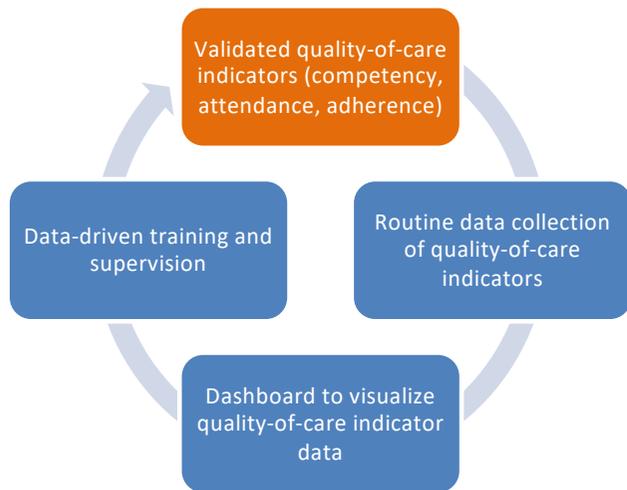
The attendance app is currently in development. The app can be used to register and monitor the attendance of children, youth, caregivers, teachers and community members. Using data from the attendance app, War Child can calculate reach.



* Jordans, M. J., & Kohrt, B. A. (2020). Scaling up mental health care and psychosocial support in low-resource settings: a roadmap to impact. *Epidemiology and Psychiatric Sciences*, 29, e189.

Quality of Care Framework





Validated instruments

Back to site | Dashboard | bkohrt@email.gwu.edu

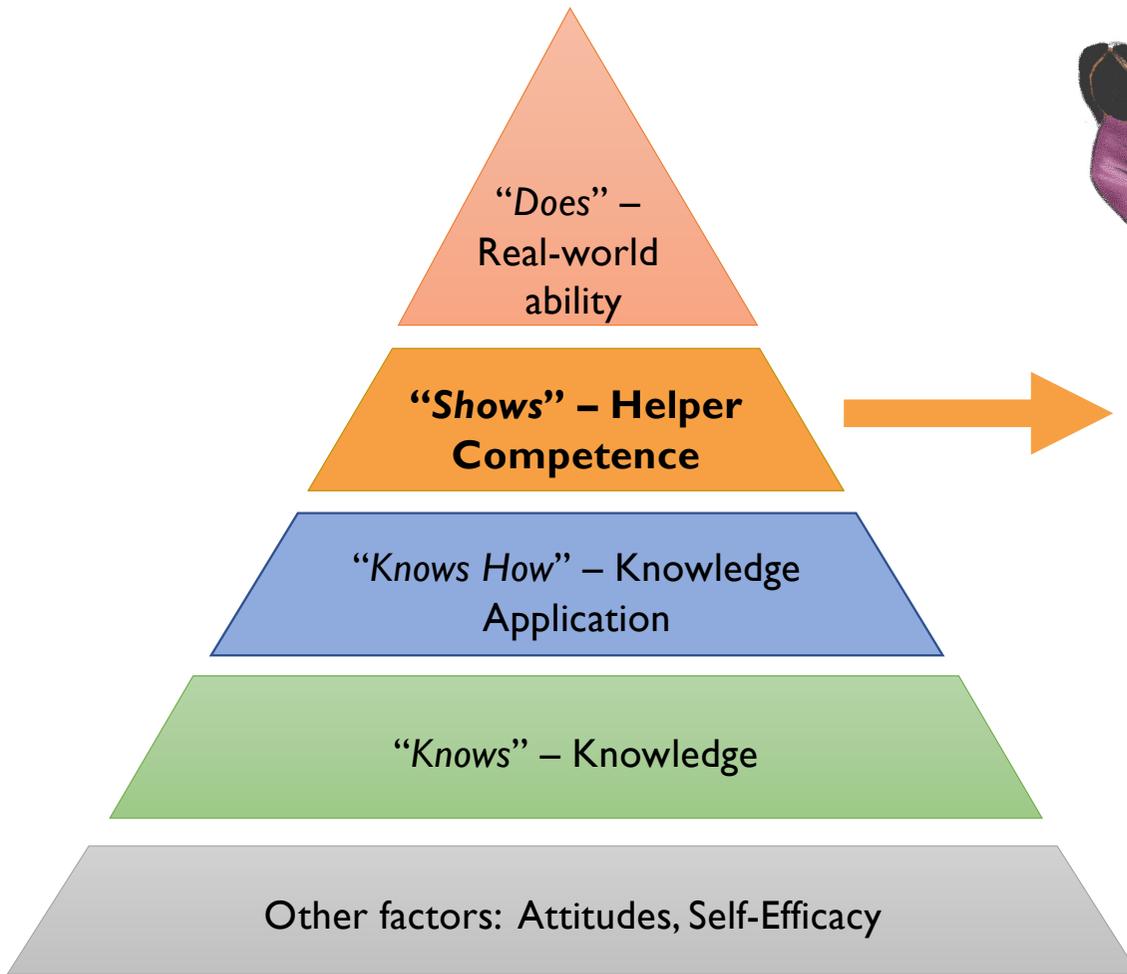
ENACT DEMO | SELECT ACTOR

ENACT / POST-TRAINING / VIGNETTE #1

Trainee demo | Online mode | Saved to the device | 1/15 Competencies Completed

Select the level and attributes observed for this competency

Competency	ANY HARMFUL BEHAVIOUR	ANY OR NONE	ALL BASIC SKILLS	ANY ADVANCED SKILLS
<input checked="" type="checkbox"/> 1. Non-verbal communication 2. Verbal communication 3. Explain and promote confidentiality 4. Rapport building and self-disclosure 5. Exploration & normalisation of feelings 6. Demonstrate empathy, warmth & genuineness 7. Assessment of harm & developing response plan 8. Connect to social functioning & impact on life	<input checked="" type="radio"/> LEVEL 1 RISK OF HARM <input type="checkbox"/> Engages in other activities (eg. answers mobile, completes paperwork) <input checked="" type="checkbox"/> Laughs at client <input type="checkbox"/> Uses inappropriate facial expressions <input type="checkbox"/> Inappropriate physical contact	<input type="radio"/> LEVEL 2 BASIC HELPING SKILLS <input checked="" type="checkbox"/> Allows for silences <input type="checkbox"/> Maintains appropriate eye contact <input checked="" type="checkbox"/> Maintains open posture (body toward client) <input type="checkbox"/> Continuously uses supportive body language (head nod) and utterances (uh huh)	<input type="radio"/> LEVEL 3 ADVANCED HELPING SKILLS <input checked="" type="checkbox"/> Varies body language throughout session to match client's content and expression	<input type="radio"/> LEVEL 4



MEASURING TRAINEE KNOWLEDGE, SKILLS, & RELATED FACTORS



Competency

Observable skills in **controlled settings** (e.g., in training or supervision sessions) – *evaluated with role plays*

Ottman, Kohrt, et al. 2020. Use of role plays to assess therapist competency. *Behaviour Research & Therapy*



Non-specialist workers selected for psychological treatment



Pre-training role-play competency assessment



Training



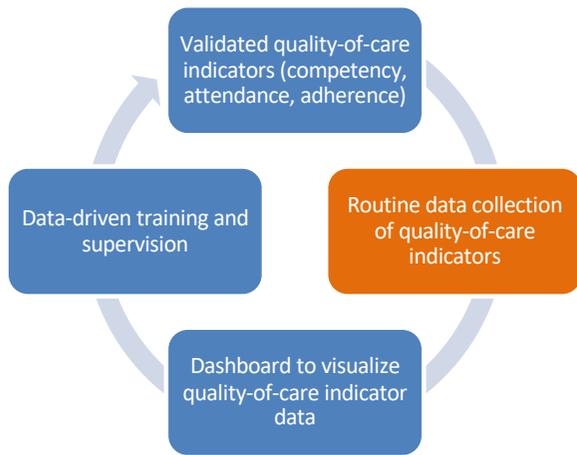
Mid and post-training role-play competency assessments



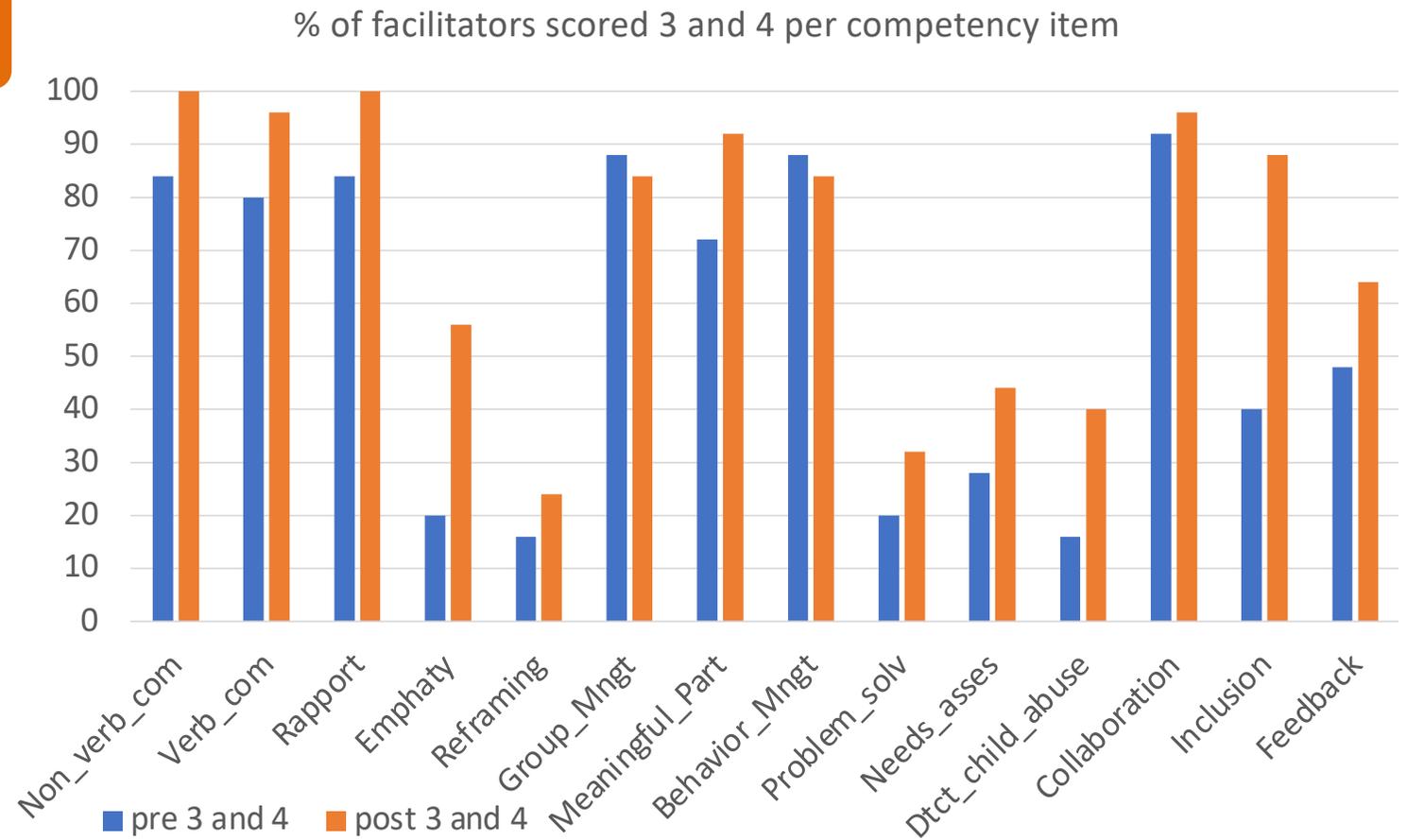
Practice and supervision



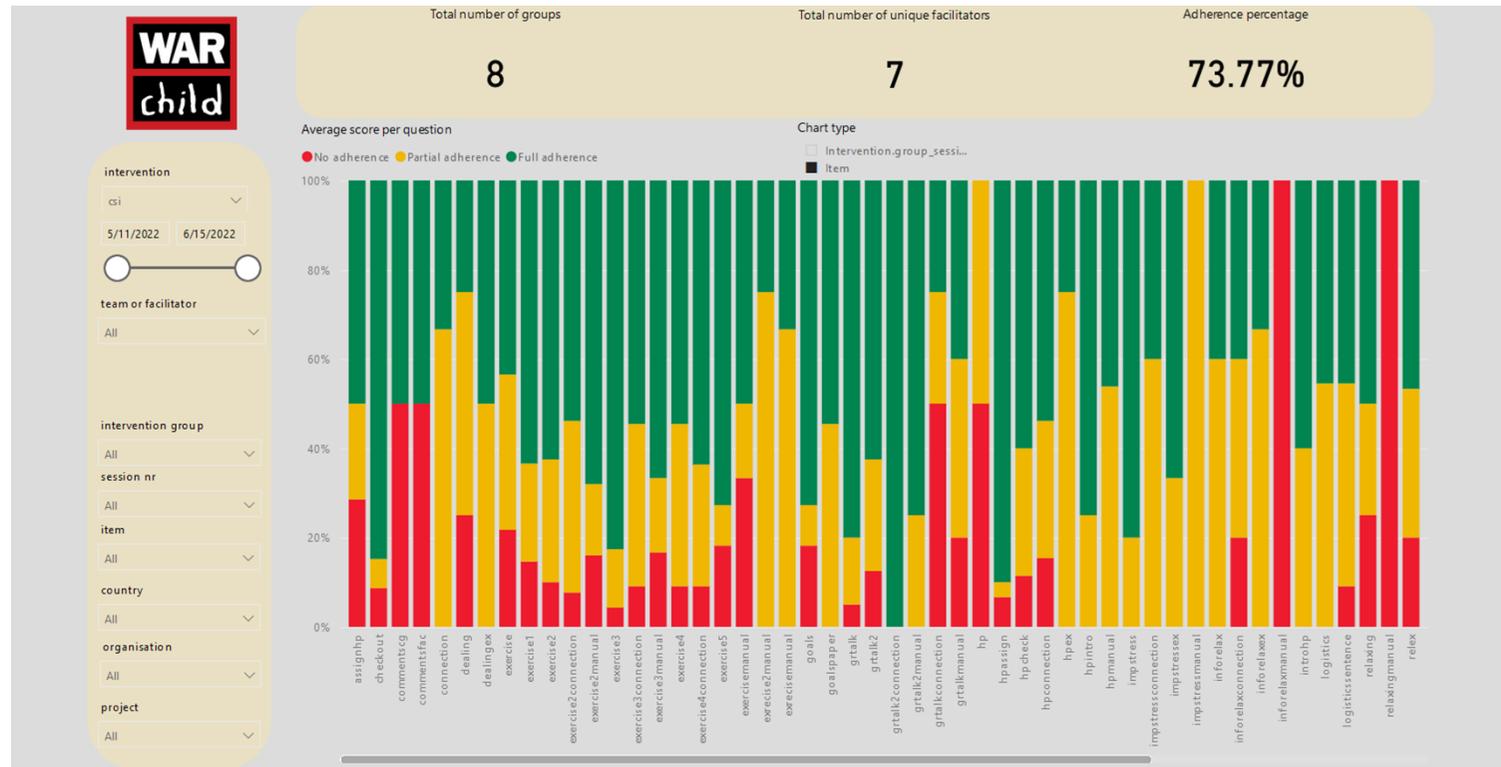
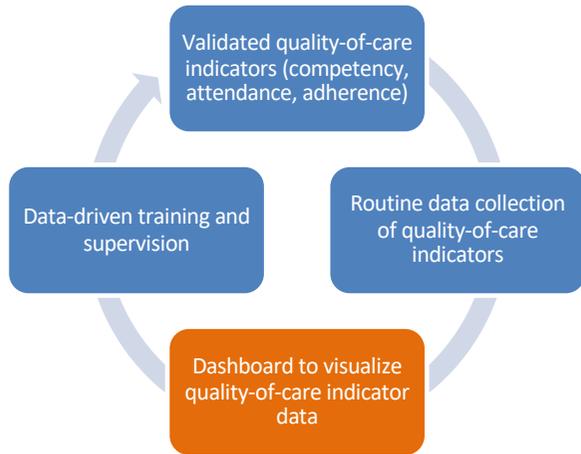
Role-play assessment, after seeing persons, under continued supervision



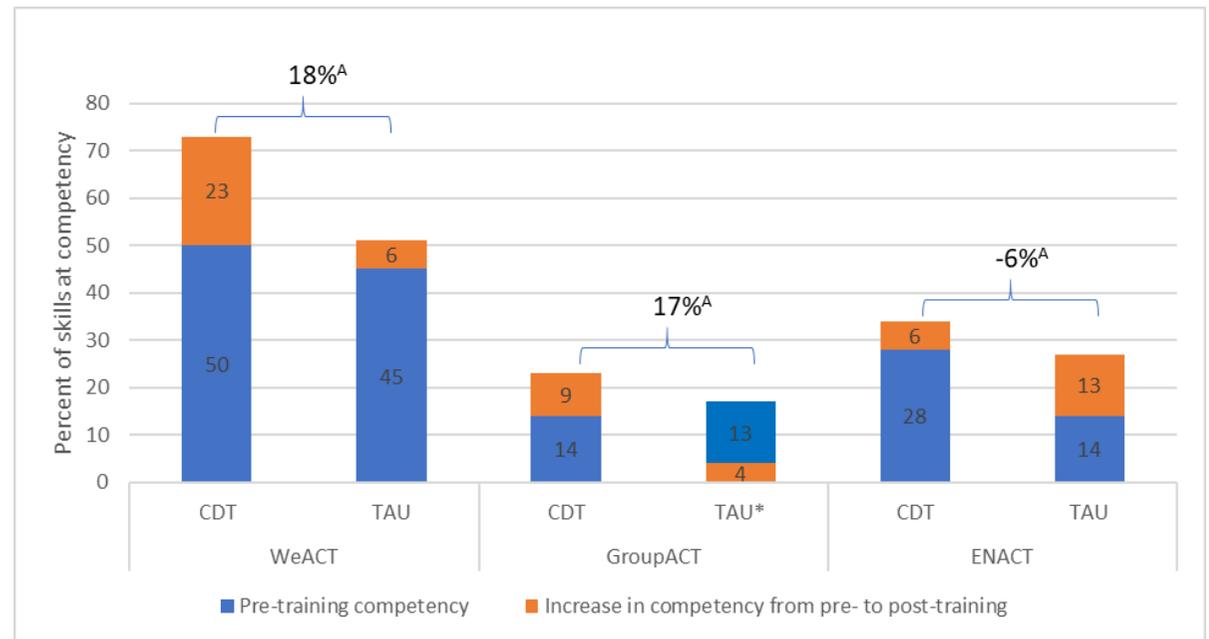
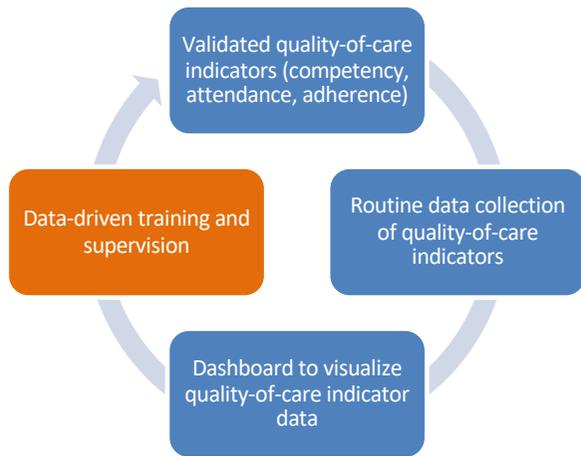
Data collection



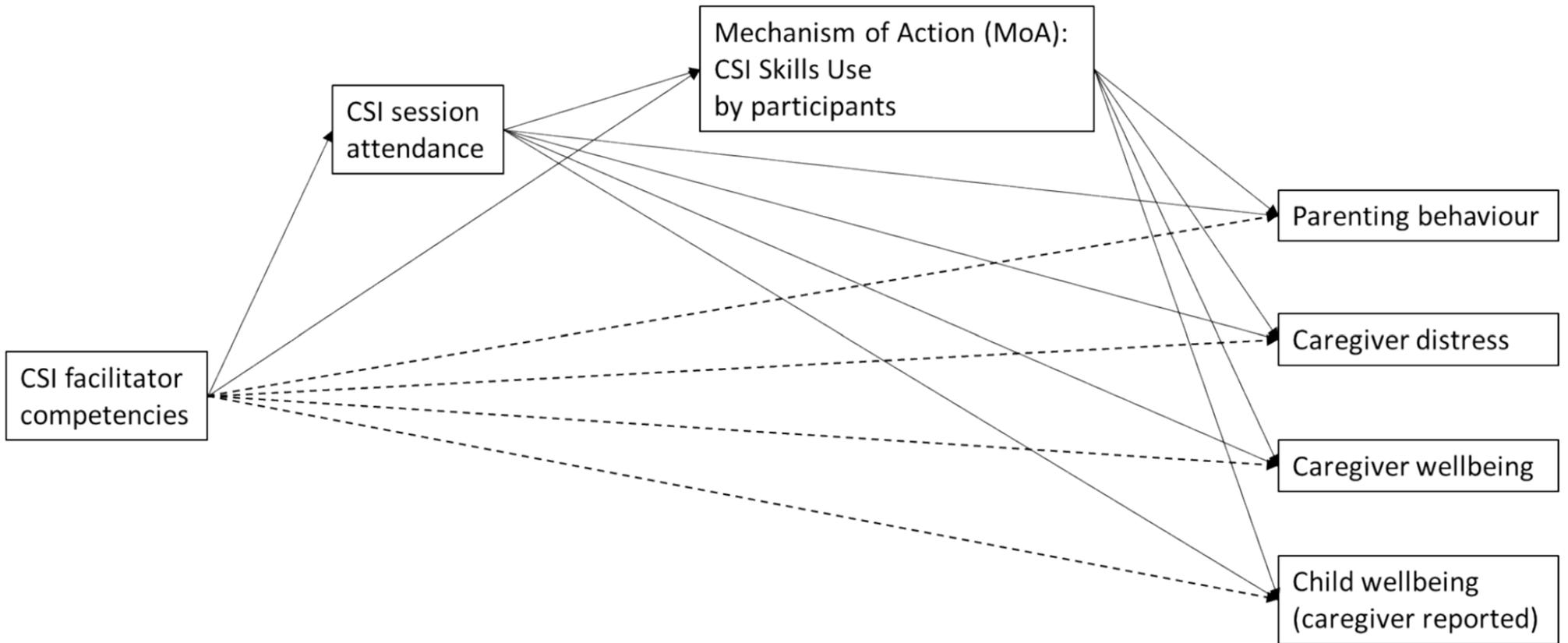
Visualization



Data-driven quality improvement



Jordans et al, Evaluation of competency driven training for facilitators delivering psychosocial care in Lebanon, EPS, 2022



Thank you

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