ODI Case study

'Let's learn together': co-creating mental health solutions with adolescents in Tanzania and Viet Nam

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Key messages

Increasing facilitators and country partners' ownership over the co-creation process was crucial to ensuring the co-creation activities were contextualised to local realities and practices.

Designing the co-creation process through collaborations with stakeholders with diverse areas of expertise (e.g., mental health, teaching, technology development, co-design etc.) was important for guaranteeing adolescents received adequate support, including through multidisciplinary learning opportunities.

Learning together about common mental health challenges was an effective way to motivate adolescents to participate and engage in co-creation activities.













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1 Introduction

Co-creation is a process whereby the users of a digital solution or programme participants are key to the design process. Also referred to as co-design,¹ co-creation is based on promoting egalitarian roles, democratic partnerships and agency between all stakeholders involved in an intervention – including designers, experts, researchers and groups formally known as the 'users' of a solution or, in the case of development programming, project participants (Sanders and Stappers, 2008). Critically, co-creation is an approach to gathering the anticipated users' inputs to shape interventions to ensure that they are contextualised and culturally specific, relevant, user-friendly, impactful, inclusive, fit for purpose and sustainable. The approach challenges the idea that interventions should be designed *for* individuals, and instead relies on designing interventions or solutions *by* the very individuals who will be using them (Scaife et al., 1997; Sanders and Stappers, 2008).

This ODI Case study explores the experiences and reflections that emerged from designing and implementing a process to co-create digital and non-digital solutions which respond to mental health and well-being challenges facing adolescents in Tanzania and Viet Nam. This process is part of a large programme of work (see Box 1 for further details). While Covid-19 was not the initial focus of the programme of work, the fact that the pandemic started during the early stages of implementation meant that it became a critical consideration – not only in the way it impacted on the mental health of adolescents in both countries,² but also in terms of how the programme of work was adapted to different forms of working, including remote working.³ The co-creation process also adapted to Covid-19 restrictions in the two countries, as we describe further. Co-creation can only be beneficial and impactful if groups are provided with appropriate processes, support, tools and activities (Sanders, 2005; Myers, 2021). This ODI Case study presents insights that can be used to inform what a co-design process should consider in practice.

We first present evidence on the use of co-creation for mental health, before describing the co-creation process developed for this programme of work. We then present some reflections on what worked and what did not work when this process was implemented in Tanzania and Viet Nam. We conclude by presenting a few lessons learnt and suggestions on how to do things differently in future.

Other terms related to co-design include participatory design and human-computer interaction (HCI).

² See case/country studies written as part of this programme (León-Himmelstine et al., 2021a, on Tanzania; and Samuels et al., 2021, on Viet Nam).

³ See case study describing these experiences and considerations (Chakraborty et al., 2021).

Box 1 Key programme information

This programme was awarded by Fondation Botnar to ODI and to country partners in Tanzania and Viet Nam. It aims to address the mental health needs of adolescents in schools, in the community and at institutional level through the co-creation and application of digital and non-digital approaches and technologies.

The programme's objectives include:

- Identifying the drivers of mental ill-health among adolescents, taking into account underlying social norms that may be driving mental distress.
- Co-creating and designing digital and non-digital technology solutions or applications (apps) and other approaches with adolescents, teachers and local authorities to support and enhance the mental health and overall well-being of adolescents.
- Reviewing and adapting the developed applications and approaches through a mixedmethods baseline and endline study, and ongoing feedback loops.
- Documenting the effectiveness of the digital and non-digital technology-based solutions tested by the project in addressing adolescents' mental health problems.

2 Evidence of use of co-creation

Co-creation is based on introducing users as partners in the design process, with equal responsibilities and roles as other stakeholders (Schuler and Namioka, 1993; Scaife et al., 1997). The goal of co-creation is to form processes and environments in which all participants and users feel they can contribute as co-creators (Muller et al., 1993; Scaife et al., 1997). In regard to overall co-creation processes, the literature presents divergent activities that tend to broadly cover the following steps: (1) elaboration of preliminary ideas with users and stakeholders, and/or literature reviews; (2) intensive co-design phase with focus groups and/or workshops with diverse stakeholders (such as potential users, experts in mental health and developers); (3) creation and refinement of a prototype; and (4) development, implementation and evaluations to analyse feasibility, use, impact and levels of ownership or acceptability (Shepherd et al., 2015; Bevan Jones et al., 2018; 2020).

There is mixed evidence on the effectiveness of integrating co-creation in programming. On the one hand, co-design is presented as a way to include diverse groups in design processes (Fleischmann, 2015), to create solutions that are aligned with users' needs (Cumbula et al., 2013; UNICEF, 2016), and to improve uptake and sustainability through the promotion of ownership (van Rijn and Stappers, 2008). On the other hand, co-creation can lead to long and costly creation processes (Wiljer et al., 2017), the development of unfeasible design ideas (Trischler et al., 2018), and risks related to collecting insufficient or unusable inputs from stakeholders (Spikol et al., 2009; Bevan Jones et al., 2020).

When programmes involve the use of technologies, as is the case for this project funded by Fondation Botnar, it adds another layer of complexity, as co-creation processes also need to consider how the technological aspects of a solution will be developed – for example, how an app will be programmed. This requires users to have technical skills, to democratise the design of technologies or, when this is not possible, to facilitate activities that can capture users' inputs without restricting their agency and involvement (Myers, 2021).

When it comes to mental health, there is little evidence on the best practices for co-creating digital or blended solutions to improve children's and adolescents' mental health (see, for instance, Bevan Jones et al., 2020). As such, this ODI Case study adds to the limited body of knowledge and practices on how to do co-creation as effectively and efficiently as possible. It also covers how to do co-creation using technology, and how to do co-creation to improve mental health outcomes among children and adolescents.

3 Aims and principles of the co-creation process

Co-creation in this instance was carried out with adolescents in both Tanzania and Viet Nam. The process also involved other stakeholders such as facilitators, local government officials, mental health experts, parents and teachers. The aim was for all involved to create their own solutions to promote good mental health and well-being. When the co-creation phase of this programme started, both country teams were encouraged (through facilitated discussions) to define the aims and overall principles of the co-creation process, and the expected outcomes. These discussions resulted in the identification of the following aims and principles:

- 1. Creation of solutions that are self-managed by adolescents: The co-creation process aims to support adolescents' agency throughout the design and implementation of a solution. The process needs to be based on guiding adolescents to co-create a solution that would require minimal support from external stakeholders during implementation. It is also important to ensure that adolescents understand that they can access support from the facilitators of the co-creation workshops during the implementation phase (for instance, to access material on mental health).
- **2. Inclusion of local stakeholders in the co-creation process:** The co-creation process includes other stakeholders such as parents, teachers, local authority representatives, mental health practitioners and staff from non-governmental organisations (NGOs). Their involvement recognises that their participation could increase uptake and impact of solutions identified, ensuring that those solutions are aligned with existing initiatives and policies. Their involvement could also lead to greater sustainability and replicability of the solutions.
- 3. Exclusion of discussions about personal mental health experiences and needs: The cocreation process aims to invite adolescents to discuss mental health without sharing personal experiences or needs. This was achieved by using the baseline study to raise awareness of mental health and to present findings on the mental health issues facing adolescents⁴ during the workshops (those participating in the workshop had all taken part in the baseline study, with the exception of a few participants in Tanzania who had to fill the shortened survey prior to taking part in the workshops).

⁴ See baseline studies written as part of this project funded by Fondation Botnar on Addressing the mental health needs of adolescents in Tanzania and Viet Nam through the co-creation of digital and non-digital solutions: León-Himmelstine et al., 2021b (Tanzania) and Samuels et al., 2022 (Viet Nam).

- **4. Facilitation of intensive and comprehensive support:** The co-creation process aims to support adolescents with structured guidance and activities, as well as access to learning resources and opportunities to discuss the topic of mental health with experts/facilitators. It was based on guiding adolescents to gradually define the elements that would constitute a solution (e.g. objectives, target audience, participation, name), and to support them in making informed decisions by using reflective exercises and providing access to relevant resources.
- **5. Creation of equitable solutions:** The co-creation process was designed to guide adolescents to co-create a solution that would be inclusive and benefit different groups. To achieve this, inclusivity was presented as a requirement for the solution, and the adolescents were repeatedly asked to reflect on inclusivity (e.g., by discussing the extent to which the proposed solution could be accessed by diverse groups, or would have equal impacts).
- **6. Facilitation of inclusive participation and contributions:** The co-creation process intends to be collaborative and, when possible or relevant, based on group discussions. It is important to ensure that all adolescents can participate and contribute to co-creating a solution. This was to be achieved by following the advice of teachers and researchers, which was to allocate participants in groups (following their recommendations for group composition), disaggregate the group by age and gender (acknowledging that some adolescents might feel shy), and by inviting facilitators to iteratively monitor and improve group dynamics.
- **7. Creation of flexibility, adaptability and ownership:** The co-creation process was created by considering evidence-based practices of participatory design, the baseline findings, and by inviting the country teams (and facilitators) to take ownership over the workshop's agenda to design, adapt and improve it as needed. The process was expected to be different in each country, and to be developed iteratively by considering local perspectives and realities.

4 Overview of the co-creation process

This section presents an overview of the co-creation process that was designed, implemented and evaluated in Tanzania and Viet Nam. The process was implemented in four schools in Tanzania – two in Morogoro (Mhovu and SUA) and two in Mwanza (Nyamagana and Magu). In Viet Nam, the process was implemented in eight schools – four in Nha Trang (Nguyễn Huệ, Lam Sơn, Nguyễn Thái Học and Hà Huy Tập) and four in Vinh (Nghi Lâm Hưng Bình, Nghi Lộc 5 and Lê Viết Thuật).

The co-creation process developed was carried out after a baseline study and before a 10-month implementation period during which the co-created solutions would be used by adolescents. The baseline study identified needs and opportunities around improving adolescents' mental health and well-being, using digital and non-digital solutions (León-Himmelstine et al., 2021; Samuels et al., 2022). While adolescents (aged 11–19) were the main target group for the mixed-methods baseline study, key informants and local stakeholders (such as teachers, mental health service providers, local leaders and government officials) were also interviewed. Although not a direct focus of the programme, the baseline study also served as a means to start raising awareness (among adolescents and other stakeholders) of the drivers of mental ill-health among adolescents, as well as protective factors.

The co-creation process and the related workshop sessions, resources and activities were defined in collaboration with country partners through weekly meetings that took place over a two-month period. The meetings were attended by the researchers who would be conducting the baseline study, technology developers, and experts in co-creation and monitoring, evaluation and learning (MEL). The teams jointly decided on the number, duration and content of the sessions; who would facilitate them and how; the shortlist of solutions to be presented to the adolescents during session three (see below); the activities, games and energisers that would be used; and the materials that would be made available for adolescents, and in what format.

Local stakeholders, mostly teachers, were consulted to gather insights to inform the co-creation process, to plan and prepare for the necessary logistics, and to increase the programme's potential uptake. As part of preparation for carrying out the co-creation workshops, the country facilitators participated in a training session on co-creation and facilitation. This included discussions on energisers and ice-breaker activities that could be implemented during the workshop sessions. Prior to Covid-19, it was envisaged that members of the ODI team would travel to support the co-creation process and facilitate the workshops. Given the limitations imposed on travel due to Covid-19, this plan was modified, with workshops led entirely by the country teams, delivered in local languages, with support as and when necessary from the ODI team.

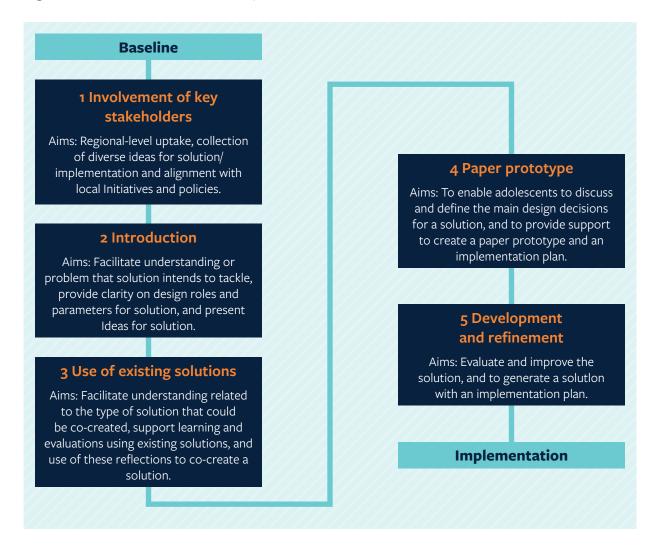
The overall co-creation process or agenda consisted of five sessions, which all included: support from facilitators with different areas of expertise, access to learning opportunities about

mental ill-health and well-being, and activities intending to create inclusive collaborations and contributions. As we explain below, the first and second sessions were merged for the workshops in Viet Nam.

- **The first session** involved local stakeholders. It was based on presenting the programme, the baseline results, and gathering insights, considerations and ideas to co-create an impactful and sustainable solution with and for adolescents a solution with which local stakeholders could also engage.
- The second session involved adolescents. It was based on presenting the baseline results (specifically illustrating adolescents' mental health needs and practical considerations for a solution), parameters that the solution needed to consider (including inclusivity, the implementation period, involvement of other stakeholders, objectives related to mental ill-health and well-being, resourcing, etc.), ideas gathered during the previous session and the rationale of using co-creation as part of this programme.
- **The third session** involved adolescents. It was based on presenting existing examples of solutions, and inviting adolescents to learn about these solutions and evaluate their potential suitability and impact in their context.
- **The fourth session** involved adolescents. It was based on inviting adolescents to create a paper prototype of a solution and an implementation plan, through using a pre-prepared workbook (translated as necessary).
- **The fifth session** involved adolescents and a sample of participants from the first session. It was based on testing, evaluating and improving the solution, which included a tool prototyped by the technology team based on the paper solution created by the adolescents.

The aims of each session are presented in Figure 1.

Figure 1 Overview of the co-creation process and aims of each session



Due to the Covid-19 situation in Viet Nam, and the continuation of online schooling, this process had to be adapted to be partly conducted online. The changes involved:

- 1. making all the sessions shorter, including by merging the first and second sessions;
- 2. inviting groups to work in sequence instead of simultaneously (that is, groups working one after another to ensure that facilitators could provide required support);
- 3. distributing the paper-based resources used during each session in advance of the workshops;
- 4. adapting or designing additional energisers and ice-breaker activities to increase motivation and engagement levels during online sessions; and
- 5. implementing activities to enable adolescents to learn about mental ill-health and well-being that are suitable to online environments.

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As the co-creation workshops progressed, the Covid-19 situation started improving and there was a return to in-person teaching, with some schools wanting the workshops to be conducted face-to-face rather than online. After detailed discussions with the relevant teaching authorities, it was decided that the final session would be conducted in-person in all eight schools in Viet Nam. This would also allow for the team to refine the solutions based on the prototype developed by the adolescents and then present, evaluate and improve it with them in-person.

5 Results

To evaluate and iteratively improve the co-creation workshops, a MEL strategy was implemented. This strategy was based on gathering feedback from the facilitators and participants through surveys and after-action review sessions, which took place after each session and at the end of the workshops in each school. These intended to gather data on what worked well and what did not, ideas to improve the upcoming workshops, as well as overall impressions from facilitators and participants. The ideas generated were implemented after each session and workshop.

The overall impressions of all the facilitators, participants and researchers involved in this programme was that the process worked well in Tanzania, considering both the solution co-created and engagement/impressions of the facilitators and adolescents involved. The suggestions on how to improve the sessions after the workshop in the first school were considered minimal, as was the case with sessions in the subsequent workshops in the other three schools. These impressions were different for the workshops organised in Viet Nam, where significant changes had to be implemented after the workshop in the first two schools. By the end of the workshop in the third school, the process was considered adequate and was not further adapted for the remaining schools. Box 2 provides a brief overview of the solutions co-created in each country.

Box 2 Adolescents help each other to co-create mental health solutions

Tanzania

In Tanzania, the adolescents involved co-created a solution that combines a computer-based platform with in-person activities. The computer-based platform encompasses a digital library with interactive mental health resources and a mood tracker app, which invites adolescents to log their daily mood and reflect on the factors that might influence how they feel. The in-person activities include clubs and outdoor sport sessions, which aim to enable adolescents to discuss various mental health topics, such as the drivers of mental ill-health and coping strategies.

Viet Nam

In Viet Nam, the adolescents co-created a solution that combines a mood tracker mobile phone application, a social media group and in-person activities. The mood tracker app aims to help adolescents understand the factors that might influence their moods, and to help them perceive how certain actions could impact their daily feelings. The in-person activities include discussion-based and physical-based activities (with outdoor physical activities and quiz/games related to mental health). The social media group is monitored by members of the research team and is presented as a follow-up and ongoing collaborative activity, where adolescents are encouraged to discuss mental health topics with their peers – and with the occasional involvement of mental health experts.

5.1 Tanzania

The next two subsections present findings and reflections on implementing the co-creation process in Tanzania, by presenting insights on what worked well, what did not, and why. These were collected from the MEL data, and analysed and interpreted by the authors of this study.

5.1.1 What worked well, and why

Adequate preparation and training for facilitators. To implement the co-creation process, a detailed agenda was created, describing the sessions, their objectives and rationale, the facilitators' roles and responsibilities, timing and supportive resources. This agenda was created by inviting the country teams and facilitators to take ownership of it, and by discussing the sessions during weekly meetings with the ODI team (over a two-month period). A training session with an expert in co-design and facilitation was also organised for the facilitators. The facilitators reported that among the factors that contributed to the positive outcomes of the workshops were their 'team spirit' (which was frequently mentioned by the team), all the related preparation and training work, clarity about their respective roles during each session, and their capacity to collaboratively implement energisers/ice-breaker activities when the adolescents seemed tired or less motivated.

Suitability of using baseline results to illustrate problems to be tackled. This programme used baseline findings to illustrate problems that the adolescents could tackle through the cocreation and implementation of a solution. These findings were also used to enable adolescents to identify problems to be solved and, without asking them to share personal experiences or needs, to enable them to learn more about mental health. This worked well in Tanzania; many of the stakeholders and adolescents commented that they started to learn about mental health through being involved in the baseline study, and that the issues and needs captured at baseline were aligned with their experiences and perceptions of mental ill-health and well-being issues.

Suitability of using existing solutions as a starting point for co-creation. The third workshop session used a set of existing solutions as a starting point for the co-creation, both to exemplify potential solutions and to enable adolescents to evaluate existing solutions (that is, by reflecting on their relevance and impact in their context). These solutions were gathered through a collective exercise, where a researcher analysed and selected solutions discussed in the baseline study. The country team then selected digital and non-digital solutions that were, or could be, popular and/or relevant in the schools' context. Finally, another researcher conducted desk research to find and consider additional solutions. Dividing up the tasks and using these solutions was considered fruitful in all the workshops in Tanzania, as they enabled adolescents to understand the type of solution that they could co-create, and also gave adolescents ideas for their solution.

Relevance of providing learning opportunities about mental ill-health and well-being.

Learning about mental ill-health and well-being was cited as the main reason why adolescents felt 'happy' to have participated in workshops and why they would recommend other adolescents to do so. In Tanzania, the adolescents had access to a book about mental health in Swahili (a short book with visuals), to a presentation on mental ill-health and well-being, and to an information desk where they could ask questions of facilitators. Facilitating such a learning opportunity was reported as a key factor that has positively impacted the co-creation process, as well as the overall impressions and motivation of the adolescents involved.

5.1.2 What did not work well, and why

Limited involvement of a mental health expert/practitioner. In the first workshop, there was no mental health expert or practitioner involved as part of the facilitating team. The facilitators had limited experience of working with the topics of mental ill-health and/or well-being, and they reported struggling to answer some questions asked by stakeholders and adolescents. For the last three workshops, a mental health practitioner with extensive practical experience of working with adolescents joined the team, and the facilitators reported that his involvement significantly contributed to improving the results of the workshops.

Underestimation of time. During the first workshop, all the sessions lasted two or three times longer than estimated. The facilitators had to adjust the activities and presentations during the workshop in the first school and adjusted the timing of the upcoming sessions in the other schools by inviting the adolescents to attend longer sessions (no adolescent ended up leaving early as a result of this) and by allocating half a day for stakeholders' meetings. One way to avoid this would be to organise a pilot workshop session to enable facilitators to practice the timed activities, and/or invite them to prioritise some of the presentations and activities.

Insufficient familiarity between facilitators and adolescents. In the first two schools, the facilitators were assigned to adolescents' groups randomly for each session, leading them to work with different groups throughout the workshops. This was adjusted for the other two schools, so that adolescents would feel more comfortable with a facilitator they had come to know. This enabled adolescents to get to know the facilitator throughout the activities and discussions, which would increase their trust in the facilitator. This positively impacted the workshops, as the facilitators reported that spending more time with one group contributed to creating more fruitful interactions and discussions, and the adolescents seemed more comfortable when they had the same facilitator throughout.

5.2 Viet Nam

The next two subsections present findings and reflections on implementing the co-creation process in Viet Nam, by presenting insights on what worked well, what did not, and why. These were collected from the MEL data, and analysed and interpreted by the authors of this study.

5.2.1 What worked well, and why

Ownership of the co-creation process by facilitators. The facilitators' level of ownership over the workshop agenda and activities significantly increased after the first two workshops. This was made visible by the fact that when faced with challenges, including apparent limited interest/motivation among adolescents participating in the workshop, the facilitators changed the agenda to make it work better. This included implementing activities that were considered relevant and engaging by the adolescents, such as simplifying some of the supportive resources and introducing new activities (for instance, crosswords and activities to raise awareness of stigma associated with mental health).

Process encouraged discussions about circles of trust and confidentiality. A key finding that emerged relates to the importance of including discussions on confidentiality and circles of trust during the co-creation workshops. Adolescents seemed to place particular importance on discussing which stakeholders were perceived as trustworthy for providing support and confidentiality when seeking help with mental health problems. Ensuring that adolescents understood they have agency over deciding which stakeholders to involve in their proposed solution was also considered key to enable adolescents to co-create solutions that are based on their needs.

5.2.2 What did not work well, and why

Insufficient consideration of local teaching practices and appropriate pedagogic activities.

The facilitators mentioned that local teaching practices were not sufficiently considered when developing the co-creation approach from the start, and that this possibly resulted in adolescents being less motivated and/or willing to contribute to discussions during the workshops. This led the country team to have concerns about adolescents' ability to co-create solutions. They mentioned that some adolescents might not want to share their ideas and opinions, as in these settings it is not typical for adolescents to do so. The facilitators also reported concerns about applying co-creation processes with adolescents, who are more used to top-down hierarchical or didactic teaching practices. These concerns led to changes to the workshop's agenda – for example, by significantly reducing the participatory element and by encouraging facilitators to use and/or adapt local teaching practices and activities.

Limited consideration of adolescents' academic incentives. The country team mentioned that some adolescents were concerned that spending time on the programme activities would mean they had less time for their studies. Given the stress that many adolescents already feel to perform well academically, this could put them under even more pressure, with negative effects on their mental health. An idea for improvement could have been to discuss the potential benefits of co-designing a mental health solution directly with adolescents, including the benefits for their academic performance. This could have been facilitated ahead of the workshops, in an attempt to increase adolescents' motivation to participate.

Insufficient support to enable adolescents to develop an implementation plan. In Viet Nam, by the end of the penultimate session of the workshops, the adolescents had only cocreated initial ideas for solutions. However, the original idea was that by the end of this session, the solutions would have been further advanced and an implementation plan developed. It emerged that the adolescents needed more time and support to define implementation details. As a solution, the country team suggested changes to the last session and facilitated additional discussions on implementation. The team also created another workbook that was used specifically to invite adolescents to define how to implement their solution in more detail.

6 Conclusion

This ODI Case study presented the practices, findings and reflections on how to design, apply and evaluate a process to co-create blended (digital and non-digital) solutions to improve adolescents' mental health and well-being. The main lessons highlight the importance of country partners sharing ownership over co-creation processes, while at the same time ensuring that such processes are carried out through collaborations with stakeholders with diverse areas of expertise (for instance, mental health, technology development, teaching and co-design). Generating ownership and establishing collaborations are both critical to ensuring that co-creation processes are contextualised to local realities and reflect the multidisciplinarity of inputs needed to create blended solutions.

Other findings that emerged from this work, which can be used to improve the design and implementation of processes to co-create adolescent mental health solutions, include the following practices: facilitating learning opportunities about mental health as part of co-creation processes; discussing the rationale of adopting co-creation approaches directly with participants; and using baseline studies or other forms of locally generated evidence to raise awareness of common mental health issues and to understand local needs that could be tackled with co-created solutions.

This work also sheds light on some of the challenges that might be encountered when adopting co-creation approaches – for example, concerns about whether co-creation is the best approach in all contexts; and if not, whether there may be other 'half-way' approaches that seek critical engagement of users, but which provide more scaffolding or support during the actual co-creation process (perhaps exploring the application of the 'informant design' approach, as described in Scaife et al., 1997). An area for future work could be to rigorously study perceptions related to co-creation and explore how to align participatory approaches with local contexts where participants might face structural, cultural or historical barriers to expressing their ideas and opinions. This research could be used to complement the findings presented in this report and to add to the body of knowledge and practices on how to use co-creation to improve mental health outcomes among children and adolescents.

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