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Implementing Interventions to Address Gender and Power Inequalities in Early Adolescence: Utilizing a Theory of Change to Assess Conditions for Success

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A B S T R A C T

Purpose: To create a set of criteria to assess facilitators and barriers to implementation among gender transformative interventions that target very young adolescents (VYAs) across different cultural settings.
Methods: Interventionists and researchers involved in the Global Early Adolescent Study created a Theory of Change (ToC) based on summarizing intervention components from five different gender transformative intervention curricula. Embedded within the ToC is a set of criteria labeled, 'Conditions of Success' which were developed to illustrate that change cannot happen unless interventions are implemented successfully. To test the feasibility of these criteria, implementation data collected across the five interventions in Global Early Adolescent Study were mapped onto the 'Conditions for Success' criteria and used to identify common facilitators and barriers to implementation.
Results: Using the 'Conditions for Success' criteria, we found that gender transformative interventions targeting VYAs were most challenged in meeting program delivery and facilitation conditions and needed to build more multisectoral support to shift rigid gender norms. Parents and caregivers also needed to be engaged in the program either as a separate target population or as codesigners and implementers for the interventions.

IMPLICATIONS AND CONTRIBUTION

Using implementation data across a set of gender transformative interventions for very young adolescents, researchers created a Theory of Change to illustrate that a program's ability to change outcomes is determined by a set of 'Conditions of Success' criteria. This article contributes to our understanding of how best to implement programs in early adolescence.

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Discussion: The Conditions for Success criteria provide a useful framework for assessing facilitators and barriers to implementation among gender transformative interventions for VYAs. Additional research is underway to examine whether interventions that meet more conditions of success result in greater program impact, which will be used to further refine the overall ToC.

Representing more than half a billion of the world's population, very young adolescents (VYAs), defined as 10–14 years of age, are in a critical stage of physical, sexual, psychological, and social development [1]. During this intense developmental phase, gender norms increasingly regulate interactions between boys and girls and shape beliefs and expectations of what it means to be a boy/man or girl/woman. While gender norms have the potential to promote gender-equitable relationships and sexual and reproductive health, in many contexts, they perpetuate power imbalances that result in behaviors that lead to violence and negative sexual and reproductive health (SRH) and rights outcomes among both boys and girls [2].

Addressing gender norms related to adolescent behaviors requires a multilayered approach, including challenging gender bias within communities and institutions, recognizing the impact of the family on how boys and girls are socialized into gender roles and fostering positive interactions between boys and girls as they grow into adulthood [2]. Programs that try to change harmful gender norms toward a more gender-equitable environment are known as gender-transformative interventions. Given that these interventions strive to examine, question, and shift rigid gender norms and power imbalances as a means of achieving health, they represent a promising strategy for laying the foundation for future SRH and well-being among VYAs [3,4].

To date, several gender transformative interventions have been implemented among VYAs providing evidence on 'what works' [5,6]. Despite this growing body of literature, there is still limited information on how best to implement such programs among this age group. This is a critical gap, as recognizing the important implementation processes and components is key not only for scale-up and replication but also for overall sustainability. For instance, understanding how to select and train teachers to deliver the curriculum or to garner political and administrative support is arguably just as important as documenting intervention effectiveness. In addition, while targeting social structures, such as health and education systems, is essential for leveraging changes at the community, group, and individual levels and achieving long-lasting effects that support gender equity, understanding how to operationalize this in interventions is still not clear [7].

To address this gap, an intervention working group (IWG) of members from both the research and intervention teams collaborating on the Global Early Adolescent Study (GEAS) was established. GEAS is a longitudinal international study that explores how adolescents' perceptions of gender norms evolve across adolescence and inform a spectrum of adolescent health outcomes across nine urban geographies on five continents. Implementation and/or impact evaluation studies have been conducted in the following sites to examine how well interventions are implemented and the extent to which they influenced gender-equitable practices and short-term/long-term VYA health outcomes: Kinshasa; Democratic Republic of Congo, Nairobi, Kenya; Blantyre, Malawi; New Orleans; and three different sites in Indonesia: Bandar Lampung, Semarang, and Denpasar. Further details about these studies can be found in additional articles included in this supplement.

Given that all interventions within the GEAS address gender and power as one potential mechanism for promoting VYA health and well-being, IWG members created an overarching theory of change (ToC) to bridge their collective knowledge. A ToC is critical for laying out assumptions and ideas for how interventions create change and influence health outcomes. Since implementation data are being gathered across interventions, analyzing these data collectively can increase our understanding of the extent to which interventions experience common implementation challenges.

The aims of this article, therefore, are to (1) describe the interventions included in GEAS and (2) introduce the ToC and specifically the Conditions for Success in the ToC as a framework for assessing key enablers and barriers to successful and sustained implementation across the interventions in GEAS.

Summary of interventions included in GEAS

While all interventions included in GEAS target gender as a system that shapes adolescent health and well-being, each is also unique in the way it addresses gender to influence health. Below is a brief description of these interventions, followed by a table (Table 1) that depicts additional similarities and differences.

Semangat Dunia Remaja or Teen Aspirations. Semangat Dunia Remaja or Teen Aspirations is a comprehensive sexuality program implemented at junior high schools with adolescents aged 12–15 years in Indonesia. SETARA aims to support healthy adolescent sexuality development by addressing gender in relationships and through critical thinking, communication, negotiation, and assertiveness.

Growing Up GREAT!. Growing Up GREAT! is a norms-shifting multilevel intervention implemented with in-school and out-of-school girls and boys aged 10–14 years in Kinshasa, Democratic Republic of Congo. GUG! engages VYAs via school and community clubs to build their knowledge, health-positive and gender-positive attitudes and skills, and self-efficacy. GUG! also engages adults in VYAs' lives (parents, teachers, and healthcare providers) to foster an environment that values and supports VYAs in their journey through puberty.

Creating a Future Together. Creating a Future Together is a trauma-informed adolescent SRH education program rooted in a human rights framework that is being implemented in New Orleans, Louisiana. The curriculum integrates an understanding

of power and oppression into all its modules and emphasizes the importance of emotional well-being as a strategy for reducing high-risk behaviors among adolescents. CrAFT was developed for youth aged 11–14 years but has been implemented among older youth across middle and high schools and youth-serving community-based programs.

Nisikilize Tujengane—Listen to Me, Let's Grow Together. Nisikilize Tujengane—Listen to Me, Let's Grow Together is an asset-building program for girls aged 10–19 years and boys aged 10–24 years living in the Kariobangi and Mathare informal settlements of Nairobi, Kenya. The program aims to create safe spaces via weekly group meetings through which adolescents learn about a range of health topics, life skills, and financial education and by addressing inequitable gender norms and harmful masculinities. Groups are segmented by sex and facilitated by a same-sex mentor, but girls and boys meet monthly to discuss the topics they have been learning.

Very Young Adolescence 2.0. Very Young Adolescence 2.0 is a group-based curriculum with a focus on SRH and violence prevention for boys and girls aged 10–14 years in Blantyre, Malawi. The curriculum emphasizes questioning unequal relations of power and privilege that undermine VYAs' well-being and the importance of appreciating the sexual and reproductive changes happening to their bodies in age-appropriate ways and works with youth to develop skills to challenge and prevent violence.

Methods

Creation of the ToC

IWG members participated in a one-day workshop to bring together each intervention's theories of change to identify commonalities and unique differences across the interventions. A draft version of an overarching ToC was then developed and shared among each IWG member who then revised and provided continuous feedback until a finalized version had received consensus across the group. In addition, implementation data were collected across the interventions to measure fidelity, quality of delivery, and participant experience of the program (Table 2). These data were then summarized and formed the basis of a key framework of the ToC, called Conditions for Success, which is described in more detail below.

Results

Description of ToC

Overview of proposed ToC. Across each intervention, an adapted curriculum or set of materials is administered by trained facilitators to provide adolescents with opportunities for critical reflection and activities to strengthen knowledge, skills, and self-efficacy to promote overall health. The ToC, therefore, outlines pathways to change by focusing on three common intervention elements: delivery/facilitators; content/curriculum; and supportive environment (partnerships and stakeholders [Figure 1]).

Specific components of the ToC

1) *Principles and approaches* refer to the overarching theories, values, and ethics that guide program development and implementation. All the interventions included in GEAS applied at least one of the following principles and/or approaches: gender transformative; rights-based; inclusive; create meaningful youth engagement; locally owned; evidence-based; and culturally appropriate.
2) *Conditions for success* refer to the pre-existing knowledge, skills, values, and environment necessary for successful implementation. A program's ability to change short-term and long-term outcomes is likely determined by the extent to which it can meet these 'Conditions of Success.' In the ToC, this was organized by the three intervention elements:
   a. Delivery/facilitators: Facilitators should have prior experience working with adolescents; they should be comfortable with the material; embrace values aligned with the curricula; they should be engaging, embody gender-egalitarian attitudes, and provide a safe space or environment for adolescents to express their thoughts and feelings.
   b. Content/curriculum: The curriculum or content should engage both boys and girls, be developmentally appropriate, include scientifically accurate resources, and use participatory methods that encourage adolescent engagement.
   c. Supportive environment: This refers to structures and individuals in adolescents' social contexts that positively reinforce gender equitable norms and enable adolescents to translate their knowledge and skills into actions. The ToC operationalizes this across three criteria: multisectoral support, community champions, and the prevailing cultural and gender norms in a setting. Multisectoral support refers to working with groups and individuals across different sectors, such as education, health, policy, and media, and can include both governmental and nongovernmental entities. Community champions are key individuals or groups that build support for the intervention (e.g., parents, community leaders, or faith leaders). Finally, we have found that having an awareness of the prevailing cultural and gender norms that relate to the intervention is essential for building greater acceptance of the intervention.
3) *Activities/pedagogy* are the pedagogical methods or functions employed to transform knowledge, attitudes, or behaviors. Organized by the three intervention elements, activities include:
   a. Delivery/Facilitators: Initial training, values clarification to ensure facilitators' values align with curriculum, and supportive supervision.
   b. Content/curriculum: Education sessions combined with reflective small group discussions that encourage critical reflection, questioning of harmful gender norms, and discussion that can transform ideas and attitudes.
   c. Supportive environment: Activities to deal with or prevent opposition and create a supportive environment including parent and youth engagement, community sensitization, and systems integration, including linking the intervention with needed health services.

A key aspect across each of these activities is youth engagement. For example, in Denpasar, Indonesia, the project manager for SETARA implementation was a young person, and a team that consisted of primarily young people conducted school monitoring visits, developed a student poll on SETARA and assisted adult project staff in maintaining relationships with parents, teachers, and local government leaders. In Kinshasa, a youth advisory committee was established for GUG! to guide implementation and monitor and evaluate various aspects of program implementation.

Table 1
Summary of similarities and differences among interventions in GEAS

SETARA (Indonesia)	Growing up great (DRC)	CrAFT (New Orleans, USA)	NISITU (Kenya)	Very young adolescence 2.0 (Malawi)
Target audiences				
Students aged 12–15 years (standards 7 and 8 Junior High School)	Students and out-of-school adolescents aged 10–14 years	Students in community-based programs aged 11–19 years	Girls 10–19, Boys 10–24 in-school and out-of-school	Students aged 10–14 years (6th grade)
Dosage				
Two years (22 chapters with 46 topics)	One school year (25 weekly 1-hour sessions)	15, 1-hour sessions	12 months (1x week)	12 weeks (one session lasts 1–2 hours)
Facilitators				
Teachers	Teachers, trained adults, trained VYAs	Trained health educators	Trained young adults, matched by sex	Trained young adults, matched by sex
		Setting for intervention		
Schools	Schools and Community-based organizations (CBOs)	Schools and CBOs	CBOs	Schools
Content in curriculum or materials				
Gender stereotypes, attitudes, and beliefs	Gender stereotypes, attitudes, and beliefs	Gender stereotypes, attitudes, and beliefs	Gender stereotypes, attitudes, and beliefs	Gender stereotypes, attitudes, and beliefs
Violence and conflict resolution	Violence and conflict resolution	Violence and conflict resolution	Violence and conflict resolution	Violence and conflict resolution
Puberty, pregnancy, contraception, sexuality	Puberty, pregnancy, contraception, sexuality	Puberty, pregnancy, contraception, sexuality	Puberty, pregnancy, contraception, sexuality	Puberty, pregnancy, sexuality
Communication and decision making	Communication and decision making	Communication and decision making		Decision-making
Alcohol/drugs	Alcohol/drugs		Alcohol/drugs	
Human rights		Human rights	Human rights	
Power			Power	Power
		Mental and emotional wellbeing, stress and coping skills		Mental and emotional well-being and coping skills
Supportive environments (secondary audiences)				
Local government	Headmasters	Principals (Headmasters)	Parents	Local government
Headmasters	Teachers	Teachers		Teachers
Teachers	Parents	Health educators		Parents
	Community	Community		Health providers
				Police

Table 2
Monitoring and implementation data collected among interventions in GEAS

SETARA (Indonesia)	GUG! (DRC)	CrAFT (USA)	NISITU (Kenya)	Very Young Adolescence 2.0 (Malawi)
Methods and tools to measure fidelity • Stakeholder interviews. • Document review and teacher interviews, which focused on school and teacher level factors that facilitated and/or hindered program fidelity.	• 3 separate qualitative studies to understand differences between in-school and community facilitators; an assessment of value of health exchange visits; and '	• Implementation fidelity logs. • Fidelity and quality observations of sessions.	• Attendance data to assess dose received. • Interviews conducted among participants, parents, and program staff to assess strengths and weaknesses and impact of program.	• Session observation forms (conducted 2x/week) to assess fidelity and quality of delivery. • WhatsApp facilitator chat transcripts to share lessons learned and challenges faced. • Data from all-team interviews to reflect on lessons learned.
Methods and tools to measure quality • Stakeholder interviews. • Teacher interviews.	• Facilitator performance assessment.	• Fidelity and quality observations of sessions. • Readiness assessment among partner organizations for replication and scale up of the program.	• Random quality checks (observations).	• Session observation forms (conducted 2x/week) to assess fidelity and quality of delivery. • Notes from debriefing sessions with facilitators to understand quality of program delivery.
Methods and tools to measure reach and participant experience • Qualitative study on SETARA students, at mid-term, which examined how well SETARA was received by participants.	• Most Significant Change' methodology conducted among participants, parents, and community members.	• Participant attendance and engagement. • Pre-test/post-tests to measure changes in students' knowledge and attitudes. • Feedback forms to assess satisfaction with the program.	• Attendance data linked with participant data to assess changes in behaviors with dose received.	• Session attendance forms completed by facilitators.

Youth advisory committee members accompanied government and program representatives on joint supervision visits and conducted two different participatory evaluations of the GUG! pilot and scale-up phase. Similarly, in Blantyre, the entire testing and validation process of the program was conducted among youth facilitators and students with their feedback guiding the content creation and revisions of the curricula.

4) *Change mechanisms* refer to the proposed pathways linking program activities to short-term and long-term outcomes. Together, they comprise a set of practices or techniques through which activities work to inspire and encourage gender transformational change.
5) *Short-term outcomes* refer to a range of outcomes including individual knowledge, attitudes, and self-efficacy, such as improved self-awareness and comfort with emerging sexuality; interpersonal outcomes, such as improved communication and conflict resolution skills behavioral outcomes, which include an increased update of SRH services, improved health seeking, and gender-equitable use of time and resources.
6) *Long-term outcomes* refer to a range of health and social outcomes that result from improved and sustained short-term outcomes. As depicted in the ToC, there are four main categories of long-term outcomes: sexual and reproductive health; violence; mental health; and education.

Conditions for success: what worked and did not work across interventions?

To understand the extent to which facilitators and barriers to implementation were similar across interventions, the Conditions for Success were included in the ToC as a key framework.

Conditions for success: lessons from the field. Delivery/facilitators: Below are descriptions of how the interventions in GEAS met the criteria for successful delivery and facilitation of a program.

1. Experience working with adolescents: In general, this criterion was easily met, as interventions either had trained teachers, health educators (who frequently work with adolescents), or adults and young adults who had prior experience working with adolescents.
2. Facilitator comfort with material: Across the interventions, it was demonstrated that although there may be a rigorous selection process for hiring facilitators, it is not realistic to assume that facilitators will be comfortable with all the material presented within the curriculum. Particularly observed in Blantyre and Indonesia, facilitators needed space to reflect on their personal gender biases and values to better understand and internalize program principles before implementation. Interestingly, teachers in Kinshasa unanimously agreed that linking the Growing Up GREAT! toolkit to existing Family Life Education curriculum materials gave them confidence and more ease broaching sensitive topics [8,9].
3. Engagement with adolescents: Depending on the setting and cultural context, facilitators may require additional training to successfully engage with youth. In Indonesia, while the SETARA curriculum included activities and teaching aids to engage students, many teachers were not accustomed to these methods and fell back on approaches they were used to, such as delivering lectures. One strategy that worked well in New Orleans and

Blantyre was to offer 'teach-back' practice sessions in which facilitators demonstrated their youth engagement skills to trainers. In addition, in New Orleans, newly employed health educators were paired with experienced staff to foster learning and new methods of engagement. In Kinshasa, teachers indicated that the flexible modality of the curriculum material gave them the ability to combine didactic classroom lessons with game-type activities to facilitate better engagement [9].

4. Ability to express equitable gender attitudes: Data collected across the intervention sites indicated that this criterion was especially difficult to achieve among some facilitators. In Indonesia, the module on gender was one of the most skipped modules in the SETARA curriculum. In addition, even among teachers who did teach about gender, when it came to student responsibilities in the classroom, gender roles were firmly entrenched: boys cleaned the blackboard, girls swept the floor, and it was inconceivable that tasks could be distributed differently [10]. In Nairobi, it was particularly challenging for male mentors to express gender-equitable attitudes, while female mentors had less difficulty. Mentors also reported more difficulty addressing gender equitable norms with older adolescents compared to younger adolescents as gender norms were already deeply entrenched and mentors noted a significant degree of cynicism among the older participants. In Kinshasa, however, teachers actively monitored gender equity in activities and expressed support for emerging gender equitable practices related to the division of time for chores and schoolwork in the home [9].
5. Having shared values: This criterion refers to facilitators embracing values aligned with the curricula. In Indonesia, while one of the main goals of the SETARA curriculum is to support healthy and positive sexuality development, most teachers saw the goal as helping prevent 'bad behavior', which was mainly defined as 'dating' and 'premarital sex'. Teachers feared that dating leads to premarital sex, which was seen as immoral in the Indonesian context. In contrast, in Kinshasa, it was found that the curriculum was successful in helping teachers, parents, and providers realize that VYAs should ask questions about puberty and sexuality and that adults should be open to discussing such topics with them [8,9,11].
6. Creating a safe space for sharing: While creating a safe space is primarily viewed as something facilitators do for VYA participants, in Kinshasa, Nairobi, and Blantyre, it was suggested that a safe space be created for facilitators to express their challenges and conduct refresher sessions on particularly sensitive topics [12]. In Nairobi, groups needed to be safe in terms of emotional security to ensure participants felt comfortable disclosing personal information and physical safety since the community was prone to violence. This was accomplished by using trusted and centrally located institutions, such as community halls, churches, or school classrooms that were empty on the weekends. In addition, in Blantyre, to create a safe space for adolescents, implementation data revealed that time was required to build trust among adolescents. Facilitators reported using energizers and interactive games that were not in the curriculum to create a more dynamic and relaxed atmosphere. In Indonesia, a safe and supportive environment was defined as one that is open, trusting, and allows for both teachers and students to be comfortable with each other to share sensitive information. Implementation research data, however, revealed that this was often challenging to achieve. Teachers were often reluctant to take the opinions from students about how SETARA was being implemented and instead tended to position themselves as knowing what was needed for the students.

Content/curriculum: Below are the key lessons learned across interventions as they relate to successful content and curricula.

1. Engages both boys and girls separately and together: Across the interventions, this criterion was primarily assessed in the mixed-sex interactive sessions that were designed as part of the curriculum. These mixed-sex sessions were offered to normalize exchange and dialogue between boys and girls. In Blantyre, facilitators observed that boys and girls, while initially shy, were eager to sit near each other and interact in mixed groups over time. This was also supported in Nairobi, which found that adolescents were initially uncomfortable in the mixed-sex group meetings, but over time, found it easier to interact as gender roles and stereotypes were discussed and debated.
2. Developmentally appropriate: This criterion was easily met across the interventions. In New Orleans, the CrAFT curriculum was mapped to the 7th–12th grade Academic Standards and Grade Level Expectations for health instruction in Louisiana. The CrAFT curriculum was also developed to meet national sex education standards and align with other best practices in the field [13]. Similarly, the content for SETARA was developed in line with the International Technical Guidance on Sexuality Education set by UNESCO and follows scientifically informed content guidance per age category. However, in the process of adapting the curriculum to the cultural context, concessions had to be made as some phrases and drawings were deemed too explicit [14]. In Kinshasa, Blantyre, and Nairobi, the curricula were also reviewed by key experts alongside national life skills curricula to ensure it was appropriate for the age groups.
3. Include participatory methods: All interventions in GEAS attempted to use participatory methods. In Blantyre, discussions, games, debates, and role plays were used to help adolescents engage with the material. In Kinshasa, GUG! employed a set of interactive materials that include song, dance, theater, and games. In Indonesia, SETARA was designed to apply a learner-centered approach that encouraged students to actively participate in learning processes through interactive methods like discussions, role-play exercises, and debates. The implementation study revealed that while students enjoyed these exercises the best, they were often skipped by teachers who found them difficult to facilitate or took too much time to implement.
4. Duration is aligned with existing infrastructure: Across sites, a common challenge faced was having enough time to implement all the modules or activities. In Indonesia, there was only one site out of three that was able to complete all the program modules because they had allotted sufficient time within the teaching schedule. Similarly, in Kinshasa, short classes (45 minutes) were a constraint to classroom-based delivery of GUG! However, club sessions provided longer timeframes (60–90 minutes), which allowed most VYA clubs to use all materials at least once during the intervention. In addition, both classroom and club implementation were interrupted by months-long election unrest, which delayed planned activities and limited the number of activities completed during the intervention period [8]. However, in Blantyre, the program

was held as an after-school activity, which allowed for sufficient time to implement the curriculum modules.
5. Connection to scientifically accurate information: In both Kinshasa and New Orleans, it was recommended that teachers/facilitators connect with health providers or other technical experts for support, to reassure facilitators that they did not need to have all the answers. Similarly, in Blantyre, facilitators were encouraged to refer students to healthcare providers to receive accurate information. In Indonesia, implementation research demonstrated a need to incorporate digital resources and materials to ensure students had direct access to complete and scientifically accurate information.

Supportive Environment (partnerships and stakeholders): Below are the key lessons learned about building a supportive environment to implement the intervention in the setting and cultural context.

1. Multisectoral support: There has already been sufficient evidence gathered to show that gender transformative programs working across multiple sectors are more likely to have positive effects on VYAs [5,7,15,16]. Gender norms are collectively held attitudes or beliefs; if programs aim to shift norms, representatives in the health, education, and media sectors need to be involved, especially those who influence VYAs and those who hold power. The challenge with most of the interventions in GEAS is that they primarily focused on one sector (the education sector). In Indonesia, Kinshasa, and Blantyre, a smaller-scale multisectoral approach that was commonly recommended was to implement a 'whole school approach', where the school administration, parents, and community could be more directly involved in intervention planning and delivery. Another group that was mentioned for building multisectoral support was nongovernmental organizations (NGOs). In Kinshasa, local NGOs played a key role in collaborations between schools and health facilities. Likewise, in Indonesia, NGOs facilitated collaborations between government departments to implement SETARA within the schools. In Nairobi, financial institutions were a key partner and young people were taught financial literacy that included how to open savings accounts.
2. Community champions: Community champions are key individuals or groups external to the intervention that can facilitate support for the intervention. One of the most important types of 'champions' cited across intervention sites was parents and caregivers. In Blantyre, for example, engaging parents in an information session about the program was critical for increasing VYA attendance. Similarly, in both Kinshasa and Indonesia, while parents were involved either in intervention activities or parent sensitization workshops, it was recommended that engaging parents early on was needed to improve intervention success. In Nairobi, quarterly parent meetings were held where parents were not only briefed on the progress and activities of the program but also received short training sessions on the same content that their adolescents were receiving (e.g., financial education, gender norms, etc.). Furthermore, due to the challenges experienced by male mentors in discussions relating to gender equitable norms, multiple refresher trainings were held that included having them engage with male community leaders to share their challenges and jointly discuss solutions.
3. Awareness of prevailing cultural and gender norms: Understanding the prevailing cultural and gender norms in each setting that may be in opposition to or aligned with an intervention is key for ensuring program support and acceptance. In Indonesia, for example, there were great differences between the three sites on how SETARA was accepted by city government stakeholders, schools, and the teachers themselves. In Bandar Lampung, in the most conservative context, there was opposition from the city government that resulted in a temporary stop in implementing the curriculum until certain topics from the curriculum were removed; in the other two sites, where the prevailing cultural norms were more in alignment to the curriculum, implementation of SETARA was much less challenging [10]. Similarly, in Kinshasa, while the GUG! approach was developed in line with the National Adolescent Health Program's strategy for VYAs and the national Family Life Education program, it meant that certain topics related to sexuality and contraception had to be removed from curriculum materials. Interestingly, in Blantyre, as part of the program validation phase, young people were actively engaged in revising the curriculum and activities. As a result, the intervention incorporated local games, songs, and scenarios for how to bring up sexuality in conversations (e.g., many young people live in one-room households and are exposed to sexual activity quite early) that consequently helped increase support for the program.

Discussion

The primary objectives of this article were to describe the interventions in GEAS, introduce an overarching ToC for the interventions, and within that ToC, provide a set of criteria for successful implementation, which we labeled 'Conditions for Success'. By embedding the 'Conditions for Success' within our ToC, we postulate that a program's ability to change short-term and long-term outcomes is likely determined by the extent to which it can meet these criteria.

In our assessment, it was especially challenging to meet the Conditions for Success in program delivery and facilitation across the interventions in GEAS. While it is well recognized that the effectiveness of an intervention largely depends on facilitator quality, it is not widely known which specific facilitator attributes must be met. Using our Conditions for Success criteria, we found that nearly all the facilitator challenges could be improved upon with additional training. Specifically, training needs to be long enough to ensure facilitators are comfortable with the content and use of participatory methods have sufficient practice engaging adolescents and ensure that facilitator values and attitudes about gender and sexuality are aligned with the curriculum or content materials. For school-based teachers, such training should be integrated into preservice training in teaching training colleges and degree programs rather than through in-service training. One type of training activity to address facilitator values would be to do a values and norms clarification exercise, which uses reflexive questions and activities to identify value priorities and prevailing social norms that guide a person's interests, choices, and reactions in a given context. In addition, as found in New Orleans and Blantyre, offering 'teach back' sessions as a training activity would ensure that facilitators can demonstrate skills that promote critical reflection and create safe spaces. In Nairobi, facilitators needed refresher trainings and monthly supervision meetings to address entrenched gender inequitable norms, especially among the male facilitators. Our assessment also found that interventions that relied on teachers experienced the most challenges. This may be

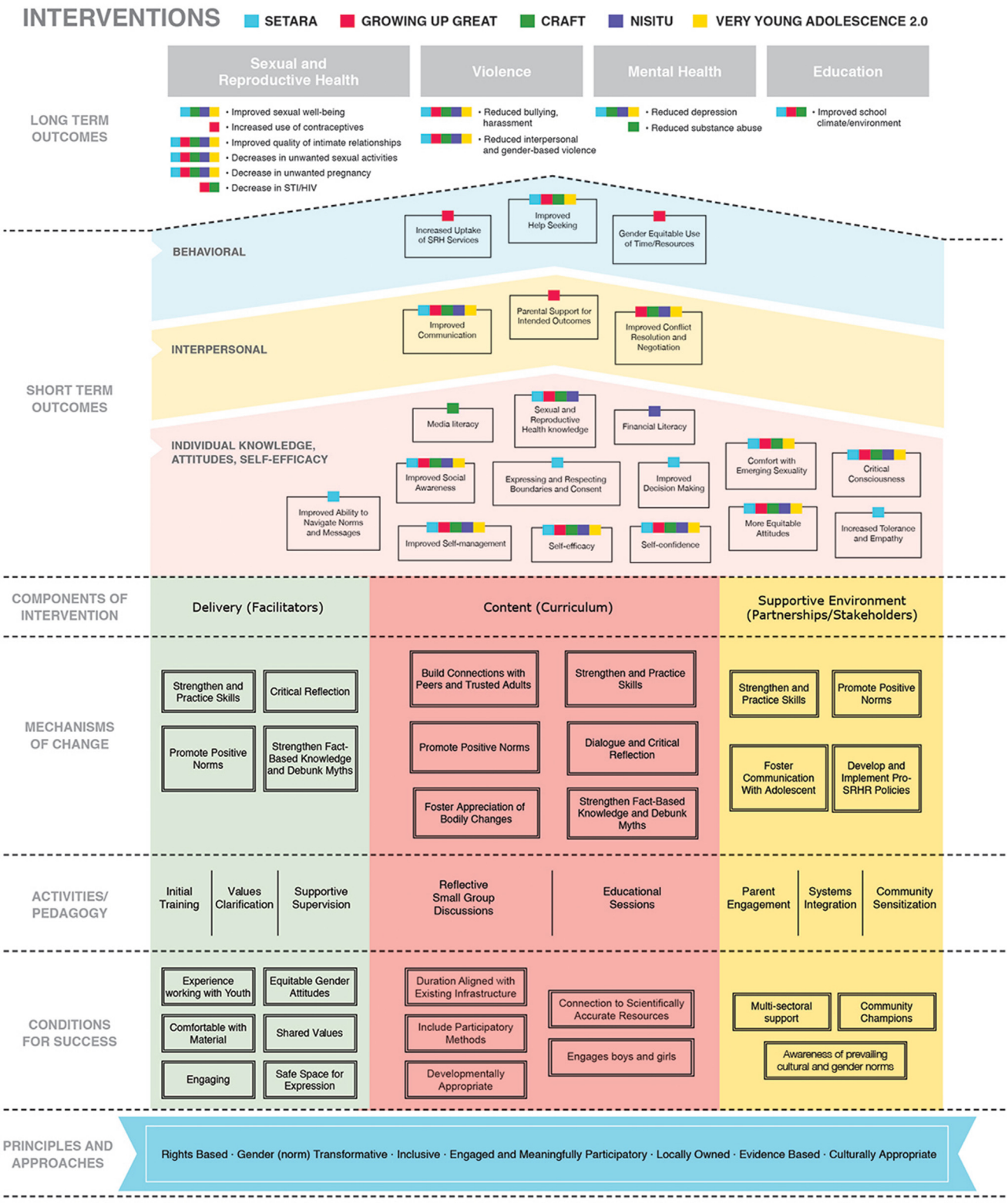

Figure 1. Overarching theory of change.

related to how teachers are selected, which can be based on availability and/or subject that is taught rather than skills and interests. This is supported by other studies of adolescent SRH programs [16–18] and may indicate that digital platforms or health educators/youth leaders may be alternative or complementary modes of delivery [19,20].

We also found that interventions were more successful in meeting the conditions related to content and curriculum. The exception was ensuring that the curriculum or content materials fit within the existing learning schedules. This was particularly the case in Indonesia and Kinshasa; consequently, facilitators often skipped over modules and activities. Similarly, in Nairobi, the original format of weekly sessions had to be adapted into a single longer monthly session for older adolescents who often juggled work, studies, and household responsibilities. In Kinshasa, Blantyre, and New Orleans, data also revealed how important it was to build connections with healthcare providers to create additional channels for students (and facilitators) to receive accurate information. This was perceived to alleviate the pressure on the facilitators to know all the answers related to the curricula topics.

Although the interventions in GEAS primarily focused on shifting individual gender attitudes and beliefs among VYAs, except for GUG! in Kinshasa which also focused on parents' and teachers' gender attitudes and beliefs, all agreed that more must be done to build multisectoral support and create community champions. Previous reviews of gender transformative interventions have suggested that to change broader cultural and gender norms related to subsequent health behaviors among adolescents, it is important to include multilevel, multisectoral approaches [5,6,15]. In our review of the interventions in GEAS, we also found that understanding what topics were acceptable—and not—in a particular cultural setting was critical for not only gaining support but also in being able to successfully implement the intervention. Engaging with young people in the design and implementation of the intervention was also valuable for ensuring that local customs and scenarios were incorporated into the content and delivery to build acceptance. While not as much is known about creating multisectoral support, there has been more research that has examined multilevel approaches and found positive norm attitude changes among adolescents [5]. For example, we found that given a parent's influencing role on adolescents' attitudes and beliefs on gender, parents need to be involved in not only intervention design and implementation but also as a separate target audience to improve their gender-equal attitudes and behaviors. Depending on the cultural setting, it may be critical to involve religious and community leaders to ensure local support for the intervention. Finally, it is important to point out that all the gender transformative interventions in the GEAS are implemented in urban settings; therefore, the Conditions for Success criteria may not apply to interventions implemented in rural settings.

Conclusion

The Conditions for Success criteria provide a useful framework for assessing facilitators and barriers to implementation across a diverse set of gender transformative interventions that target VYAs across different urban settings. Additional research is underway to examine whether interventions that meet more Conditions of Success result in greater program impact, which will be used to further refine the overall ToC. Taken together, this knowledge can be used to guide intervention design and implementation to ensure it is both effective and sustainable over the long term.

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