



Using Behavioral Science to Encourage Youth to Seek Sexual and Reproductive Health Services in Malawi

The Challenge

Adolescent pregnancies are increasing in Malawi. The country's most recent Demographic and Health Survey found that 29% of women aged 15–19 in 2016 had begun childbearing, up from 26% in 2010.¹ During the pandemic, however, teenage pregnancies have only further increased.² These high rates have many negative health, social, and economic consequences. For example, adolescent pregnancies account for 15% of maternal deaths.³ Of particular concern are fatalities caused by abortions, which are illegal in Malawi, which account for one in six maternal deaths in Malawi.⁴

Adolescent pregnancy is also detrimental to the child's health since it leads to higher rates of premature births (contributing to Malawi's high 1 in 10 prematurity rate).⁵ Early pregnancy can also lead to child marriage (with 42% of girls under 18 married),⁶ which has been shown to decrease rates of female education and reduce a family's economic prospects.

Proper use of contraceptives may curb these negative outcomes. However, the challenge is not awareness. Adolescents (95%) are aware of modern contraceptive methods, but only 19.5% use them.⁷ The lack of demand for SRH services is

¹ <https://dhsprogram.com/pubs/pdf/FR319/FR319.pdf>

² <https://www.unicef.org/media/84831/file/Malawi-COVID-19-SitRep-21-October-2020.pdf>

³ <https://www.usaid.gov/malawi/global-health/maternal-neonatal-and-child-health#:~:text=Malawi%20has%20one%20of%20the.and%2015%25%20of%20maternal%20deaths>

⁴ <https://www.guttmacher.org/fact-sheet/abortion-malawi>

⁵ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7062552/>

⁶ <https://www.unicef.org/esa/media/7446/file/UNICEF-Malawi-End-Child-Marriage-Budget-Scoping-2020.pdf>

⁷ <https://www.cmi.no/projects/2232-child-marriage-and-adolescent-pregnancies-in-malawi>

brought about by behavioral challenges such as lack of motivation, misperceptions regarding the safety of contraceptive use, and the social stigma of seeking out and using contraceptives.

Traditional advertising for SRH services has proven insufficient or cost-prohibitive. Malawi public health departments have implemented “youth-friendly service sites” to encourage adolescents to seek a range of health services, from basic health care to SRH services. However, these centers have largely been underutilized, as reported by Save the Children (SC) Malawi staff.

Our Solution

Our approach aims to promote SRH in cost-effective and scalable ways by focusing on the *social and psychological barriers* to SRH services access. To help promote Sexual Reproductive Health (SRH) services among Malawi youth, particularly adolescent girls, SC Malawi partnered with students from the University of Pennsylvania’s Master of Behavioral and Decision Sciences. The team’s perspective was similar to that of STC’s own Centre for Utilising Behavioural Insights for Children (CUBIC), which designs highly-targeted, psychology-inspired interventions to cost-effectively catalyze behavior change. Such cost-effective opportunities exist in Malawi and can help promote SRH adoption. The team determined that changes to the content of existing youth programming as well as the introduction of non-monetary incentives can generate impact, while sidestepping the costs and time delays of traditional advertising. Notably, the interventions generated through this partnership may be implemented in schools, youth clubs, and Community Based Organizations (CBOs).

Overall Objectives

- **Encourage youth to seek SRH services** by increasing self-awareness as well as by making information clearer and more tailored to youth;
- **Increase access to SRH services** by providing tangible incentives and reducing stigma associated with seeking these services as a teenager;
- **Ultimately decrease unwanted pregnancies** by significantly reducing the intention-action gap among youth who understand the importance of contraception but don’t use it in practice.

What are the barriers to action?

- **Motivational barriers** Malawi youth may not *want* to seek out SRH services and would benefit from programming designed to increase their motivation to access existing services;
- **Informational barriers** Even if Malawi youth want to seek out SRH services, they may not know how to do so or who to talk to for advice; they also might have misperceptions about SRH services that could be addressed with effective educational programming;
- **Social barriers** Malawi youth may experience stigma for seeking out SRH services and/or be unsure about whether it is socially acceptable to access these services.

How are these barriers addressed?

Each intervention intends to tackle one of the barriers as indicated below:

Overcoming motivational barriers

Planning With WOOP: *Improving Self Efficacy*

WOOP is an evidence-based motivational strategy developed by Gabriele Oettingen whereby individuals identify a Wish, or desired future state; an Outcome, or how they anticipate feeling if that future state is materialized; an Obstacle they might face while trying to make their desired future a reality; and a concrete Plan, often formulated as “if X, then Y,” that individuals can use to overcome the specified obstacles.⁸ The strategy is rooted in research indicating that envisioning desired future states along with obstacles that might co-occur motivates individuals to act. Further, pairing this mental

⁸ Oettingen, G., & Reiningher, K. M. (2016). The power of prospection: Mental contrasting and behavior change. *Social and Personality Psychology Compass*, 10(11), 591-604.

contrast with concrete if-then plans has been shown to significantly improve children's ability to change their behavior, even those in disadvantaged conditions.

Malawi youth will be taught the WOOP concept and provided with SRH-related "Wish" prompts which they can choose and for which they can identify their own anticipated outcomes, obstacles, and plans. This exercise aims to encourage young boys and girls to plan for the future by visualizing relevant obstacles and making concrete plans to overcome them.

Overcoming informational barriers

Youth-Led Educational Sessions: *Making Health Information Clear*

Evidence shows that internalizing information in order to be able to present it to others can highly improve info retrieval capacity.⁹ Also, interpersonal similarity has been shown to increase compliance and decrease resistance to a message.¹⁰ Thus, the goal of this intervention is to enable youth to internalize SRH information by teaching, while also making information more attractive to them.

Participants will be divided into teams, provided with information about a specific SRH topic, and instructed to prepare a presentation on their topic to present to other teams. Teams will take turns presenting their topics across multiple sessions.

Overcoming social barriers

Advice Giving and Receiving: *Reducing Stigma*

A study of middle school aged participants (N = 2,274) shows that giving advice can be more empowering and motivational than receiving advice, as it raises confidence in the advice giver.¹¹ Further, the messenger effect suggests that who conveys a message matters to recipients. Hence, the goal of this intervention is two-fold: 1) empower older youth by giving them the opportunity to pass on SRH advice to younger youth, and 2) reach younger youth more effectively by providing them with advice from older youth.

In the exercise, older youth will be instructed to write, type, or video record advice for an anonymous younger recipient. After these messages are screened for appropriateness, they will be anonymously distributed, read, or shown to younger youth. We believe that through this intervention, youth will be empowered by their own existing knowledge and younger youth (ages 10-14) will absorb information from older youth (ages 15-18) as they look up to them as role models..

Group-Based, Non-Monetary Incentives: *Making Services Attractive*

Past research has found that incentives can help increase the uptake of underutilized health services, such as vaccines.¹² Furthermore, supplying vouchers can inform and motivate the adoption of SRH services.¹³ Many youth may feel stigmatized for entering health centers. As a result, individual incentives may only have limited benefit for increasing the uptake of services.

In response, this incentive program is designed to encourage group participation in SRH services. Youth will be given vouchers for non-monetary incentives that can only be redeemed at health centers and that increase in value when youth redeem the vouchers as a group. Incentives are necessarily specific to a locality (varying based on rurality, proximity to other partners, and community feasibility) and must be employed creatively. For example, feminine hygiene products or bras may be supplied through a partnership with Action Aid or Smalls for All. Incentives may also be non-physical, such as computer time, Wi-Fi access, or community events.

⁹ Koh, A. W. L., Lee, S. C., & Lim, S. W. H. (2018). The learning benefits of teaching: A retrieval practice hypothesis. *Applied Cognitive Psychology*, 32(3), 401-410.

¹⁰ Silvia, P. J. (2005). Deflecting reactance: The role of similarity in increasing compliance and reducing resistance. *Basic and applied social psychology*, 27(3), 277-284.

¹¹ Eskreis-Winkler, L., Fishbach, A., & Duckworth, A. L. (2018). Dear Abby: Should I give advice or receive it?. *Psychological science*, 29(11), 1797-1806.

¹² Banerjee, A. V., Duflo, E., Glennerster, R., & Kothari, D. (2010). Improving immunisation coverage in rural India: clustered randomised controlled evaluation of immunisation campaigns with and without incentives. *Bmj*, 340.

¹³ Eva, G., Quinn, A., & Ngo, T. D. (2015). Vouchers for family planning and sexual and reproductive health services: a review of voucher programs involving Marie Stopes International among 11 Asian and African countries. *International Journal of Gynecology & Obstetrics*, 130, E15-E20.

Implementation Plan

Proposed interventions require minimal capital investment, and measures do not require extensive expertise. Moreover, they are highly modular. This means that interventions may, singly or as a whole, be built into existing programming and funding streams. For example, the project may be implemented through youth programs of local Community Based Organizations as new youth engagement activities.

To demonstrate initial efficacy, Save the Children plans to conduct a pilot study that will allow STC to understand which interventions should be tested on a larger scale. The aims of the pilot study are two-fold: (I) to test the feasibility of proposed interventions before they are deployed on a larger scale, and (II) to test the effectiveness in encouraging youth to seek out SRH services. After any needed adjustments are made, STC Malawi and CUBIC will be in a position to plan for a larger intervention that may include all or just some of the interventions proposed.

To achieve the first goal, STC will identify a number of classes in a school and administer all interventions within a reasonable timeframe. After administering each intervention, facilitators will be asked to complete a questionnaire intended to gauge their perceptions on how successful and engaging each session was. STC will also consider conducting interviews with facilitators to understand their perspective more in depth. Children will also be asked to complete a short feedback questionnaire. An indicative timeline for the proposed pilot study can be found below.

Once evaluations on the pilot study results are made, STC will conduct an experimental study to test interventions' efficacy: outcome measures will be compared between youth clubs (or schools) that receive the interventions and those that do not. Youth and facilitators involved in the experiment will be given pre- and post-test surveys, which will be evaluated internally by Save the Children staff. Successful interventions will be indicated by increases in youth's perception of their ability to effectively seek out and access SRH services, as well as increases in knowledge about SRH services and who they can turn to for support in this realm.

	Months												
	1	2	3	4	5	6	7	8	9	10	11	12	12+
Phase 1: Preparation to conduct Pilot Study													
Identify staff to support pilot engagement (logistics, data analysis, and group support)	■												
Identify with schools/youth groups to conduct pilot	■	■											
Identify cost-effective incentive; seek potential partners	■	■	■										
Develop staff training		■	■										
Refine data collection plan			■	■									
Engage with school/youth group staff; train staff to preform pilot interventions and collect data				■	■								
Print and distribute materials				■									
Phase 2 : Trials/ Proof of Concept													
Run interventions & collect data/feedback				■	■	■							
Analyze collected data/feedback to develop a report on interventions							■	■					
Review analysis and select intervention(s) with most potential								■	■				
Modify successful interventions for another iteration									■	■			
Run adjustment or iteration of selected interventions based on trial results										■	■	■	
Analyze collected data/feedback to develop a final report on interventions and scaling recommendation												■	
Phase 3: Scale up and Implementation													
Identify schools/youth centers for scale up													■
Identify staff for scale up													■
Plan large scale implementation based on Pilot Results													■

Key Outcomes

Through the implementation of the direct interventions of our solution, we expect to see increased awareness of, trust in, and uptake of SRH services. Outcome measure may include:

- Proportion of sexually active adolescents 15 – 19 years disaggregated by sex currently using contraceptives by method. The project will use a population-based survey to measure the indicator. The target is to reach an average of 50% of adolescent boys and girls in the target communities.
- Number of adolescent boys and girls reached with comprehensive SRH education. This will be captured as part of monthly project reports. The goal is to reach 75,000 youth in target communities.

Upon completion, project teams may promote new evidence, learning, and (we hope) best practices for engaging adolescents with SRH services.