Shifting Young Girls' Sexual and Reproductive Health Attitudes, Beliefs, Norms, and Intentions in Burkina Faso:

EVALUATION RESULTS FROM THE (RE)SOLVE PROJECT













BACKGROUND

ABOUT (RE)SOLVE

Launched in 2016, the (re)solve project was led by Pathfinder International, in partnership with Camber Collective, The International Center for Research on Women, and ideas 42. The consortium used expertise from consumer insights, behavioral design, and public health to discover what keeps women and girls from using modern contraception even when they wish to avoid pregnancy.

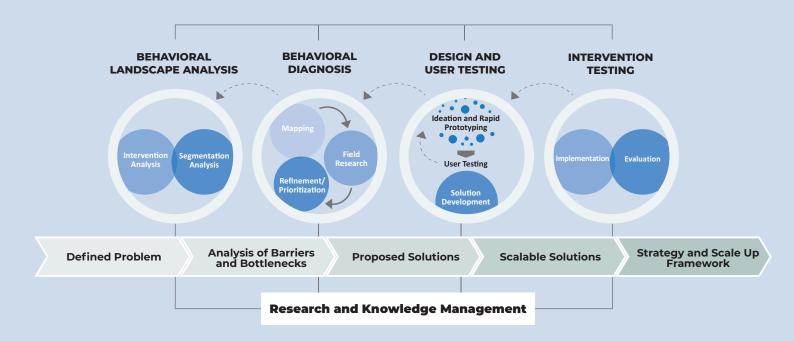
At (re)solve's core was the conviction that one size does not fit all. (re)solve designed and customized data-informed solutions and services to the needs, motivations, and lived experiences of women and girls in Burkina Faso, Ethiopia, and Bangladesh.

ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH IN BURKINA FASO

Half of the population in Burkina Faso is younger than 15, and many young people will become sexually active and at risk of unplanned pregnancy in their teens. In Burkina Faso, nearly one in two girls will be married, and one in four will become pregnant, before her 18th birthday. Among young women ages 15 to 24, 69% have had sex, and 38% are currently sexually active. However, 83% of young women in this age group have never used a modern contraceptive method, and 88% are not currently using a method.¹

1 Burkina Faso, 2010 DHS

THE (RE)SOLVE FRAMEWORK



The (re)solve Framework

The (re)solve approach had four phases: behavioral landscape analysis, behavioral diagnosis, design and user testing, and intervention testing.

PHASE I: BEHAVIORAL LANDSCAPE ANALYSIS

(re)solve's behavioral landscape analysis shed light on the dynamics that influenced nonuse of contraceptives among young women ages 15 to 24 in Burkina Faso. We used segmentation² to classify this heterogenous population into six relatively homogenous categories or 'segments' based on shared demographic, attitudinal, and other characteristics. Insights from segmentation informed the behavioral diagnosis, design, and development of the intervention.

2 The activity of dividing a larger population into sub-groups of people (known as segments) based on some type of shared characteristics, such as shared needs, common interests, similar lifestyles, or even similar demographic profiles.



Photo: Sarah Lance/Pathfinder International

PHASE II: BEHAVIORAL DIAGNOSIS

Understanding intention, which lies between contraceptive decision making and use, requires examining and overcoming the behavioral bottlenecks³ that prevent young people from using contraception. (re)solve identified bottlenecks that influence girls at various decision points:

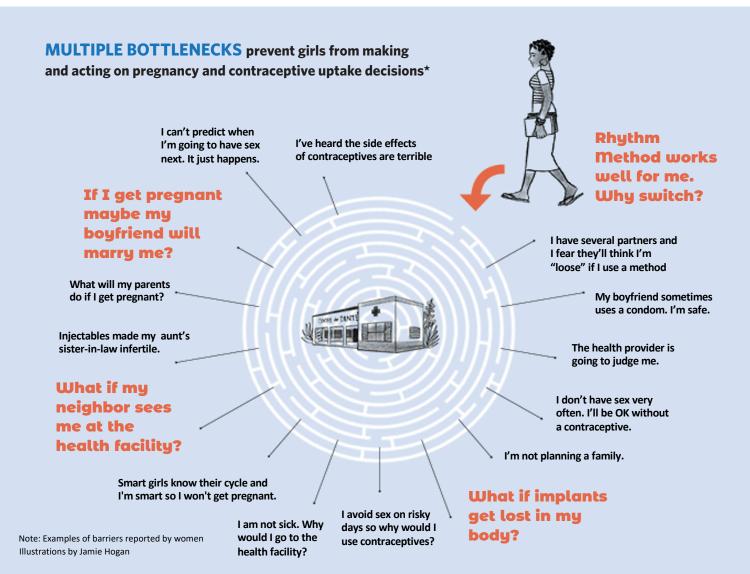
- + Decision to get pregnant (Girls do not explicitly think about the consequences of sex.)
- Decision to use contraceptives (Girls do not think they need to consider using contraceptives, because they perceive a low risk of pregnancy.)
- + Decision to visit a health facility (Girls do not go to the health facility for fear that others will find out that they are interested in or using contraceptives.)

The (re)solve team assessed each bottleneck for relevance to the problem of contraceptive nonuse, evidence of its

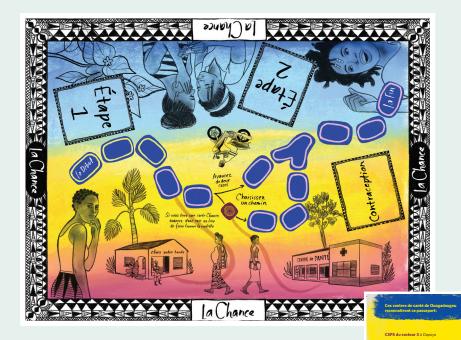
existence, and feasibility to address. Mapping the barriers to the segments showed that the bottlenecks primarily affected unmarried girls; as a result, we focused the project's next phase on unmarried girls.

PHASE III: DESIGN AND USER TESTING

The design and user-testing phase of the project involved several steps: ideation (during which the team, schoolgirls, and health workers generated myriad potential solutions to address the prioritized bottlenecks), prototyping top-scored ideas, and user testing. During user testing, we conducted workshops with implementation staff, girls, and health workers to understand and refine prototypes based on feedback related to content, usability, feasibility, and perceived effectiveness of design options. At the end of this phase, we finalized a set of solutions to be implemented with unmarried schoolgirls. Because engagement with the solutions required fluency in French, we decided to focus the intervention on girls in 4ème (9th grade) and 3ème (10th grade), as girls in lower grades did not yet have the French language proficiency to fully comprehend the content on the cards.



³ Barriers that prevent an individual from making a decision or taking action that would otherwise meet their needs (i.e. using a contraceptive method to avoid unintended pregnancy).



SOLUTION SET COMPONENTS:

La Chance board game with spinning tops, passport, poster, nametag









THE (RE)SOLVE SOLUTION SET

The solution set comprised three components.

BOARD GAME: At school, girls played a board game called *La Chance*, led by a local trained facilitator. Participants competed to reach the end of the board to win, picking cards along the way and choosing a path with or without contraceptives.

Through the game, girls explored scenarios, made decisions and experienced the consequences, answered sexual and reproductive health (SRH) trivia questions, and responded to prompts that asked them to confront myths and give advice. These activities countered misperceptions about pregnancy risk, fertility, and contraceptives; increased girls' comfort with sensitive topics, and encouraged them to visit health facilities.

HEALTH PASSPORT: After the game, the facilitator gave each girl three 8cm x 10.5cm passports —one for herself and two for friends—that listed participating health facilities. When a girl arrived at a health facility, she showed the passport to a trained health worker who recognized the passport and provided quick, discreet SRH counseling or services to the cardholder.

YOUTH-FRIENDLY SERVICE (YFS) TRAINING, POSTER, AND

NAME TAG: Administrative staff and health providers in participating facilities received YFS training on provision of comprehensive, high quality, and unbiased SRH services to

young people. Trained YFS providers wore branded name tags to visibly identify themselves. Schools and facilities displayed posters advertising non-contraceptive services. Facility posters normalized girls' presence and gave them excuses if anyone recognized them or asked about the purpose of their visit.

PHASE IV: INTERVENTION TESTING

IMPLEMENTATION

Regional Health Directorates and secondary-education departments facilitated the introduction of the (re)solve solutions in health facilities and schools, respectively. Eighteen health facilities—nine in Bobo-Dioulasso and nine in Ouagadougou —participated. In addition to the YFS training conducted between September and November 2019, (re)solve staff oriented providers to the project and the solutions.

The solutions were implemented in 16 secondary schools: eight each in Bobo-Dioulasso and Ouagadougou. Schools were assigned two facilitators who each played one to two games per day. (re)solve oriented the principal, parent-teacher association, and parents to the game and addressed questions and concerns. More than 3,000 girls played *La Chance*, and facilitators distributed more than 11,000 passports between December 2019 and mid-March 2020, when schools closed as a result of COVID-19.

Evaluation

METHODS

The primary hypothesis of the impact evaluation was that girls in 4ème and 3ème who were exposed to the board game and given a health passport to facilitate follow-up at a health center would be more likely to report accurate perceptions about sex and contraception, form intentions that match their risk status – such as intent to use contraception – and seek more information and/or contraceptive services at a health center, compared to similar girls who were not exposed to this solution.

To address our research aims, we used a mixed-method cluster randomized trial (CRT) design. Specifically, we used the following methods:

- + Baseline/midline/endline longitudinal quantitative surveys with a cohort of girls ages 14 to 18 in 4ème and 3ème in intervention schools and baseline/endline longitudinal quantitative surveys with the same population in control schools;
- Baseline/endline longitudinal in-depth interviews (IDIs) with girls ages 14 to 18 in 4ème and 3ème in intervention schools;
- Endline qualitative interviews with implementation staff;
 and
- + Endline key informant interviews (KIIs) with experts and authorities.

We used a multi-stage cluster design for the evaluation. To reach a sample size of 2,400 unmarried girls with the quantitative survey, we selected 32 schools (16 in Bobo-Dioulasso, 16 in Ouagadougou).⁴ Half of the schools in each city were randomly assigned to receive the (re)solve intervention; the others were assigned as control schools. For qualitative interviews, we randomly selected girls at baseline from those who agreed to take part in (re)solve and expressed interest in participating in the research. All other qualitative participants were purposively selected.

The (re)solve research team collected baseline data in person between November 2019 and January 2020. Endline data collection was scheduled to begin in late March 2020, but, because of the COVID-19 pandemic, the team instead collected all endline data by phone in July 2020.

The ICRW Institutional Review Board (Washington, DC) and Comite D'Ethique Institutionnel Pour la Recherche en Sciences de la Sante (CEIRSS) (Burkina Faso) approved the research. The research team obtained parental consent for all girls under the age of 20.

PRELIMINARY FINDINGS

We conducted 2,372 quantitative surveys at baseline and 2,072 at endline (87.4% retention rate) (TABLE 1); 48 IDIs with girls at baseline and 41 at endline; 35 endline IDIs with implementing staff; and 14 endline KIIs. At baseline, our sample was well-balanced on key demographic characteristics (TABLE 1).

EXPERIENCE WITH (RE)SOLVE (ENDLINE)

Of girls participating in the (re)solve research and programming—henceforth termed intervention-school girls (N=1,013)—96.2% (N=947) reported ever playing the game, and 96.7% (N=950) received a passport. The majority received either two (97.2%, N=803) or more than two (14.1%, N=143) passports to give to other girls, as was intended. The majority of girls (41.9%) reported giving at least one passport to a peer at a different school, followed by an older family member (29.9%). Only 7.7% of girls did not share a passport with anyone.

Ninety-one percent (N=923) saw the posters in school. At endline, 28.7% (N=291) of intervention-school girls had ever gone to a health facility for information or services related to puberty or menstruation, and 20.1% (N=204) had done so for contraceptive information or services.

There were 194 girls (19.2% of total) who reported having gone to a health facility in the last seven months (during (re)solve implementation) for contraceptive information or services: 14.5% in Ouagadougou (N=75) and 23.9% in Bobo-Dioulasso (N=119) (TABLE 2).

The (re)solve project was well-received by respondents. Most girls reported enjoying playing the game, learning through play, and interacting with facilitators. A 16-year old girl in 4ème in Ouagadougou shared, "What I liked about this game was the way the animators were available to us; they were courteous; they listened to us and they gave us good advice. They showed us what to take as a path to avoid pregnancy." Respondents even requested to play the game again.

Many facilitators noted high engagement by the girls and that they themselves enjoyed the opportunity to act as mentors. One facilitator in Bobo-Dioulasso said, "I was able to build good relationships with the girls. I also liked the organization and the collaboration with the other animators."

Several facilitators recommended expanding the intervention to other grades, to boys, and to play the game more than once. A facilitator in Ouagadougou noted, "What could have been done differently, in my opinion, is to extend the game through the project to an age group lower than the one we have targeted, for example [5ème], because there is an age group at this level that is already experimenting [sexually]." Another facilitator from Bobo-Dioulasso recommended, "Consider the boys, because they want to play. It will be really good for them to have the same information as girls."

⁴ The sampling process was used to define which health centers and schools would be included in (re)solve implementation and evaluation. In the first stage, the team purposively selected health centers from a list of eligible facilities in both cities.

Next, the team randomly selected schools in the catchment areas of these centers. In the final stage, students were randomly selected for participation in the evaluation.

TABLE 1. Demographics of Quantitative Survey Participants

		Control [N=1,200] (N, %)	Intervention [N=1,172] (N, %)	Total [N=2,372] (N, %)
City	Ouagadougou	600 (50.0%)	572 (48.8%)	1,172 (49.4%)
	Bobo-Dioulasso	600 (50.0%)	600 (51.2%)	1,200 (50.6%)
School	Private	900 (75.0%)	872 (74.4%)	1,772 (74.7%)
	Public	300 (25.0%)	300 (25.6%)	600 (25.3%)
Grade**	4ème	587 (48.9%)	505 (43.1%)	1,092 (46.0%)
	3ème	613 (51.1%)	667 (56.9%)	1,280 (54.0%)
Age*	14	206 (17.2%)	247 (21.1%)	453 (19.1%)
	15	279 (23.3%)	281 (24.0%)	560 (23.6%)
	16	269 (22.4%)	275 (23.5%)	544 (22.9%)
	17	232 (19.3%)	197 (16.8%)	429 (18.1%)
	18	214 (17.8%)	172 (14.7%)	386 (16.3%
Currently sex	ually active	96 (8.0%)	97 (8.3%)	193 (8.1%)

Statistically significant at * p<0.05, **p<0.01, ***p<0.001

 $Not shown: No statistically significant differences on {\it 'intention}\ to use contraceptives' between control and intervention schools.$

TABLE 2. Experience of Girls at (re)solve Health Facilities

EXPERIENCE CATEGORY	RESPONSE	TOTAL (N,%)
Saw posters at health center (N=194)		178 (91.8 %)
Method received at health center, as	Modern method ^a	36 (18.6 %)
reported by girls (N=194)	Condoms ^b	13 (6.7 %)
	Abstinence	58 (29.9 %)
	Other or prefer not to respond ^c	87 (44.8 %)
Reasons for not visiting health center for	Not sexually active	331 (40.9 %)
contraception information or services (among the N=809 girls who did not go)	Already on a method	15 (1.9 %)
	Not interested	66 (8.1 %)
	Intended to but busy with school	210 (25.9 %)
	Intended to, but COVID-19	89 (11.0 %)
	Intended to but (other reasons) ^d	66 (8.1 %)
	Other, don't know, or prefer not to respond	32 (4.0 %)

a Modern methods include all hormonal methods and emergency contraception.

b Condoms include male and female condoms.

c Other methods include 67 girls reporting "prefer not to answer."

 $[\]mbox{\ensuremath{\mbox{d}}}$ Other reasons include lack of means, transport, and support.

CONTRACEPTIVE ATTITUDES, NORMS, BELIEFS, AND INTENTIONS

The evaluation examined SRH attitudes, norms, beliefs, and intentions among girls over time and between intervention and control arms.

ATTITUDES TOWARD CONTRACEPTION

Overall, we saw positive trends in contraceptive attitudes among intervention-school girls. Between baseline and endline, the percentage of intervention-school girls who **agreed that contraception causes infertility decreased** from 81.8% to 77.6% (**FIGURE 1**). Likewise, the percentage of intervention-school girls who **agreed that** "contraception is the best option for me" increased from 72.7% to 83.6% (**FIGURE 2**). At endline, we observed statistically significant differences between the intervention and control groups in level of agreement with both statements (both p<.001).

Qualitative results suggested that the solutions challenged girls' misconceptions and taught them how and where to obtain medically accurate information. "I think the girls are starting to understand, they buy into it," said a health worker in Bobo-Dioulasso. "Especially those who have enough information about contraception, they do not hesitate to submit to a method."

A 19-year old girl in Ouagadougou in 3ème reported, "I thought that [contraception] was not a good thing and that what people were saying about it was not the truth. I thought contraceptives weren't safe to avoid getting pregnant. But after the game, that changed."

However, misinformation and fear, especially of a link between contraception and permanent infertility, were still commonly reported by intervention-school girls. A 17-year old girl in 4ème in Ouagadougou shared, "I am afraid... of using contraception, because later on I will have no more children."

FIGURE 1. Girls who agree that contraception causes infertility (N=1,986)

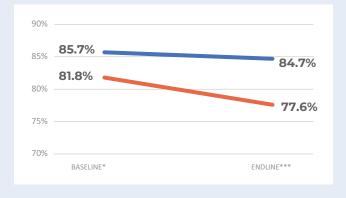


FIGURE 2. Girls who agree that contraception is the best option for them (N=2,044)

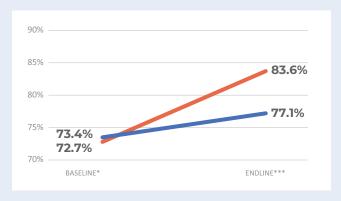
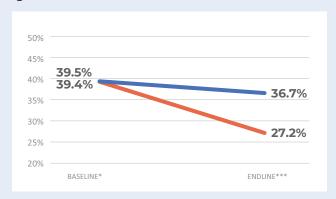


FIGURE 3. Girls who agree that they have the confidence to get and use contraception if they want to (N=2,072)



FIGURE 4. Girls who agree that health care workers do not like to give contraceptive advice to unmarried girls (N=1,988)



Statistically significant at * p<0.05, **p<0.01, ***p<0.001

Girls are considered to agree with the statement if they responded "agree" or "strongly agree."



Photo: Arthur Abga/Pathfinder International

SELF-EFFICACY, PERCEIVED PROVIDER BIAS, AND NORMS

We also saw an **increase in girls' self-efficacy to get and use contraception.** The percentage of intervention-school girls reporting confidence to get and use contraception rose from 54.9% to 74.6%. At endline, a statistically significantly larger proportion of girls in the intervention group reported the confidence to obtain and use contraception, compared with girls in the control group (74.6% compared to 63.0%, P<.001) (**FIGURE 3**).

Relatedly, intervention-school girls reporting **agreement that health care workers do not like to give contraceptive advice to unmarried girls decreased** from 39.4% to 27.2%. At endline, a statistically significantly smaller proportion of girls in the intervention group reported that they agreed with the statement, compared with girls in the control group (27.2% compared to 36.7%, P<.001) (FIGURE 4).

Girl IDI respondents who visited a health center after playing the game almost universally reported positive experiences: they felt welcomed, were seen quickly, and received the advice or answers they sought. A 16-year old girl in 3ème in Bobo-Dioulasso recalled, "The agents welcomed me as soon as I presented my passport to them. They gave me a place.... I was comfortable, because all the questions were confidential. I felt satisfied."

Many respondents of all types noted that a major barrier to visiting health centers has been girls' fear of being seen and their interest in or use of contraception being discovered by their families. However, the anonymity and confidentiality associated with the passports appeared to counter these fears, as did the attitudes of the health

workers, who put the girls at ease. A health worker in Bobo-Dioulasso said, "When [the girls] come with the card [passport], they don't need to talk too much. Because most of our agents have received training for this, so when we see a girl with a card, we quickly approach her to easily guide her."

The percentage of girls reporting social norms around unmarried girls' nonuse of contraception decreased (not shown). Between baseline and endline, the percentage of girls in the intervention group who agreed that it is not normative for unmarried girls to use contraception decreased from 32.1% to 17.7%. At endline, a statistically significantly smaller proportion of girls in the intervention group reported they agreed contraceptive use for unmarried girls is not normative, compared with girls in the control group (17.7% compared to 28.4%, P<.001).

Even when girls did not want to use contraception and preferred to abstain from sex until marriage, qualitative results at endline suggested that their general attitudes toward contraception were more positive than at baseline. One 19-year old respondent in 3ème in Ouagadougou reflected, "Contraception! It's for all girls. It's a choice. If you want, you can go on use it, and if you don't want, you leave it. Otherwise it's for every girl.... It depends on what you want."

Adults responded similarly; many would support contraceptive use among their daughters or other girls, especially if the alternative was an unwanted pregnancy and/or an unsafe abortion. "Nowadays adults have understood [about contraception]," said a health worker in Ouagadougou. "Better to adopt contraception than to have an unwanted pregnancy and have an abortion at the risk of losing her life."

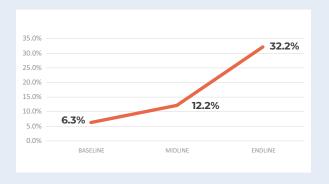
INTENTION TO USE CONTRACEPTION

The main results of our generalized estimating equations (GEE) analysis show that (re)solve had a positive impact on intention to use contraception but did not reach statistical significance in any of the adjusted risk models, or when stratifying by sexual activity. Girls from intervention schools had higher odds of reporting an intention to use contraception in the next three months compared to girls in the control schools (aOR=1.59, 95% CI 0.97-2.61).

While many girls were in relationships, few reported being currently sexually active. Most seemed naïve about sex and contraception. As a result, many reported that contraception, while not inherently bad, is simply not relevant to them now. When asked if she saw herself using a contraceptive method at any time, one 15-year old girl in 4ème in Ouagadougou responded, "No, not really.... because I don't intend to be in a relationship."

Many girls expressed an intention to use family planning in the future—when they are married or finished with school, for instance. A 16-year old girl in Bobo-Dioulasso in 3ème shared, "[I will use contraception in the future], because at some point I will have sex, and I will have to protect myself to avoid unwanted pregnancies."

FIGURE 5. Percentage of Intervention-school Girls Who Have Ever Visited a Health Facility for SRH Information or Services (N=999)



VISITS TO HEALTH FACILITY FOR SRH INFORMATION AND SERVICES

Among intervention-school girls, we noted a statistically significant increase in the percentage reporting ever having gone to the health facility for SRH-related reasons, from 6.3% to 32.2% (P<.001) (FIGURE 5). During the game and in subsequent conversations with facilitators, girls asked questions about contraception, menstruation, and sexual health. Some girls gained enough confidence to visit health centers and ask follow-up

questions. One 16-year old girl in Ouagadougou in 4ème reported, "I went [to the health center] to determine if what we have been told at school is the same [as] what I will hear at the health center then to know about the method of contraception."

The passports helped girls know what to expect when they arrived at the center, which made them more comfortable going. A health worker in Bobo-Dioulasso observed, "The game.... entertains [the girls] and makes them curious about sexuality, about contraception, and often it also brings them to [the health center]. Also, with the cards they have, it facilitates their access and counseling." While girls might not have developed a clear plan for obtaining and using contraception immediately, the game planted seeds of knowledge and piqued girls' curiosity and desire to learn more.

Discussion

(re)solve was well-received by stakeholders and showed promising results in terms of shifting SRH attitudes, beliefs, norms, and behaviors among unmarried schoolgirls in Bobo-Dioulasso and Ouagadougou. Girls, game facilitators, health workers, and Pathfinder staff reported that they enjoyed the program activities and perceived a positive impact. The game sparked curiosity and challenged myths about contraceptive use, encouraging girls to begin conversations with facilitators to learn more. These conversations helped to reduce misconceptions and fears—particularly that contraception can cause infertility. Intervention-school girls developed more positive attitudes toward contraceptive use and gained confidence to obtain and use a method of their choice.

About one in five respondents used their (re)solve passports to seek information at a health facility. These girls reported receiving answers to important personal questions about their bodies and SRH. Some girls' visits even led them to secure a contraceptive method. Although we did not observe a statistically significant change in intervention-school girls' intention to use contraception, this is likely due in part to the fact that respondents were young, not yet sexually active, and do not yet perceive contraception as an immediate need. However, the fact that at this young age and level of sexual naivety, girls are beginning to ask important questions, gain factual information, and challenge previously held misconceptions and negative attitudes about adolescent contraceptive use suggests that they might be primed to take up a method when they are ready to become sexually active.

In addition, 45% of intervention-school girls said that they intended to visit a health center for contraceptive information or services but had not yet gone because of school, COVID-19, or other reasons. This reported intention shows that girls are interested and eager to learn more.

I THOUGHT THAT [CONTRACEPTION] WAS NOT A GOOD THING... I thought

contraceptives weren't safe to avoid getting pregnant.

But after the game, that changed. (Girl, 19, 3ème, Ouagadougou)

THE GAME.... ENTERTAINS [THE GIRLS] AND MAKES THEM CURIOUS about sexuality,

about contraception, and often it also brings them to [the health center]. Also, with the cards they have, it facilitates their access and counseling. (Health Worker, Bobo-Dioulasso)

Recommendations

Based on initial indicators of success, we see potential for expanding the (re)solve solutions to other schools and new audiences, such as older and younger girls, out-of-school girls, and boys. Program participants echoed similar calls for replication and expansion. The intervention will need to be further contextualized and adapted to the needs of each new group, and additional formative research may be required. The board game, passport, and posters might need to be re-designed to reflect the behavioral bottlenecks new audiences encounter. Future evaluations will be needed to understand how the intervention differentially affects these diverse groups.

While the intervention shows promise, we do not know if playing the game more than once could amplify the effects. We also do not know if and how COVID-19-related

school closures and movement restrictions affected girls' ability to access health facilities and how the pandemic might have altered SRH behaviors and risks.

Finally, implementation of (re)solve solutions at scale will require close coordination between and oversight of the Ministries of Health and Education to ensure successful integration and implementation. Behavioral solutions like the game, health passport, and poster can complement existing demand-generation interventions and connect girls to youth-friendly health facilities so they can make informed decisions that benefit them.

(re)solve places women and girls at the center of our work. This evaluation of the (re)solve intervention for Burkinabé schoolgirls adds to the evidence base on fun, participatory, and feasible approaches to motivate unmarried girls to seek and act on accurate information about SRH and contraception.

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Cover photo by Madeline Kau

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Gates Foundation. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of the Bill & Melinda Gates Foundation.

For the full evaluation report, please visit the (re)solve website: www.pathfinder.org/resolve-burkina-faso-project-evaluation









