

# IMPACT OF GROWING UP GREAT! ON THE LIVES OF VERY YOUNG ADOLESCENTS: ONE AND TWO YEARS AFTER PROGRAM IMPLEMENTATION

## Growing Up GREAT!'s lasting impact

An impact evaluation completed three months after implementation of the Growing Up GREAT! (GUG) program for very young adolescents (VYAs; ages 10–14) shows that the intervention made improvements on a range of adolescent sexual and reproductive health and gender norms outcomes [1,2]. Additional longitudinal follow-up provides an opportunity to examine whether and how GUG created longer-term changes in the lives of VYAs. This brief summarizes findings from full evaluation reports, which show that there were sustained as well as novel impacts of GUG in the lives of VYAs one [3] and two years [4] following the end of the intervention.

## Overview of the Growing Up GREAT! intervention

Growing Up GREAT! was implemented in Kinshasa, Democratic Republic of Congo, from September 2017 to June 2018, to reach in-school and out-of-school girls and boys ages 10 to 14. The multi-level intervention sought to: 1) build VYA knowledge, health- and gender-positive attitudes and skills, and self-efficacy, and 2) engage the parents/caregivers, teachers, and health providers of VYAs with the aim of fostering a supportive environment to support the journey of VYAs through puberty.

### Box 1. Key Findings One and Two Years Post-Impact Evaluation

Longitudinal evaluation results show that the impacts of Growing Up GREAT! (GUG) on adolescent sexual and reproductive health and gender norms outcomes three months post-intervention were sustained one and two years later—and, in some cases, novel impacts emerged. For some outcomes, the impacts varied by type of VYA (in-school/out-of-school; boy/girl; 10–11 vs. 12–14 years).

#### *Sustained Impacts*

- Improved support for gender equality in household chores (for all VYAs)
- Feelings of connectedness with caregivers throughout adolescence (for all VYAs)
- Knowledge of pregnancy and menstruation (in-school VYAs)
- Communication about contraception (out-of-school VYAs aged 10–11 years)

#### *Novel Impacts*

- Comfort with accessing contraception (out-of-school girls)
- Reduced bullying and physical violence against peers (in-school VYAs aged 12–14 years)
- Increased body satisfaction (in-school girls)

To this aim, over the ten-month intervention period, girls and boys participated in 26 weekly mixed-sex sessions in either school-based groups (for in-school VYAs) or community-based clubs (for out-of-school VYAs). The sessions addressed topics related to puberty, healthy behaviors and relationships, and equitable gender roles. Additionally, adolescents visited a local health center. Facilitators were encouraged to use materials within their existing lesson-planning to allow for a flexible program delivery approach. The program was implemented over one academic year, and school-based facilitators were able to use materials in subsequent years.

Concurrently, the adults with whom VYAs interacted in home, school, and health care environments also participated in similar GUG discussion and reflection activities designed to lead to more gender-egalitarian support for young people, such as giving girls and boys equal time to do homework, addressing VYAs' newfound fertility and health issues, and fostering gender-equitable healthcare-seeking behaviors. Caregivers participated in a six-session discussion series which included videos as a basis for discussion. More information on the intervention's goals, theory of change, and implementation activities are included in the GUG Impact Brief [1] and associated report [2].

## Study approach to assess long-term impacts of Growing Up GREAT!

The GUG evaluation used a quantitative quasi-experimental design as part of the Global Early Adolescent Study (GEAS), a longitudinal study which collected data from girls and boys who participated in GUG activities (the intervention group) and girls and boys who did not (the control group). The first wave, or baseline, of the quantitative survey was conducted in 2017 with 2,842 adolescents before the GUG intervention started. The second wave (Wave 2) was conducted approximately one year later in 2018, three months after the intervention ended with 2,519 adolescents (89% retention) and measured the short-term impact of GUG. Two additional survey waves assessed any longer-term intervention effects one and two years after the end of the intervention: Wave 3 was conducted in 2019 with 2,221 adolescents (78% retention), and Wave 4 was conducted in 2020 with 1,986 adolescents (70% retention). Intent-to-treat analysis was used to assess changes from baseline to each study wave. Of note, there was significant 'contamination' across treatment arms with control group participants seeking out GUG sessions across time periods. For example, 24% of VYAs in the control group reported exposure to GUG activities in the six months before the Wave 3 survey. Since impact was assessed by treatment assignment, contamination complicates evaluation findings, but also indicates a positive implementation finding of broader program coverage than was initially intended. Additional information on the study design is included in the GUG-GEAS Wave 2 report [2].



**TABLE 1.** Longitudinal data collection timing and sample size

Wave (Year)	Intervention Life Cycle	SAMPLE SIZE		
		Overall	Intervention	Control
Wave 1 (2017)	Prior to Growing Up GREAT! implementation. Commonly called a “baseline” survey and used to understand the knowledge, attitudes, behaviors (KAB), and norms present prior to intervention implementation.	2,842 adolescents aged 10-14	1,459	1,383
Wave 2 (2018)	Three months post-implementation. Shows immediate, or short-term, intervention impacts, comparing KAB of adolescents in the intervention to adolescents who did not receive the intervention (control group).	2,519 (89% retention)	1,276 (88% retention)	1,243 (90% retention)
Wave 3 (2019)	One year post-implementation. Shows longer-term impacts one year after the end of intervention implementation, comparing KAB of intervention adolescents to control group adolescents.	2,221 (78% retention)	1,125 (77% retention)	1,096 (79% retention)
Wave 4 (2020)	Two years post-implementation; Shows longer-term impacts two years after the end of intervention implementation, comparing KAB of intervention adolescents to control group adolescents.	1,986 (70% retention)	1,003 (69% retention)	983 (71% retention)

KAB = Knowledge, attitudes, and behaviors








**Key Finding 1:** Growing Up GREAT! led to sustained changes in attitudes towards gender equality in household chores, feelings of caregiver connectedness, knowledge of pregnancy and menstruation, and communication about contraception.

**Attitudes towards gender equality.** Changes among in-school and out-of-school Growing Up GREAT! adolescents on attitudes towards gender equitable sharing of household chores seen at 3 months (Wave 2) were sustained over time (at 1 year (Wave 3) and 2 years (Wave 4) post-intervention). In-school adolescents in the intervention were 1.88 times more likely at Wave 3, and 2.23 times more likely at Wave 4, to voice support for gender equality in household chores as compared to in-school adolescents in the control group. Similarly, out-of-school adolescents in the intervention were 2.56 times more likely to support gender equality in household chores at Wave 3, and 2.37 times more likely at Wave 4, as compared to out-of-school adolescents in the control group. Notably, there was a small but steady decline in support for gender equality in household chores among control group adolescents from Waves 2 through 4.

**Pregnancy and menstruation knowledge.** Growing Up GREAT! showed improvements in pregnancy and menstruation knowledge. In-school GUG adolescents reported greater pregnancy knowledge than control group adolescents at Wave 2, and while this gain relative to controls was not seen at Wave 3, it reappeared for the youngest adolescents (aged 10-11 at baseline) at Wave 4. All menarchal girls were asked whether they knew where to get information about menstruation, and girls in GUG were more likely than controls to report

**TABLE 2.** Summary of outcomes that were statistically significant at Wave 2, and their sustained impact at Waves 3 and 4





SUSTAINED IMPACTS	EFFECT OF INTERVENTION RELATIVE TO CONTROL GROUP			
	IN-SCHOOL		OUT-OF-SCHOOL	
	W3 INTERVENTION, N=814; CONTROL, N=817	W4 INTERVENTION, N=731; CONTROL, N=746	W3 INTERVENTION, N=362; CONTROL, N=342	W4 INTERVENTION, N=272; CONTROL, N=237
 ATTITUDES TOWARDS GENDER EQUALITY IN HOUSEHOLD CHORES	OR=1.88 (1.42, 2.48), P<0.001	OR=2.23 (1.66, 2.99), P<0.001	OR=2.56 (1.58, 4.14), P<0.001	OR=2.37 (1.42, 3.94), P<0.001
 PREGNANCY KNOWLEDGE	MEAN SCORE DIFFERENCE: 0.08 (-0.24, 0.39), P=0.637	<b>FORAGE &lt;12Y</b> MEAN SCORE DIFFERENCE: 0.59 (0.07, 1.11), P=0.027	MEAN SCORE DIFFERENCE: 0.02 (-0.52, 0.57), P=0.936	MEAN SCORE DIFFERENCE: -0.07 (-0.65, 0.50), P=0.797
 WHERE TO GET INFORMATION ABOUT MENSTRUATION (ASKED OF MENARCHAL GIRLS)	OR=1.66 (1.04, 2.65), P=0.032	OR=1.38 (0.83, 2.30), P=0.218	OR=0.99 (0.42, 2.33), P=0.989	OR=1.61 (0.55, 4.66), P=0.381
 CAREGIVER CONNECTEDNESS	MEAN SCORE DIFFERENCE: 0.09 (-0.01, 0.18), P=0.077	MEAN SCORE DIFFERENCE: 0.11 (0.02, 0.21), P=0.024	MEAN SCORE DIFFERENCE: 0.24 (0.06, 0.42), P=0.009	MEAN SCORE DIFFERENCE: 0.16 (-0.03, 0.34), P=0.096
 SRH COMMUNICATION WITH OTHERS ABOUT CONTRACEPTION	OR=0.63 (0.44, 0.92), P=0.015	OR=0.85 (0.58, 1.25), P=0.418	<b>FORAGE &lt;12</b> OR=5.70 (1.07, 30.42), P=0.041	OR=0.79 (0.37, 1.67), P=0.540

having this knowledge. In-school girls were 2.10 times more likely to report knowing where to get information on menstruation than control group girls at Wave 2, and 1.66 times more likely at Wave 3 (differences at Wave 4 were not significant). Out-of-school girls were 4.18 times more likely to report knowing where to get this information at Wave 2 relative to controls, but these effects were not sustained at Waves 3 or 4.

**Caregiver connectedness.** Growing Up GREAT! helped buffer losses in feelings of connectedness with caregivers as VYAs grew up. Feeling less connected to a parent or caregiver in one’s teenage years as compared to early childhood is, to a certain degree, expected [5]. Findings show that by Wave 4, caregiver connectedness had decreased among both the intervention and control groups. However, there were overall smaller declines among GUG participants than controls. For example, among in-school adolescents, the four-point measure of connectedness dropped 4% (from 3.27 in Wave 1 to 3.14 in Wave 4) among controls but only 0.6% among GUG participants (3.20 in Wave 1 to 3.18 in Wave 4). Out-of-school GUG adolescents in fact showed increases in caregiver connectedness at Wave 3, and lower levels of decline at Wave 4 (though the difference between out-of-school controls and intervention groups was no longer statistically significant at Wave 4).

**Communication about contraception.** Among out-of-school adolescents, GUG had immediate and sustained changes on communication with trusted adults and peers about contraception. Out-of-school GUG adolescents were 1.93 times more likely to report communicating about contraception with others as compared to control group adolescents at Wave 2, and the youngest out-of-school adolescents (those ages 10-11 years) were 14.12 times more likely to talk to others about contraception at Wave 2 (3-months post-intervention). This effect held into Wave 3 for the very youngest out-of-school adolescents, who were 5.70 times more likely than control group adolescents to communicate with others about contraception one-year post-intervention.

**TABLE 3.** Summary of outcomes that were not statistically significant at Wave 2, but became statistically significant at Waves 3 and 4

NOVEL IMPACTS	EFFECT OF INTERVENTION RELATIVE TO CONTROL GROUP			
	IN-SCHOOL		OUT-OF-SCHOOL	
	W3 INTERVENTION, N=814; CONTROL, N=817	W4 INTERVENTION, N=731; CONTROL, N=746	W3 INTERVENTION, N=362; CONTROL, N=342	W4 INTERVENTION, N=272; CONTROL, N=237
 EMBARRASSED TO GET CONTRACEPTION (ASKED OF GIRLS ONLY)	OR=1.32 (0.85, 2.03), P=0.214	OR=0.95 (0.62, 1.46), P=0.811	<b>OR=0.39 (0.17, 0.89), P=0.025</b>	<b>OR=0.36 (0.16, 0.86), P=0.021</b>
 BODY SATISFACTION	OR=1.22 (0.92, 1.61), P=0.162	<b>OR=1.34 (1.01, 1.78), P=0.045</b>	OR=0.94 (0.59, 1.50), P=0.787	OR=1.03 (0.61, 1.74), P=0.897
 PERPETRATED TEASING, BULLYING, AND/OR PHYSICAL VIOLENCE	OR=1.03 (0.78, 1.35), P=0.859	<b>FOR AGE 12+ OR=0.63 (0.42, 0.95), P=0.028</b>	OR=0.90 (0.57, 1.42), P=0.649	OR=1.02 (0.61, 1.68), P=0.952
 BROTHER HELPED WITH CHORES (FROM SISTER'S PERSPECTIVE)	<b>FOR AGE &lt;12 OR=1.85 (1.00, 3.45), P=0.051</b>	OR=1.07 (0.81, 1.42), P=0.632	OR=1.31 (0.62, 2.79), P=0.479	OR=1.13 (0.75, 1.72), P=0.561

 **Key Finding 2:** Growing Up GREAT! had delayed impacts on peer violence, and body satisfaction among in-school adolescents, and comfort accessing contraception among out-of-school adolescents.

**Body satisfaction.** For in-school adolescent girls, GUG had long-term impacts on body satisfaction. While there were no changes of GUG on body satisfaction at Waves 2 or 3, these in-school adolescent girls were 1.34 times more likely to be satisfied with their bodies at Wave 4 than in-school girls in the control group.



**Peer violence perpetration.** Long-term, GUG participation was linked to positive impacts on peer violence perpetration among in-school adolescents. The Wave 2 and Wave 3 results did not show intervention impacts on adolescents' perpetration of teasing, bullying, and physical violence. However, by Wave 4, in-school GUG participants aged 12-14 at baseline were 37% less likely to tease, bully or inflict physical violence against peers as compared to control group adolescents of the same age.

**Comfort accessing contraception.** Long-term, GUG had positive impacts on reducing out-of-school adolescent girls' discomfort in accessing contraception. While there were no immediate intervention effects in comfort accessing contraception, by Wave 3 out-of-school girls who had participated in GUG were 61% less likely, and at Wave 4 64% less likely than those in the control group to feel embarrassed to go to a clinic to get contraception if they needed it.



### **Key Finding 3: Short-term improvements in knowledge of reproductive health services, gender-equitable behaviors, and peer violence faded over time—pointing to a need for additional investment.**

**Reproductive health knowledge.** Growing Up GREAT! had significant impacts on knowledge of where to access condoms and contraception and knowledge of menstruation among out-of-school adolescents but these gains were not sustained one- and two-years post-intervention. At Wave 2, out-of-school GUG participants were 1.92 times more likely to know where to get condoms than control group adolescents. Adolescent girls in GUG were 2.66 times more likely to know where to get contraception and 4.18 times more likely to know where to get information about menstruation than control group girls. However, these impacts were not sustained one (Wave 3) to two years (Wave 4) after implementation.

**Peer violence victimization and perpetration (OOS).** Growing Up GREAT! had large short-term impacts on peer violence perpetration and victimization among out-of-school adolescents, but these were not sustained one- and two-years post-intervention. At Wave 2, out-of-school adolescents in the intervention had a 39% reduction in teasing or bullying victimization as compared to the control group. Out-of-school adolescent boys also reported a 49% reduction in teasing, bully, and physical violence perpetration as compared to control group boys. However, these positive changes in peer violence perpetration and victimization were not sustained at Waves 3 or 4.

## **Future Directions**

The Global Early Adolescent Study will conduct one final wave of data collection in Kinshasa, which will offer additional insights into longer-term impacts of GUG among in-school and out-of-school adolescents. Growing Up GREAT! has also provided support to the DRC government for institutionalization of the intervention via a systematic scale-up process. For the past two years, the project has reinforced the capacity of Ministry of Education trainers to prepare teachers to include GUG in classroom-based family life education and worked to ensure that schools are equipped with GUG materials. It has also supported the Ministry of Health and community-based organizations to integrate health exchanges and parent and community-based activities into existing community-based health platforms. Over the past year, GUG also undertook a new effort to collaborate with the Ministry of Social Affairs to ensure program components for out-of-school adolescents are integrated into existing institutions that provide programming for out-of-school adolescents.

## Conclusions

The Growing Up GREAT! intervention created immediate impacts across a range of adolescent sexual and reproductive health outcomes. Longitudinal follow-up across two additional time periods (Waves 3 and 4) provided an opportunity to examine longer-term changes among adolescents. The intervention showed persistent change in support for gender equality in household chores among both in-school and out-of-school adolescents. Participating in GUG was protective for retaining caregiver connectedness at a time when control group adolescents became less connected to caregivers. Additionally, in-school adolescent girls had sustained improvements in pregnancy and menstruation knowledge. Growing Up GREAT! also shows positive impacts on peer violence, body satisfaction, and chore-sharing behaviors as in-school VYAs grow up. For out-of-school adolescents, GUG had limited effects one- and two-years post-intervention. Long-term differences between in-school and out-of-school adolescents may be partially explained by teachers' ability to integrate GUG materials into school curricula over time, though additional research is needed to test this hypothesis. These findings demonstrate a need for continued investment in adolescent sexual and reproductive health programming.



Photo: A group facilitator explains how to use the Growing Up GREAT! game.

## References

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### Recommended Citation:

Center on Gender Equity and Health. (2022). Impact of Growing Up GREAT! on the Lives of Very Young Adolescents: One and Two Years after Program Implementation. La Jolla, CA: Center on Gender Equity and Health at the University of California San Diego for the Bill and Melinda Gates Foundation.

### Attribution Statement:

This brief and the Growing Up GREAT! project were made possible, in part, by the generous support of the Bill & Melinda Gates Foundation. Data analysis was conducted by Mengmeng Li at the Global Early Adolescent Study, Johns Hopkins University. The brief was prepared by Khudejha Asghar, Kathryn M. Barker, and Rebecka Lundgren at the Center on Gender Equity and Health at the University of California San Diego (GEH/UCSD), and Jennifer Gayles at Save the Children. The contents are the responsibility of UCSD-GEH, GEAS, and Save the Children and do not necessarily reflect the views of the University of California San Diego, Johns Hopkins University, or the Bill & Melinda Gates Foundation.



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