

MOBILITY

BASELINE HIGHLIGHTS ON ADOLESCENT GIRLS' EDUCATION & EMPOWERMENT IN ZAMBIA

Baseline | Cycling to School Study – Zambia | 2017



35%

OF GIRLS EXPERIENCE TEASING
OR HARASSMENT ON THE WAY
TO SCHOOL, CONTRIBUTING
TO DROPOUT



14%

OF OUR BASELINE SAMPLE
OF GIRLS ARE CURRENTLY
ENGAGED OR MARRIED



9%

OF GIRLS ENROLLED IN SECONDARY
SCHOOL, DESPITE MANY MORE
HAVING PASSED FINAL
PRIMARY SCHOOL EXAMS

World Bicycle Relief and UBS Optimus Foundation are co-funding a study through Innovations for Poverty Action (IPA) to evaluate the impact of WBR's Bicycles for Educational Empowerment Program (BEEP) on girls in Zambia. The study will rigorously test the impact of the Buffalo Bicycle on short-term educational outcomes as well as long-term outcomes pertaining to girls' empowerment, their bargaining position in households, and their health. Baseline data collected through surveys, tests, and learning assessments established girls' demographics, family economics, school attendance, empowerment, safety, gender perceptions, self-esteem, and learning comprehension prior to receiving bicycles.

THE NEED

In Zambia, while enrollment and gender parity have improved at the basic education level, more girl students than boys still drop out. School factors, economic constraints, early pregnancy and marriage, and harassment on the way to school are the key reasons why girls drop out of school.

THE OPPORTUNITY

Baseline data show that prior to receiving bicycles, regular, on-time attendance was a challenge for students participating in the IPA study. While 43% of students reported being absent from class at least one day a week, 85% reported being late for class at least one day a week and 50% of students were typically late for three or more days. Baseline student performance was low, with students answering 25-35% of English questions and 34-52% of math questions correctly.

Data from WBR's previous BEEP evaluations shows that bicycles can increase student attendance by 28% and improve student performance by 59%¹. In the study "Cycling to School: Increasing Secondary School Enrollment for Girls in India" by Muralidharan and Prakash, it was demonstrated that bicycles increased school enrollment by 30% and generated an 18% increase in the number of girls who take the high-stakes secondary school certificate (along with a 12% increase in the number of girls who pass it)².

¹ World Vision International, 2012. BEEP Evaluation Report. World Vision Lusaka, Zambia.

² Muralidharan, Karthik, and Nishith Prakash. 2017. "Cycling to School: Increasing Secondary School Enrollment for Girls in India." American Economic Journal: Applied Economics, 9 (3): 321-50.

COLLECTING THE DATA

For the IPA study's baseline report, the research team randomly selected 25 girls from each of the 100 schools involved in the study to provide a view into girls' attitudes and experiences prior to the Buffalo Bicycle intervention. Baseline data included:

- A face-to-face survey covering education, family, time schedule, alimentation, home goods, self-esteem, gender issues, decision-making, and life choices
- A semi-self-administered survey on marriage and fertility desires for the same sample of girls
- Self-administered learning assessments measuring performance in English and Mathematics
- Attendance data from school registers for girl and boy students enrolled in grades 5, 6, and 7

Additional data were collected directly from head teachers regarding:

- Enrollment and staffing
- School fees, facilities, and locations



RESEARCH STUDY METHODOLOGY

The study is a cluster randomized control trial targeting an estimated 2,471 eligible girl students from 100 schools (45 treatment schools and 55 control schools). Targeted students are in grades 5, 6 and 7. The girls were selected from a list of eligible students who live from 3 – 15 km away from schools in the Monze, Mazabuka and Kalomo districts.

- 25 treatment schools (with 614 girls) will implement the standard WBR BEEP model, including an upfront payment for spare parts
- 20 treatment schools (with 498 girls) will not require upfront payment
- Students in the 55 control schools will not receive bicycles

BASELINE STUDY FINDINGS

STUDENT DEMOGRAPHICS & ECONOMICS

- Average household size is 6.39
- 40% of households do not have access to electricity
- 53% of households have at least one bicycle already

SCHOOL ATTENDANCE

- 85% of girls reported being late for class at least one day a week; more than 50% were late three or more days.
- 36% of girls reported repeating a grade level at least once.
- Most students (94%) report taking at least 60 minutes to reach school. For some students, it takes more than 4 hours to reach school.
- 35% of girls experience teasing or harassment on the way to school.

MARRIAGE & FERTILITY DESIRES

- 14% of girls reported being currently engaged or married.
- 6% of girls reported being pregnant at least once.
- 60% of girls report desiring between 2 and 6 children in their lifetime. Average desired number of children is about 4.

USE OF TIME & GENDER NORMS

- 45% of girls report spending less than 30 minutes on school work at home.
- 94% of girls think all girls should be able to study as long as they want.
- 50% of girls think that men and women should be provided equal opportunity, although 23% of girls think wives should be less educated than their husbands.

LEARNING & PERFORMANCE

- Learning levels are generally low
- Students correctly answered 25-35% of English questions
- Students correctly answered between 34-52% of math questions

THE SCHOOLS

- Schools are on average 43 km from the closest town and approximately 25 km from a paved road.
- The nearest secondary school, about 20km from sample schools, means a longer commute to access higher education.
- The pupil-to-teacher ratio is 51:1 on average.



Schools are on average 43 km from the closest town and approximately 25 km from a paved road. With the nearest secondary school approximately 20km from sample schools, students will travel even further to access higher education.



ABOUT THE RESEARCH FIRM

Innovations for Poverty Action (IPA) is a non-profit organization dedicated to discovering and promoting effective solutions to global poverty problems. In close partnership with decision makers, IPA designs and evaluates potential solutions to poverty problems using randomized evaluations, the most rigorous evaluation method available. IPA also mobilizes and supports these decision makers - policymakers, practitioners, investors, and donors - to use these solutions to build better programs and policies at scale.

WHY WORLD BICYCLE RELIEF?

World Bicycle Relief mobilizes people through The Power of Bicycles. Our innovative model combines philanthropic distributions with social enterprise sales that enable us to achieve greater efficiencies of scale, distribute more bicycles per donor dollar and create deeper impact where we work.

We work closely with our partners, supporters and end-users to design and implement sustainable programs, leveraging best practices and local expertise. World Bicycle Relief oversees the philanthropic programs and Buffalo Bicycles, Ltd. produces the bicycles that enable individuals to achieve mobility and thrive. We envision a world where distance is no longer a barrier to independence and livelihood.



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