

The Impact of Bicycles on Girls' Education and Empowerment Outcomes in Zambia



Children often walk long distances to get to school in rural areas of developing countries, which contributes to high rates of absenteeism, particularly for girls. Can providing girls with bicycles to travel to school help address the problem? In rural Zambia, researchers partnered with World Bicycle Relief (WBR) to evaluate the impact of providing girls with bicycles to travel to school. The evaluation measured impacts of the program on girls' educational attainment and empowerment outcomes. Girls were eligible for the program if they were in 5th, 6th, or 7th grade and walked at least three kilometers to school.

Key Findings

Approximately one year after bicycles were distributed

- Giving girls access to bicycles reduced their commuting time to school by a 35% or 33 minutes each way, and increased their punctuality by 66 percent.
- Girls in the program attended school an extra five days a year, accounting for a 26 percent reduction in absenteeism.
- The program increased empowerment outcomes: girls reported feeling more in control of the decisions affecting their lives, they were more willing to reach out to a friend in need, and they had a more positive self-image than girls in the comparison group.
- Girls in the program were less likely to miss school due to safety concerns and were 22 percent less likely to be whistled at or teased on their way to school.
- Girls in the program scored higher on a mathematics assessment than girls in the comparison group, while no impacts were found on reading in English.
- On average, researchers did not find evidence that access to bicycles impacted school dropout, how many children girls wanted to have in the future, their life goals, or their freedom of movement.
- These results suggest that giving girls access to bicycles to travel to and from school can increase school attendance, self-confidence, and lead to better learning outcomes in rural Zambia and possibly other developing-country contexts where distance to school is a barrier.

RESEARCHERS

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PARTNER

World Bicycle Relief

COUNTRY

Zambia

TIMELINE

June 2017 – December 2018

STUDY SAMPLE

100 schools (2,477 girls)

STUDY DESIGN

Randomized evaluation

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