

Evaluation of an Interactive Mobile Phone Program to Improve Knowledge,  
Communication, and Attitudes about Reproductive Health: A Cluster-Randomized  
Controlled Trial in Ghana

Slawa Rokicki, Harvard University  
[srokicki@fas.harvard.edu](mailto:srokicki@fas.harvard.edu)

Guenther Fink, Harvard School of Public Health

**Abstract:**

Use of mobile phone technology has been suggested as a tool for improving health in developing countries. The Study on mHealth and Reproductive Health in Teens (SMART) was a cluster-randomized controlled trial of adolescent girls from 34 secondary schools in Accra, Ghana. Schools were randomized to one of two intervention arms or a control arm. The “unidirectional” intervention passively sent participants a text message once a week for 12 weeks with facts about reproductive health. The “interactive” intervention engaged users in an incentivized quiz game about reproductive health. Control participants were sent messages about malaria. Reproductive health knowledge improved for participants in the unidirectional arm by 11 percentage points (95% CI 7-15) and for participants in the interactive arm by 24 percentage points (95% CI 20-28). The difference between the interventions was statistically significant ( $p < .0001$ ). Communication and attitudes about reproductive health also significantly improved for participants in the interactive intervention.

Please email author for full text of article.