

# CASHING THE DEMOGRAPHIC DIVIDEND

Estimating the multi-dimensional Return on Investment (ROI) of the holistic approach to youth development by Shujaaz Inc's multi-media youth program in Kenya

## RESEARCH QUESTIONS

- What are the causal effects of exposure to Shujaaz media on measures of income, educational attainment, and contraceptive use among Kenyan youth?
- What is the (monetized) Return on Investment (ROI) from the multi-media interventions of Shujaaz?

## KEY STEPS

- Calculate program costs with standardized methods.
- Estimate the effects of Shujaaz on health, education and income using nationally representative panel data of youth.
- Monetize the total population and compare benefits costs to calculate net benefits and Return on Investment.

## TAKEAWAYS

- This study is intended as a first step in contributing to a more encompassing and realistic assessment of the value of SBC programs.
- The benefits of Shujaaz exceed the costs by many multiples, with total monetized benefits estimated at more than \$400 million, relative to costs over the period of study of only \$18 million. This yields an ROI of roughly 24:1.

Paul Hutchinson,<sup>1</sup>  
Anastasia Mirzoyants,<sup>2</sup>  
Alejandra Leyton<sup>1</sup>

<sup>1</sup> Tulane University School of Public Health and Tropical Medicine  
<sup>2</sup> Shujaaz Inc



**We estimate the magnitude of monetized benefits associated with the exposure to Shujaaz gained by the media fans to reach approximately \$439,707,318.**

## SHUJAAZ INC

Shujaaz Inc's media for social change program, Shujaaz, inspires, entertains and mobilizes 9.5 million 15-24-year-olds across East Africa. Shujaaz embeds young people in a digital and real-world community that gives them the self-belief to succeed, in their context and on their terms.

Using entertaining storytelling that reflects the lives of young people and explores themes of sexual and reproductive health (SRH), income-generating activities and self-empowerment, Shujaaz has proven that when young people take control of their lives, they create transformational change.

To date, few economic evaluations of such multi-sectoral programs have been conducted, especially in lower- and middle-income countries.

### 1. ANALYZING COSTS

Costs were analyzed according to the Consolidated Health Economic Evaluation Reporting Standards (CHEERS) (Husereau et al., 2013) and costing guidelines for SBC programs (Rosen et al 2019). Analysis used a programmatic perspective for the period 2015 to 2018. Costs included implementation,

overheads, program development and background research. Future costs and benefits were discounted at a 3% rate. Total costs were estimated to be approximately \$18.1 million.

### 2. ESTIMATING EFFECTS

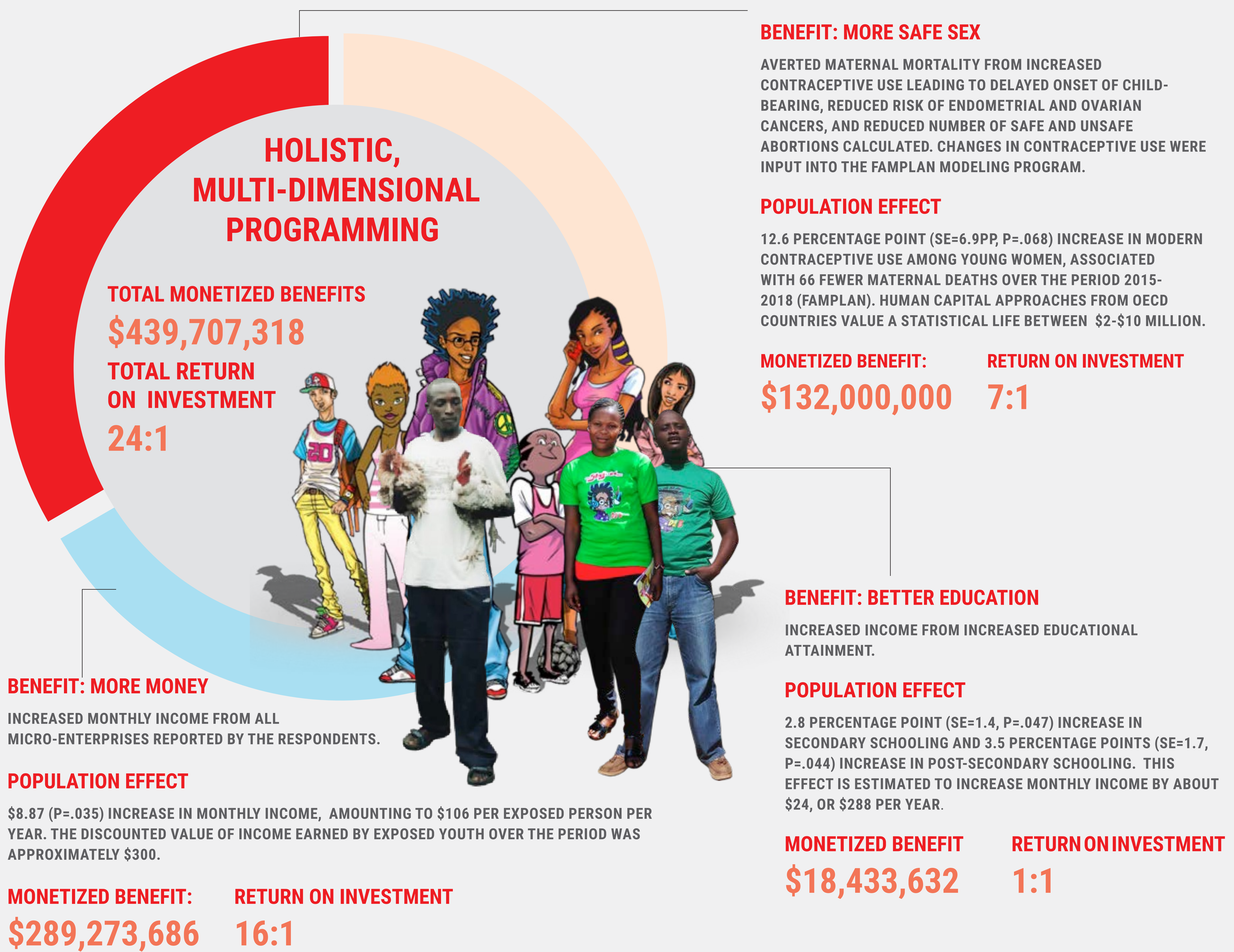
**DATA:** Youth data come from a nationally representative panel of 450 Kenyan youth aged 15-24 years, collected annually in 2016, 2017 and 2018 via CAPI surveys.

**ANALYSIS:** The magnitude of effects of exposure to Shujaaz media were estimated on contraceptive use, educational attainment, and income using multivariate correlated random effects (CRE) regression models. CRE models control for endogenous (non-random) exposure to Shujaaz.

We use the margins, `dydx()` command in Stata 17 to calculate the marginal effects of Shujaaz exposure on each of the outcomes.

**POPULATION-LEVEL EFFECTS:** Marginal effects were then applied to population estimates from the Kenyan National Bureau of Statistics for the age group of 15-24 years (9.5 million), multiplied by the percentage of this age group exposed to Shujaaz digital media (10%).

### 3. MONETIZING BENEFITS AND ESTIMATING RETURN ON INVESTMENT



## CITATIONS:

P.L. Hutchinson, A. Mirzoyants, A. Leyton.  
"A Multidimensional Human Capital Approach to Investing in Youth: Estimating the Return on Investment (ROI) for the Shujaaz Behavior Change Multimedia Platform." Working Paper. Tulane University, New Orleans, USA.

Scan here to learn more about Shujaaz Inc's impact

