



RESEARCH BRIEF

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Happy Collecting Water?

Women Collecting Water in Rural Kenya Report They Would Prefer Doing Other Activities

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BY JOSEPH COOK, JANE KABUBO-MARIARA, AND PETER KIMUYU, OCTOBER, 2018

Contrary to a widely-held belief that rural women enjoy collecting water because it gets them out of the house and lets them socialize, a survey in Kenya found that 94% of women do not like the task. This finding suggests that providing rural households with convenient access to safe drinking water will reduce this physically taxing and time-consuming burden on women and girls, freeing up time and energy that they might use for productive pursuits such as on-farm or off-farm employment, increased school attendance, or even leisure time.

The research

Women and girls do most of the water collection in rural communities in much of Africa. Many development programs have responded by making public water taps or even household connections more available in villages. A long-held, but poorly-documented, counter-argument has been that women *enjoy* water collection because it allows them to socialize with others and get away from their homes and husbands. Some believe that they might even sabotage new water points. This belief is so widespread that it has even made it into the plotline of the Hollywood movie "Whisky Tango Foxtrot."

We set out to test this hypothesis in rural Meru County, Kenya with a method developed in the field of psychology called the Experience Sampling Method (ESM) that asks respondents to complete short surveys about their feelings at random points throughout the day over several days, weeks, or longer. We focused our application of the ESM approach on the main water carrier in 220 households over eight weeks during the dry season in August – October 2016.

Our results show women are less energetic, less sociable, and feel less safe when they are collecting water. In addition, 94% of women told us that they dislike collecting water and the majority do it alone.

Key Points

- Women and girls in rural Africa are generally responsible for collecting water, with little access to piped water and very few having household taps.
- There is a long-held belief that women enjoy collecting water because they can get out of the house and socialize.
- We tested this belief in Kenya by asking women to describe their feelings at various points in their day.
- We found that women feel unsafe and isolated when they are collecting water.
- Contrary to the belief that it is a social activity, most women do it alone, and 94% said they dislike the task.

Happy collecting water?

The research also has implications for a broader question: how happy are people while at “work”? Economists generally take the view that no one works for fun. Results from psychology, however, report that the unemployed report *lower* overall happiness. Part of the answer to the puzzle is that there are many components of subjective well-being, including satisfaction with life as a whole, overall feelings of meaning and purpose in life, and momentary feelings of happiness. With data from over 20,000 individuals in the UK who volunteered to download and use an ESM-like app called “Mappiness,” recent research found that paid work is ranked as the least enjoyable of 39 activities, with the exception of being sick in bed. People are less unhappy when they are working from home or working with others, and happiness varies predictably across the day.

Our results are the first in a low-income setting. “Work” in these settings is less likely to be salaried formal-sector labor; much more common are manual labor on smallholder farm plots (either on one’s own plot or working for barter or cash on another’s), resource collection, or tending to livestock. Results from 12,939 ESM records in our study show that respondents are indeed less happy “at work,” whether that work is paid casual labor (6% less happy), unpaid casual labor (4% less happy), paid formal sector labor (10% less happy), collecting firewood (3% less happy), or collecting water (6% less happy).

Less happy than what? Household chores is our reference category since it is both the most common activity for our respondents and in the middle of overall “happiness” rankings among all activities. So, our results imply that water collectors are 6% less happy when they are collecting water than when they are doing household chores. Two additional results are more tenuous, but intriguing: the self-employed are actually happier while at work and people are less happy when they reported their primary activity as “having nothing to do.”

Figure 1. Percent change in happiness (compared to household work) when the respondent is doing activity X. For each activity listed on the left, the corresponding line shows the average level of happiness compared to household work (the red vertical line). The dot is average happiness on a scale of 0-100. Wider corresponding lines imply less statistical confidence; when lines do not overlap the red vertical line, the authors are 95% certain the difference is meaningful.



Conclusions

It remains possible that women enjoy water collection in other places, particularly where they may have very little autonomy in the household, and quantifying the benefits of more convenient access remains an active area of research. However, we can conclude that water collection is an activity women would be happy to give up in Meru County, Kenya.

Happy collecting water?

ABOUT THIS BRIEF

This brief is based on “Happy collecting water? Measuring hedonic well-being among water carriers in rural Kenya using the Experience Sampling Method,” EfD Discussion Paper 18-07 (2018), by Joseph Cook, Jane Kabubo-Mariara, and Peter Kimuyu.

FURTHER READING

Bryson, A., and Mackerron, G. (2016). Are you happy while you work? *Economic Journal*, 127(202647), 106–125. Retrieved from <http://doi.org/10.1111/eoj.12269>

Cook, J., Kimuyu, P., and Whittington, D. (2016). The costs of coping with poor water supply in rural Kenya. *Water Resources Research*, 52, 841–859.

Dolan, P., and Metcalfe, R. (2012). Measuring subjective wellbeing: Recommendations on measures for use by national governments. *Journal of Social Policy*, 41(2), 409–427.

Whittington D., Hanemann, W. M., Sadoff, C., and Jeuland, M. (2010). The challenge of improving water and sanitation services in less developed countries. *Foundations and Trends in Microeconomics*, 4(6–7), 469–609.

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