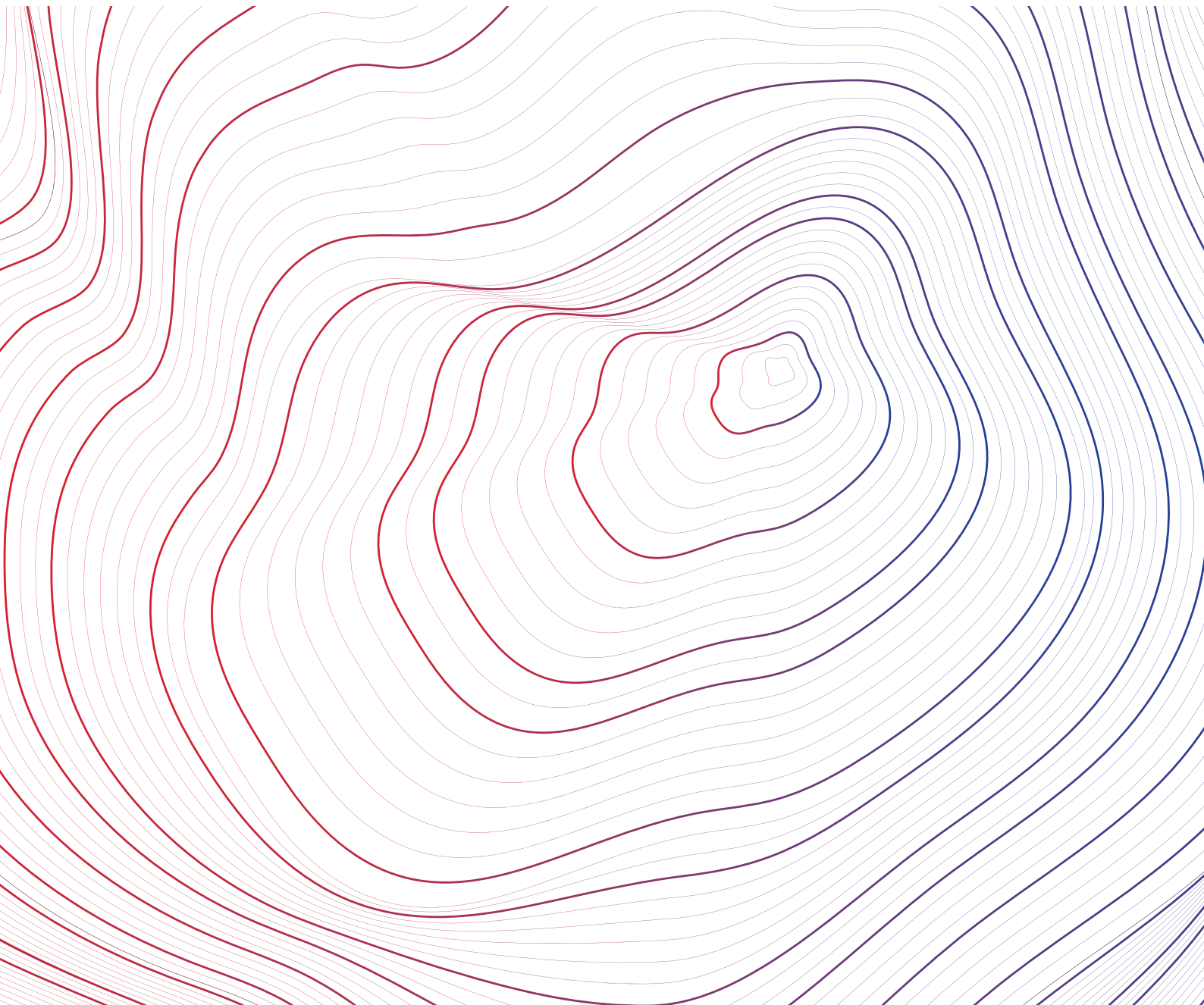


BEHAVIORAL  
SCIENCE IN THE  
FIELD

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# Blog Book



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## OVERVIEW



The Behavioral Science in the Field Course is a collaboration between **MIT GOV/LAB and the Busara Center for Behavioral Economics**, to train graduate students from the U.S. and local universities in East Africa in cutting-edge behavioral science research. Conducted in Kenya, the course is structured as an intensive deep dive into interdisciplinary behavioral science and provides students the opportunity to develop novel behavioral science games to answer research that will result in data collection.

In recent years, behavioral sciences, or ways to better understand determinants of human behavior, have emerged as a leading innovation across disciplines and sectors. These novel methods and data allow us to measure what incentivizes individual and group behavior to inform numerous interventions; for example, targeted online marketing, incentives for healthier eating, improved educational pedagogy, enhanced community policing protocols, effective policy design for compliance with public health ordinances or paying taxes. Lab in the field experiments, in particular, are one of

the gold standards to test behavior using a method that most closely resembles real life. Training in behavioral sciences is a critical skill for students to master from across disciplines and is one of the most exciting developments for bridging the gap between theory and practice with proven potential to achieve real-world impacts.

The course will provide students with practical experience in implementing a lab in the field experiment. To encourage innovative thinking beyond disciplinary boundaries, the course will be open to PhD students in the social sciences more broadly (e.g. political science, economics, business, psychology).

The Behavioral Science in the Field course was piloted in January 2020 and data collection was delayed until May 2022 due to the pandemic. Research results forthcoming.

Course syllabus: <https://mitgovlab.org/results/behavioral-science-in-the-field-course-syllabus/>.

## ACKNOWLEDGEMENTS



This course was the brainchild of Channing Jang and Kelly Zhang who wished they had a similar experience in their graduate training and brought the course into existence. A big thanks to Rebecca Littman who was a core instructor for social psychology and Nate Peterson who brought economics expertise from Busara's perspective.

Thanks to the scholars who presented during the course and supported participants by workshopping pre-analysis plans and game design and providing issue area expertise on their original research projects: Joshua Dean, Alexandra Scacco, Shana Warren, Daniel Posner, Macartan Humphreys, Amanda Robinson, George Oforu, Johannes Haushofer, Lorenzo Casaburi, Julian Dyer, Catherine Thomas, and Lily Tsai.

A huge thank you to the entire Busara Lab team, including Jennifer Adhiambo, Anisha Singh, Kelvin Kehindas, Joel Mumo, Lornah Wahome and Debrah Opiyo who lead core workshops and helped participants ideate, iterate, program, pilot and implement their research designs. A special thanks to Esther Owelle for shepherding eleven games into an omnibus for field testing.

And, of course, thanks to Stanley Ngugi who facilitated many hours developing and shaping the course with Kelly and Channing,

and for leading feedback sessions and helping us all to learn and grow together with kindness and compassion. Thank you to Barbara Masinde and Linda Gathoni for making the logistics smooth sailing. Micheal Bagorogoza and Nengapate Kuria for the communication and branding work. And thanks to the MIT GOV/LAB team, Alisa Zomer and Selmah Goldberg, for seeing the big picture and keeping everything together.

A debt of gratitude to the people from Machakos County who participated in focus groups, interviews, site visits, and many hours of behavioral science games to allow us to gain insights and new knowledge.

Lastly, a huge thanks to the inaugural course participants (the authors of this very blog book) who came to the classroom and the field ready to adapt and create and grow. This course would not be possible without your engagement with each other and willingness to learn.

The pilot course was made possible with generous support from MIT's J-WEL Grant in Higher Education Innovation and MITx Express Exploration Grant, and core contributions from Busara and MIT GOV/LAB.

This blog book was edited by Nengapate Kuria and Alisa Zomer. Design was done by Micheal Bagorogoza.

## INTRODUCTION



As part of the course, participants developed a research question for a Kenyan context and designed behavioral games that could be used to study their research question. In this collection of blog posts, the students share their experience piloting their game designs, discussing their research question in focus groups, and working in the field.

**George Kinyanjui** (University of Capetown) is exploring the common practice of donating money to people who need to pay for medical expenses. Even though paying for health insurance would be cheaper than paying medical bills out-of-pocket, most Kenyans rely on this informal support network — fewer than 20% of Kenyans have health insurance. Kinyanjui is interested in what motivates people to pay others' medical expenses. **Kim Fre Cramer** (Columbia University) is also studying informal systems for exchanging money in order to pay expenses, sitting in on a meeting where women collect and loan money to group members with urgent expenses. She is looking at why someone might prefer to take such a loan rather than dip into their personal savings.\*\*

Farming is the primary source of income for most Kenyans, and several students were interested in how farmers make decisions. **Peter Babyenda** (University of Nairobi) wonders if providing farmers with information on climate change could encourage them to adopt strategies to adapt

to climate change, such as irrigation. **John Shilinde** (University of Dar es Salaam) is examining whether farmers prefer to trade with people who speak the same language and are of the same ethnicity. **Marius Vollberg** (Harvard University) is interested in whether some people care more about retaining free choice than making optimal decisions. He designed a virtual farming game in which people could either pay a few to make their own decisions for allocating crops, or follow someone else's advice for free, to see if people would be willing to pay to retain their freedom of choice.

Most Kenyans have mobile wallets that allow them to virtually send and receive money. But many people don't trust the agents working for the mobile money companies, who exchange cash for mobile credits and vice versa. On occasion, some people are scammed by dishonest agents. **Isabel Macdonald** (Harvard University) hypothesizes that sharing anonymous custom ratings could lead to fewer scams and more trust in agents. Mobile money's accessibility has also led to an increase in gambling in the country. **Laura Barasa** (University of Nairobi) is investigating if warnings about how gambling can be addicting in social settings could limit gambling.

**Richard Sebaggala** (Uganda Christian University) also wants to see if information can be used to curb behavior. He is looking at whether emotionally-charged messaging showing the consequences of corruption can lead to less corrupt behavior. Many Kenyans view politicians as being corrupt. But incumbent politicians still often win re-election, even when they've performed poorly. **Stuart Russell and Nicole Wilson** (MIT) think that this is because voters tend to hold on to prior beliefs, such as support for a candidate from their party, and discount contradictory information, like evidence that a politician is corrupt.\*\*

**Lynda Nakawala** (Makerere University in Uganda) is interested if people can be motivated to think more critically. She is designing an experiment where people receive a message touting the benefits of critical thinking and are given a small amount of money. Then, they can either

play a puzzle game or return some of the money and skip the game. Nakawala wonders if the motivational messaging will increase people's willingness to expend cognitive energy and play the game. **Aidan Milliff** (MIT) is more interested in measuring people's behavior than trying to change it. He's curious about how people behave in life threatening situations. Milliff is using a video game to stimulate an emotional response in study participants, then talking participants through scenarios where they encounter violence and asking them questions about how they would handle it.

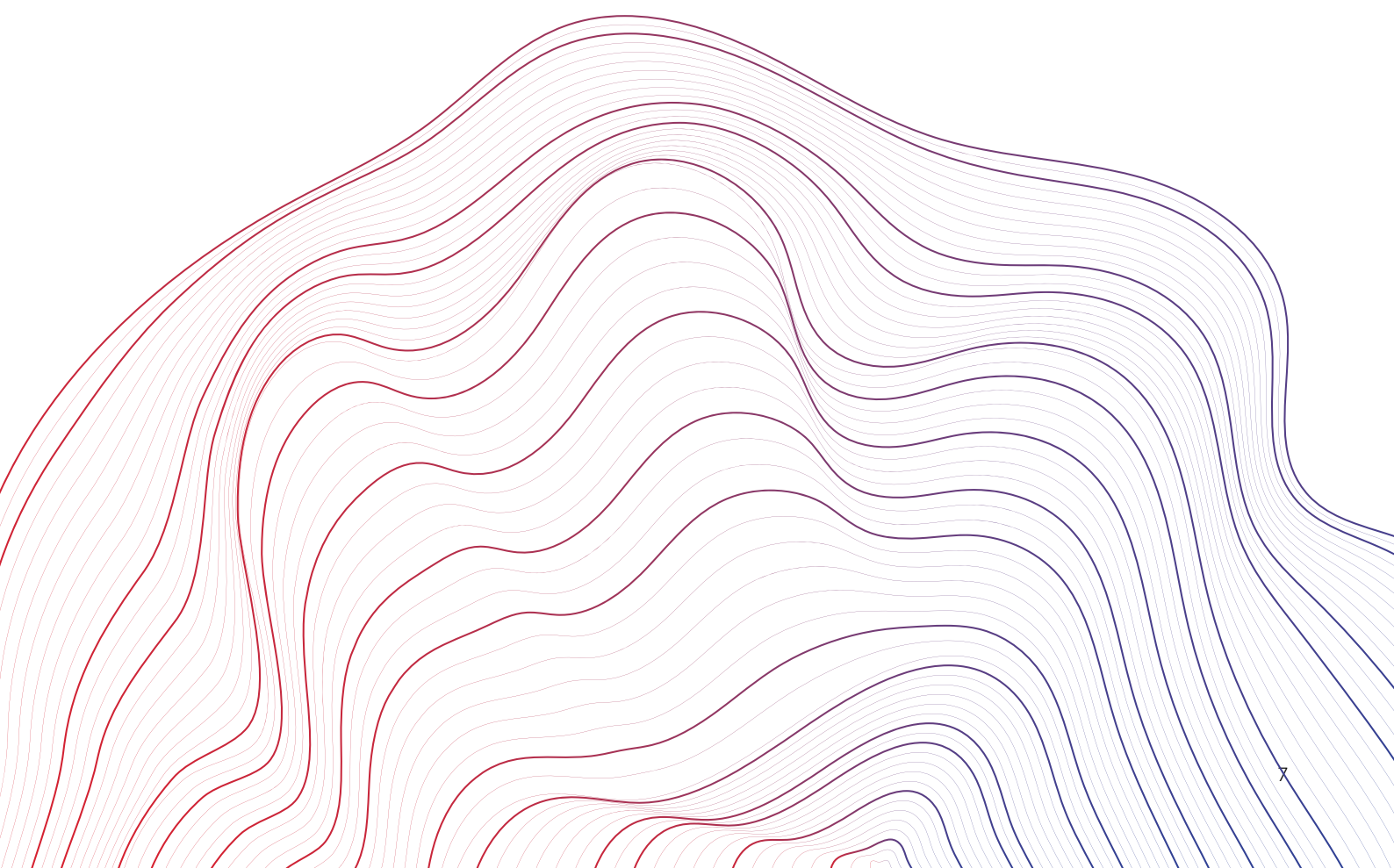
For more details about these projects and the people behind them, please read through the participants' blog and biographies in the following pages.

\*\*The Covid-19 pandemic delayed data collection for two years, and as a result some games were not fielded due to changes in research priorities of the participants

# Bios & Blogs

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The author biographies in this book were written shortly after the course took place in 2020 and may not reflect the authors current affiliation.



## BIOGRAPHY



George Kariuki  
Kinyanjui

**Affiliation**

The University of Cape Town

**Why I participated in the Busara/MIT course**

Having worked on a doctoral dissertation in behavioral economics, I developed a motivation to run my own experiments. I had been lucky to use my dissertation advisor's project on my Dphil but at the same time unfortunate to have missed the murkiness of implementing an experiment of my own. Experiments are currently being used to show relationships between social variables. I felt motivated to learn the hard process of placing experimental data on the table. This urge drove me to work hard through the recruitment process and secured a place at the pioneering class. I learned a great deal of knowledge in implementing cohesive experimental designs both in the lab and in the field.

**Research question**

My study involved understanding the drivers of preferences for giving at instances of adversities. That is, why people opt for a more expensive option to split their resources, at least in the face value than a more efficient insurance subscription. In the giving experiment, I instrument a standard dictator game with three randomised treatments to i) empathy, ii) reputation and iii) reciprocity.

**Background information**

George is supporting universality of social protection to vulnerable children and women at the United Nation Children's Fund. He provides technical assistance in aligning UNICEF's programmes to local community behavior as well as integrating social behavior components in social protection programmes. Prior to this assignment, George worked as a consultant with the Social Protection and Jobs global practice at the World Bank where he focused on designing and analyzing behavioral interventions meant to shift mindsets of young job seekers in South Africa. His research interests are vastly on how individuals order preferences for social goods. Specifically, he is currently interested in why and how people elicit preferences for charitable giving.





# Is social giving irrational?



ARTICLE BY GEORGE KARIUKI KINYANJUI

## Why do people donate resources towards medical bills and funerals?

Often, people share their resources with others who are experiencing hardships. In rural communities in Kenya, people spend their money and time helping out in funeral arrangements, wedding committees and the like. These contributions are sometimes structured - even recorded and files stored. The contributions are voluntary and members join the committees on their own volition. However, such contributions are not what we would expect if people would all behave “rationally” as economists suggest. That is, an insurance option for example that is cheaper than sudden contributions to settle hospital bills should be naturally preferred. The health insurance coverage for example has less than [20 percent](#) of the Kenyan population. Whereas health care insurance is a cheaper alternative to community based harambees (donations) aimed at raising funds for medical bills, people opt to settle for these harambees.

On average, a monthly private contribution to NHIF is currently at five hundred shillings while in a similar month, an individual may on average give over a thousand shillings to donations for medical bills. Additionally, even for those who are covered by some formal insurance, do participate in the fundraising. This behavior that I observed in a personal experience provides the grounds for this study. So why do people feel compelled to give?

My study involved understanding the reasons that motivates people to donate resources when negative shocks such as a sudden medical bill is required or a loss of life of a community member. That is, why people opt for a more expensive option to split their resources, rather than a more efficient insurance subscription. Existing research points to several reasons as to why people elicit generous behavior. For example, Andreoni & Paynes (2013) shows that individuals are often empathetic towards experiences of others and through a phenomenon known as “perspective taking”, people place themselves in the shoes of the victim and act according to what they would

have wanted others to do to them. People are also keen to ensure that their reputation within the society they live in is not compromised, a phenomenon closely related with the concerns for reciprocity - that is, the expectation to receive back gifts when personally in need.

To better understand the underlying reasons for giving, I designed a giving experiment using a standard dictator game and three randomised treatments to i) empathy, ii) reputation and iii) reciprocity. A dictator game is a popular experimental tool in social psychology and economics where one player in the game is given an amount of money usually called an "endowment". This player is asked to send an amount of their choice to another player. The player is at liberty to send nothing, a fraction or the whole amount to the second player. I put together a replica of the real-life choices in a laboratory experiment to elucidate the mechanisms at play in an actual world. I developed the experimental design that would hypothetically measure empathetic motives, concerns for reputation as well as people's affinity to reciprocity in giving. My literature review, as well as the visits to the field, had all pointed to empathy, reputation and concerns for reciprocity as the main drivers of why people could be seen to donate resources within a community.

Early field visits provided an opportunity to contextualize my research idea by meeting villagers and discussing my research questions. It dealt with a significant number of prior biases I had held around the topic and really sharpened my understanding. I met with a group of nearly 30 village members who were in an actual harambee (meeting to donate) towards a funeral

event. I learnt from the community members that they not only empathized with the family but also were careful not to ruin their reputation by not contributing. Importantly, I learnt that the harambee was not limited to contributing towards the funeral but also to a saving for future emergencies. In conclusion, the tradition of giving is widespread in Kenya. Existing formal structures can best leverage these traditions if the structures and mechanisms for giving are better understood.

## BIOGRAPHY



Kim Fe Cramer

**Affiliation**  
Columbia University, US

### Why I participated in the Busara/MIT course

As a development economist, my main focus of research is how to integrate low-income households into formal financial systems. However, even if there is sufficient supply of e.g. credit products, we often see puzzlingly low demand. To truly understand why demand is low, we need to look deeper into financial decision-making. I participated in the Busara/MIT Behavioral Science Course because I hoped it would provide me this opportunity – and it exceeded my expectations. We learned how to build a lab experiment from scratch that allows us to study decision-making and were able to gain valuable insights on our ideas from instructors, Busara staff, and fellow students.

### Research question

My research question is about how people decide whether to use their savings or take out a loan to finance an investment. I test two hypotheses: First, people prefer loans because it is easier to pay off a loan than to rebuild savings on your own. Second, people prefer loans because they motivate them to work harder (the responsibility and drive to pay someone else is stronger than just paying yourself). In order to test these hypotheses, I combine a lab experiment with a field experiment. In both parts of the study, participants have to take on an investment and then randomly get allocated to treatment or control. In the control group, people finance the investment by savings; in the treatment group, they can take up a loan. I will then compare outcomes such as total savings and work effort subsequently to test the hypotheses.

### Background information

Kim is a PhD student at the Finance Department of Columbia Business School. Her main research interests are development economics and household finance. Kim's job market paper investigates how rural households in India are affected when a bank enters their village. In particular, she asks whether households gain access to credit and savings accounts, whether they increase their consumption levels and importantly whether they can better cope with shocks, ranging from individual-level shocks such as health emergencies to village-level shocks such as droughts.

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# Learning from sophisticated decision-makers who live on a tight budget



ARTICLE BY KIM FE CRAMER

Conducting fieldwork in Machakos, Kenya, I met a group of inspiring women while attending a “chama” meeting. A chama is an informal self-help group where members agree to regularly contribute money to grow economically. As a researcher, I’ve read a lot about [chamas](#) – but I was eager to see how they worked in practice. That’s why I was excited to receive an invitation from a chairwoman in Machakos to join her group’s meeting.

After being offered typical sweet Kenyan tea, business started. In the first round, all 16 members contributed 50 to 200 Ksh (about USD \$.50 - \$2). The chairwoman counted the money and made a note of each contribution in a large notebook. Afterwards, the money was redistributed to two members. Receiving large sums is essential for these women who have pressing financial needs and lack formal saving devices. The chairwoman told me that they randomly selected the order of who received funds at the beginning of the year.

What followed were five rounds of exchange – each with slightly different rules and purposes. For instance, in the last round members

could take out small loans if they had urgent expenditures like buying medicine for an ill family member. The chama supported the women to make important lump-sum investments, and also increased their ability to cope with shocks. I left the meeting humble and impressed. While I had read about how chamas typically work in academic papers and blogs, I was not expecting such a high degree of complexity and individualized rules. While I heard that chamas allow members to collect lump-sums, I did not know that they also foster household resilience.

I was also fascinated to hear about how informal mechanisms were used in Kenya by people who are excluded from formal financial systems, and those who have access. For instance, my colleagues in the Busara/MIT course told me about Whatsapp groups that were created to support friends in case of need (e.g. a medical emergency). That these informal mechanisms exist even if people have access to formal financial services means that they provide some important value that a bank account or loan cannot provide, like social value. Learning about how people support each other in Kenya was

interesting for me to hear, since in Europe or the US you rarely rely on anybody outside of your family if you are in financial trouble.

The women of the chama I visited as well as other interview participants all conducted highly complex financial decisions – and I wanted to learn more about what influences decision-making. In particular, if someone needs to make an investment, for example paying school fees, how do they decide whether they use their savings or take out a loan? It seems like a relatively simple decision. A loan has interest, which means if the person has sufficient savings, she should use those. However, we observe in the data that people often take loans – does low financial literacy explain this behavior? I do not think so. People who take up loans instead of using their savings know that this is more costly.

So why do some people prefer loans? During fieldwork in Machakos I was able to delve deeper. One potential reason cited is that people know that everyone has trouble saving. It is much easier to pay off a loan with some pressure from your peers than rebuild the savings on your own. A second reason cited is that with a loan you not only feel more obliged to make regular payments but it also motivates you to work harder. In order to test these explanations, I designed a lab experiment. Participants in the experiment take an investment and then randomly get allocated to treatment or control. In the control group, people finance the investment by savings; in the

treatment group, they can take up a loan. I will then compare outcomes such as total savings and work effort subsequently.

Overall, my time in Kenya showed me that low-income households have complex financial lives—and are often sophisticated in their financial decision-making. The chama I visited demonstrated a multi-faceted system that supported long-term investment and fostered resilience, providing insights into what motivates people who live on a tight budget to take out a loan.

## BIOGRAPHY



Peter Babyenda

**Affiliation**

University of Nairobi

### Why I participated in the Busara/MIT course

Given that I was interested in examining what factors influence farmers to adapt to the changing climate, I realised that adaptation to climate change is mainly influenced by changes in the behavior of the farmers. Adaptation starts with the change of the mind and behaviour and thus it was important to undergo training in behavioral science. During the Busara/MIT Behavioral Science Course, I was able to learn a number of things including setting up and playing incentivized behavioral games, conducting behavioral research in a lab setting, programming games, recruiting survey participants, carrying out interviews in the field and various data analysis methods.

Another benefit was the interaction with PhD students from North American Universities such as MIT, Harvard and Colombia. The course was also interdisciplinary and gave me an opportunity to learn how to mix economical aspects with political and psychological aspects so as to make them easily understandable by society and policy designers.

### Research question

My study attempts to answer the following questions: 1) How do people respond to weather or climate information? 2) How can farmers be shifted to adapt to long-term climate variability adaptation mechanisms? We adjust the existing farmers' game to capture the various aspects of our study. The participants of the study are the farmers who are divided into three groups and each group given a separate piece of information on climate variability. We then give the three groups of participants the same task in the form of a game that reveals the choice of preference. After the game, which is played once, depending on the choice selected, each participant is rewarded.

### Background information

Babyenda Peter is an assistant lecturer in the department of Policy and Development Economics (PDE), School of Economics, College of Business and Management Sciences, Makerere University. He is a PhD candidate at the School of Economics, University of Nairobi, Kenya. He is also a research fellow and a policy engagement specialist for inclusive green economy at EfD-Mak Centre Uganda. His areas of specialization are; Behavioral and Policy Analysis, Econometrics, Energy, Environmental, Climate Change, Land and Experimental Economics. His research interests are mainly in the Micro foundations of Macroeconomic aspects such as energy consumption, environment, education, urbanization, ethnicity, regionalization, climate change, biodiversity, forestry, water resources, adaptation and agriculture.

# How information on climate variability influences farming decisions



ARTICLE BY PETER BABYENDA

**How various information on climate variability can encourage farmers to adopt long-term adaptation mechanisms such as irrigation and also be able to differentiate short-term and long term potential adaptation strategies.**

An experimental game seeks to uncover how information on climate change can encourage farmers to adopt long-term adaptation mechanisms such as irrigation.

Africa’s climate is warmer than it was 100 years ago and model-based predictions of future climate for the continent clearly suggest that this warming will continue and, in most scenarios, accelerate (Intergovernmental Panel for Climate Change, 2018). In the face of a changing climate across the globe, farming households are likely to change how they farm to minimize losses and



Figure 1: 30 years Machakos County Historical Weather Data (1982-2012)

take advantage of new opportunities. Farmers may change which crops to grow, as different crops are better suited to different temperature and precipitation levels. For example, they may change when they plant and harvest their crops, switch inputs such as fertilizers, pesticides, and seeds, or rely more heavily on irrigation. Farmers may also change occupations to other businesses or service sectors that are less dependent on weather (Mendelsohn, 2012; Solomon, 2019). These choices, however, may depend on the type of information available to the farmers about climate forecasts and the likely impacts and how they interpret such information. Using a

novel lab experiment, my research assesses the impact of providing long-term climate variability information on farmers' decisions. I specifically investigate what type of information on climate variability is required to trigger farmers to take-on long-term climate change coping (adaptation) strategies such as irrigation.

For example, adaptation choices may vary according to the form of climate information received and the available period for the farmers to practice farming. That is, short-run (one to two years) adaptation mechanisms may be different from the medium term or long-term adaptation plans. Therefore, this study proposes to examine what type of information is required to accelerate the choice of adaptation mechanisms, how the interpretation of information influences farmers' decisions, and what factors determine adoption of some adaptation measures. In the game, the farmers will be categorized into the treatment and control groups and assigned tasks as follows. The treatment group will be divided into two groups, with one group given a well explained long-term historical climate information for over 30 years on Machakos climate situation to use as a basis for making a long-term adaptation choice. The second treatment group will be given well-explained short-term monthly weather forecasts for the last one year (2019) which will act as their basis to make long-term adaptation plans. The third group will be the pure control group that will be given the usual weather forecasts (unexplained), monthly weather forecasts for one year and then required to use the same information to make a long term adaptation plan for climate variability. Both groups will be given similar tasks to whose

answers will provide measures for the outcome variable. The explanation of weather forecasts (climate information) will be an audio in Swahili for every participant to understand and comprehend with the exception of the control group.

The study will be based on utility maximization theory where a representative farmer adopts a given climate variability adaptation mechanism that gives a higher net utility. In other words, a given farmer selects a climate change coping strategy given the relevant climate information based provided it gives him higher benefits. He or she compares among the strategies and selects the one with higher benefits.

The study will take place in Machakos County, Kenya which is characterized by frequent occurrences of prolonged dry seasons, floods and landslides which adversely affect farming which is the primary source of welfare for the majority Kenyans. The results of this research will inform climate policies and initiatives that support farmer's livelihoods and sustainability in Kenya, and more broadly in East Africa.

### References

- Solomon, E. (2019). Determinants of Climate Change Adaptation Strategies Among Farm Households in Delta State, Nigeria. *Current Investigations in Agriculture and Current Research*, 5(3), 615–620. <https://doi.org/10.32474/ciacr.2018.05.000213>
- IPCC. (2018). Summary for Policymakers. In: *Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming*. Retrieved from <https://www.ipcc.ch/>
- Mendelsohn, R. (2012). The Economics of Adaptation To Climate Change in Developing Countries. *Climate Change Economics*, 03(02), 1250006. <https://doi.org/10.1142/S2010007812500066>



## BIOGRAPHY



John Siegfred  
Magalaya  
Shilinde

**Affiliation**

University of Dar es Salaam,  
Tanzania

**Why I participated in the Busara/MIT course**

Participating in the Busara/MIT Behavioral Science Course was like an awaited accolade to me as I am so interested to know how behavior of an individual plays role in make decision. Behavioral science field has been one of the fields that had attracted me to dwell in so that to know how people behave, however, I had such a little knowledge. Participating in the course was an eye opener to me as has broadened me with the fundamental skills on understanding human behavior impacts decision making or preferences. In addition, the diversity of students with different backgrounds has also motivated me to participate in the course since provided competitive learning environment enough to bring out the best in me. Joining, the course has been as beneficial to me as it has enriched my knowledge in field and lab experimental design, lab set up and implementation. I also learned how intrinsic behavior plays role in influencing decision making. This is because participation of an individual in making choice or decision such as choosing trade partner is derived from an internal motivation for success. In this view, it is difficult to know what an individual is internally thinking before deciding what to do given the choices. Individual's internal rewards are considered as the key aspects that derive satisfaction towards selecting which action to do such as selection of trade partners. This, can be seen from an individual level or community level that intrinsic factors of an individual that dictates more power towards decision making.


**Research question**

Does preferences for ethnic homogeneity and geographic similarities influence agri-sellers to select individual trade partner? A multiple rounds trust game will be deployed supported with a series of lab actions to capture expectations and the altruism of others. The trust game is applied as an incentivized measure of individual's trust that actors used as an experiment to establish how traders select trade partners. It represents a trading scenario where the trade partner varies by mother tongue as proxy for ethnicity. Each participant will complete two experimental activities. The activities are Trust Game (TG) as player 1 and Choose Your Dictator Game (CYD) as player 2. The general conduct of the game is as explained above.

**Background information**

John is a PhD student in Economics at the University of Dar es Salaam, Tanzania and also a lecturer and researcher at the Moshi Co-operative University in Kilimanjaro, Department of Economics, and Statistics. His research interests include agricultural economics, trade, and ethnicity in economic development. John also engages with other research institutions such as Economics and Social Research Foundation (ESRF) as a research fellow. His research assesses how ethnicity and geography influence agri-traders in forming trade partnerships.

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# Can language and geographical similarities promote social interaction in exchange of agricultural commodities?



ARTICLE BY JOHN SIEGFRED MAGALAYA SHILINDE

## **Partnership between small-scale agricultural sellers inherently relies on individuals' behavior.**

Ethnicity plays an important role in the exchange of goods for money within communities and between countries in most developing countries such as Kenya. It is considered one of the cultural factors that define a group of people, community or nation. Other factors include language, geographical location, regional culture as well as nationality. To some extent, these aspects are believed to play a pivotal role on an individual's preferences in making a choice to interact either for economic activities such as trading or for social events.

Preference for ethnically homogeneous social groups is an important feature that promotes social interaction of a group of people, be it in

trade partnering, commodities exchange or any other activities, supposedly because individuals belonging to a similar ethnicity or geographical location can easily share information and at some point act together. Examples of the activities that can be done jointly include saving and credit or community revolving fund, agriculture and trade. However, in this study only agricultural traders are considered as the main actors for the joint action since agriculture is the leading sector that accommodates the majority of people. The available evidence suggests that similarity in social groups bolsters the links between groups which facilitates establishment of co-ethnic networks. Felbermayr et al. (2010) points out that co-ethnic network is vital for facilitating international transactions since it reduces information asymmetry about trade and improves mutual trust between traders. This means that one party may have more information about the commodities traded or market status than the other party. The barriers to agricultural trade at the community level

include imbalances of market information about commodities' demand and supply, price as well as desired quality.

Basically, experiences gained from focus group discussions that were held in selected villages in Machakos County during Busara/ MIT course as a pilot survey revealed that individuals are highly motivated to collaborate with other traders because of a number of motivational factors. Such factors include trust, social cohesion, geographical similarities and communication structure (language). Undeniably, the survey registered that language and geographical similarities are the most identified salient elements that facilitate actors to choose partners as all these can characterize human behavior of an individual, though, rarely experimentally tested. Against this background, more consideration is that field experimental studies are warranted to establish how ethnicity plays a role in trade and specifically attempts to answer the question: do agricultural traders select trade partners from similar ethnicity and geographic contexts? And if so, why do traders from Nairobi choose to exchange with traders of similar ethnicity in Machakos or traders from within the counties? For instance, traders who are Taita-Tanzanian, Chaga-Tanzanian, Kamba, Taita and Kikuyu from Nairobi choose to make certain decisions about exchanging goods or partnering over other traders of similar profiles in Machakos.

The purpose of this study is to examine how selection of agricultural trade partners can be influenced by preferences for ethnic homogeneity and geographic similarities. Randomized field experiment design at selected villages in Machakos County in Kenya will be deployed together with the lab experiment at the Busara Center for Behavioral economics. The assumption is that homogeneity and geographic similarities between traders affect their decision-making at two levels such that shared mother tongue, which is Kamba, Kikuyu, Chaga or Taita

increases the likelihood of selecting partners both within and outside the country. The lab experiment will be used to vary the shared mother tongue as the main treatment condition to see how this affects decisions of agri-sellers in choosing trade partners. In order to achieve our experiment, the recruited participants as per recruitment criteria will play a multiple round trust game. This game measures differences in trust worthiness of individuals such as making decisions on selecting partners to trade with. The multiple rounds trust game is an interactive guide to the game theory of why and how we trust each other works by considering the total points gained in one round and the succeeding rounds. This is done through a lab experiment by having two players and monetary endowment X: trader 1 (trustor) and trader A (trustee). Trader 1 is given an initial endowment X and is requested to choose how much to share with trader A. Trader A then chooses how much of '3X' to send back to Trader 1. The total points each player earns in a single round are kept and the game is repeated for several rounds.

The basic setup of the experiment will involve both treatment and control groups. The treatment arm in this experiment will be the mother tongue of the trade participants, whereas variation will be only for the mother tongue - the native language which a person has grown up speaking from early childhood - across trader profiles. Other variables that will be explaining trade partner profiles such as gender, business experience, education level and age will be held constant for each trader whereas the outcome variable will be the likelihood of choosing a trade partner. The findings of this experiment will inform how ethnicity influences in making trade decisions.

## BIOGRAPHY



## Marius Vollberg

**Affiliation**

Harvard University

**Why I participated in the Busara/MIT course**

The Busara/MIT Behavioral Science Course provides a unique opportunity to learn about cutting-edge behavioral science, build and contextualize your research question in a development context, and implement the corresponding study in that same environment.

Each of those opportunities are reason enough to participate by themselves, but their combination has brought me the single most instructive month of graduate school. Thank you!

**Research question**

My research question explores how people's intuitions about taking advice inform their decisions, and whether those intuitions can be adjusted for a given decision-making context. In other words, do differences in how individuals care about decisional freedom drive real-world decisions? If so, is there a way to guide such intuitive preferences when they interfere with people's goals? By addressing these questions, I hope to better understand how and why people make decisions.

**Background information**

Marius is a doctoral candidate at Harvard University and a Swiss Government Excellence Scholar at the Swiss Center for Affective Sciences. His research explores group dynamics, memory, and emotion in both brain and behavior. During his prior studies in Zurich and London, he conducted research at the intersection of neuroscience, economics, and psychiatry; he also assisted with the WHO's Zika emergency response. These experiences left him convinced that the best research cuts across disciplines while remaining mindful of real-world relevance. For example, having started as a reformulation of a social psychological theory from a cognitive science perspective, the current project was developed in conversation with economists and legal scholars, aiming to connect preliminary findings to decisions that affect people's lives.

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# Can free choice be the enemy of optimal choice?



ARTICLE BY MARIUS VOLLBERG

**A big question in behavioral science and politics is why people don't always choose what's best for them. In our field study, we want to see whether one answer lies in how much people value choosing freely.**

From eating apples to preventing Zika, humans constantly make decisions from the mundane to the monumental. Across scales, decisions have in common that we are often told what to decide by family, friends, or other authorities. But the kind of decision matters for whether we end up doing what we are told: forced to eat your vegetables, you may think “Don't tell me what to do!” but if you have a medical issue you may tell a doctor, “Please tell me what to do!”. Do we always get this right, that is, do we know when to choose freely and when to follow advice?

Humans have likely grappled with this question for at least as long as toddlers have rejected their food, but our scientific understanding is still catching up. While we seem to like choosing freely for its own sake, we know little about how our valuation of freedom depends on differences between a) contexts and b) people. In other words, we might be less receptive to advice about apples than about Zika (i.e., decision context), and, separately, some people might care more about choosing freely than others, regardless of the context.

Prior to my work with Busara and MIT Governance Lab, I started to address these questions via online experiments. In this format, large samples of participants are typically presented with games and questionnaires that reveal how people make decisions in a relatively artificial setting. In my specific study, participants gained varying levels of experience playing a game before receiving advice that could be more or less forceful (think “DO THIS!” versus “You might want to try this”). In these experiments, participants followed advice

regardless of how well they knew the game or how forcefully the advice was presented; but the more they stated to care about their freedom to choose in general, the less they followed the advice.

In this abstract online setting, differences between people (b), not contexts (a), may best explain when people follow advice, but what do online experiments tell us about how people decide in contexts that are more relevant to them? Social science research has a tradition of being overly abstract and Western-centric in addressing these questions, but there have been growing efforts to break with this tradition. In line with these efforts, the Behavioral Science in the Field course offered an opportunity to rethink my project in new contexts. When I arrived in Kenya, I did not know whether “caring about your freedom to choose” meant anything to people at all. One of the things that makes field research so interesting and important is that it emphasizes the reality of the people the research aims to serve. For example, it became clear that decisional freedom indeed means something to people as soon as our field interviews gave me the chance to talk to Mutongoi (name changed). Mutongoi is the breadwinner in his household and, unlike some other respondents, immediately indicated that he cares a lot about his freedom to choose (10/10 when asked to provide a number rating). He emphasized his leadership role in the family and noted that he would not delegate his decisions, because that’s just who he is.

Anecdotes such as this one suggested that people might differ meaningfully in how they rate their freedom to choose, but my actual study was still as abstract as before. Here, too, field interviews were crucial. Mutongoi and other interviewees further noted that they

would not delegate when it came to decisions about which crops to farm either. Farming is one area where researchers and organizations like One Acre Fund have been trying to guide farmers’ crop choices—with varied success; people tend to prefer farming crops for themselves instead of planting and selling more valuable options. There are many reasons, including access to resources (equipment and capital), education, as well as sociocultural and historical factors. Although the specific systemic factors at play are tremendously important and need addressing, the present investigation was aimed to uncover general decision making processes that work in parallel. To this end, we designed a behavioral game in which participants allocate fictional crops to a virtual plot of land; participants then receive advice and can follow that advice or pay a fee every time they decide to choose freely instead, thereby lowering their expected earnings.. These task features alone allow only to probe whether following advice is linked to caring about choosing independently. Additional features are included to test whether this association is sensitive to context (“How much do you care about choosing independently in the context of this task?”).

Do differences in how individuals care about decisional freedom drive real-world decisions? If so, is there a way to guide intuitive preferences when they interfere with people’s goals? By addressing these questions, we hope to better understand how and why people make decisions.

## BIOGRAPHY



Isabel  
Macdonald

**Affiliation**

University of California  
Berkeley

**Why I participated in the Busara/MIT course**

I decided to participate in the course because in my prior research on debt and savings, I found standard economic explanations did not seem to capture the behavior I was observing. I wanted to explore more behavioral-oriented approaches to research. I learned that contextualizing research to local contexts is critical. The question I came in with turned out not to be relevant to the Kenyan context, but by speaking directly with people about their financial needs and habits, I came away with new ideas that were more interesting and practical.


**My research question**

My research question explores how social stigmas prevent information on scammers from spreading, and the consequences for mobile money usage and trust in mobile money agents. I designed a new game to measure whether subjects disclose prior scams more often when they answer anonymously or when their answers are shared with a stranger. I also designed a customer rating system and collected ratings from real customers on real agents. I test in the lab whether these reviews make people more willing to trust agents whom they don't already know.

**Background information**

Isabel is a postdoctoral researcher with the Lab for Inclusive FinTech (LIFT) at University of California, Berkeley. She focuses on development economics, with applications to education and behavioral finance.

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# How mobile money users choose agents and why it matters



ARTICLE BY ISABEL MACDONALD

## Lessons on trust in agents, and how anonymous ratings can help prevent scams.

In most places, getting people to trust a currency that they cannot see or touch is the biggest obstacle to starting a mobile money system. Kenya is an exception. Over [70% of Kenyan households](#) have mobile wallets, which allow them to send or receive money virtually via a phone, showing that almost everyone has overcome the initial trust barrier. But trust continues to be an important challenge for one aspect of the Kenyan system: people's choice in agents.

Mobile money agents have a crucial role to play. When a consumer wants to send money virtually to a peer or business, they bring cash to

an agent who will exchange it for credit in their mobile wallet. Agents also cash out credits, help new users with issues, and serve as the face of the mobile money company for most users. The agents can be any individual, typically a shop owner, who is registered with the operator to provide services. Safaricom, the company behind Kenya's most popular mobile currency M-Pesa, has a network of over [100,000 agents across the country](#).

All agents perform the same tasks and charge the same transaction fees as established by the operating company, meaning that users should feel comfortable visiting any agent in the network. In practice, however, many users refuse to work with anyone except their one trusted agent. This reliance on one agent can leave users stranded when that person is unavailable.



Over 70% of Kenyan households have mobile wallets, which allow them to send or receive money virtually via a phone, showing that almost everyone has overcome the initial trust barrier.

Understanding trust in agents is therefore important to ensure that consumers can always find an agent when needed. My field work suggests several key insights into why people trust some agents and not others, and why this trust is so important:

**Mistrust in agents is sometimes warranted.** Despite safety precautions like the secret PIN number, dishonest agents can still find ways to take money from users. Agents might use sleight of hand to hide a portion of a cash deposit and insist the customer handed them a lesser amount. They may give counterfeit bills, or collaborate with muggers to target users who have just made a large withdrawal. While scams are uncommon, the possibility of these events suggests that mistrust of unknown agents is sometimes warranted.

**The importance of agent trust depends on the user.** Self-sufficient, tech-savvy users know how to minimize their risk of scams, and typically feel comfortable transacting with any given agent. These users are more often young, urban, male, and have years of experience with mobile money. Less confident consumers, often

women, older, and/or new users, rely much more on agents to guide them through the process, which may expose them to greater risks. Some users, for instance, hand their phone to the agent to complete part of the transaction, which creates more opportunity for dishonest agents to run a scam. Trust in agents is much more important for these types of users, and many of them will only visit one or two agents.

**Social stigmas prevent information about dishonest agents from spreading.** Users who are scammed by M-Pesa agents may feel partially responsible for having been duped. They are often embarrassed and confused by the event and may not tell even close family members about it, much less report it to Safaricom. Users may also be uncomfortable asking friends and family whether local agents are trustworthy because they fear these questions will show a lack of confidence with the M-Pesa process. By consequence, fraudulent agents often go on to scam many others even though some people in the community are aware of their dishonesty.

Helping consumers find the right agents to trust will make mobile money even more successful in Kenya. As part of the Behavioral Science in the Field course, I designed a study to test whether sharing anonymous customer ratings can increase trust in unknown agents and reduce the ability of agents to scam users and get away with it. Participants in the study receive quality ratings from real customers of real agents in the community. I measure how these ratings impact people's willingness to transact with agents they don't know, and whether people are more likely to disclose prior experience with scams if they can do so anonymously. This research will help us understand the role of agent trust and stigmas around being scammed, and whether anonymous ratings can help more hesitant users navigate mobile money successfully.

## BIOGRAPHY



Laura Barasa

**Affiliation**

University of  
Nairobi, Kenya

**Why I participated in the Busara/MIT course**

The Busara/MIT Behavioral Science Course was the first of its kind in Kenya, and perhaps even in East Africa. I was interested in engaging in research involving lab experiments but did not have the means to do so. Taking part in this course has widened my perspective on multi-disciplinary research, and helped me to develop a keen interest in cross-disciplinary theories that are important in understanding a wide range of socio-economic issues.

**Research question**

The research question the lab game aims to test is “What is the effect of gambling warning messages and peer effects on gambling behavior?” This game involves watching penalty shoot-out videos, and betting on whether the penalty shooter will score or miss. The players will be given an opportunity to interact by voting on how to place bets, based on the player’s profiles. They will also view gambling warning messages during the game.

**Background information**

Laura Barasa holds a Ph.D. in Economics from Radboud University Nijmegen, Netherlands. She is a lecturer at the University of Nairobi, School of Economics. Her research interests include innovation and development and has published in leading journals such as Research Policy. She is affiliated to the African Economic Research Consortium and to Partnership for Economic Policy, and is also a member of the African Network for Internationalization of Education.

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# Hitting the Jackpot: how to curb youth gambling



ARTICLE BY LAURA BARASA

## Practical solutions to the losses and devastating effects of the elusive quest to hit the jackpot might be within reach

The gambling industry has experienced rapid growth as a result of the emergence of [new technologies](#). [2] The advent of mobile money in Kenya has brought with it big gains in financial inclusion as well as, become a medium for placing bets and cashing out winnings. Gambling services are now [easily accessible](#), and this has been linked to increased cases of [problem gambling](#)[3] . [The 1966 Betting, Lotteries and Gaming Act](#) which was set up to regulate the gambling industry in Kenya has been outpaced by technological innovations.

In a bid to update regulations to reflect and cater for the growing importance of online

operators within the market, the [Gaming Bill, 2019](#)[4] has been proposed to replace it. Some of the proposed changes involve the inclusion of gambling warning messages[5] in gambling related advertisements e.g. “Gambling Can Be Addictive”. and placing a ban on mobile money based gambling.

A ban on placing bets using mobile money might be effective in curbing problem gambling, however, gamblers still have the option of going to sport betting shops to place bets. Considering that gambling is perceived as a [recreational](#) and [social activity](#), sport betting shops might be more appealing to problem gamblers due to the presence of their peers.

This study aims to investigate the impact of peer effects[6] —gambling in a social setting—and gambling warning messages on gambling behavior. It will be undertaken in a lab setting where participants will play a game that captures both peer effects and gambling

warning message effects. Generally, the game involves watching penalty shoot-out videos with two football (or soccer)[7] players: the penalty shooter and the goalkeeper, and betting on whether the penalty shooter will score or miss.

The treatment will involve exposing participants to peer interaction and gambling warning messages. Bets will be placed after interacting[8] with peers. The interaction will involve voting on how to place the bet based on given information on the career profiles of the penalty shooter and the goalkeeper. This mimics going to a sports betting shop where peer engagement occurs through discussions on who is likely to win or lose. It also mimics phone betting while consulting with peers and takes many forms: WhatsApp, Telegram, and Facebook. Gambling warning messages will also be displayed to participants before they place their first bet individually and also before they place their last bet in a sequence of three games.

This lab experiment reflects the real life situation because of two elements: betting on football outcomes, and sharing information on how to place bets. While sports betting and peer discussions on how to place bets may be a reality[9], little is known concerning how gambling warning messages affect gambling behavior. Practical interventions such as these are likely to play a major role in reducing problem gambling in Kenya.

## BIOGRAPHY



Richard  
Sebaggala

**Affiliation**

Uganda Christian University

**Why I participated in the Busara/MIT course**

I participated in the Busara/MIT behavioral Science course because all along I have wanted to understand practically how lab-field experiments are executed. The literature I used to read would not explicitly help me to understand the “real” work behind the implementation of lab-field experiments in economics. I am happy to say that the ignorance I had about lab-field experiments is no more, given the participatory and practical training methods the professors and trainers used.

**Research question**

The research focus attempted to ascertain whether the use of emotional framed corruption messages would affect corrupt behavior more significantly than the usual descriptive framed corruption messages. To address this research, I adopted an experimental manipulation to measure the immediate effect of corruption information framing on individual propensity to cheat in a mathematical quiz.

**Background information**

Richard has been a lecturer of Economics at Uganda Christian University, Faculty of Business and Administration since 2007. He completed his Master of Science degree in Quantitative Economics and a Bachelor of Arts Degree with Education majoring in Economics from Makerere University. His research interests lie in applied microeconomic economics particularly in health economics, corruption, agriculture, inequality and poverty, and marriage and labour market outcomes.

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# The potential of emotions in the fight against corruption in developing countries



ARTICLE BY RICHARD SEBAAGGALA

The importance of information in shaping people's choice to engage in corrupt behaviors is an undisputable in the corruption literature. Evidence shows that the type of information available to individuals and the manner in which it is interpreted plays a significant role shaping people's decisions to engage in corrupt acts, such as accepting or paying bribes. For instance, an experimental study in Costa Rica found that people's beliefs in corruption increased after exposure to watching informational display depicting the increasing percentage of Costa Ricans who have personally witnessed an act of corruption. This is consistent with the self-fulfilling prophecy hypothesis which claims that the individual returns to corruption are a function of the perceived corruptibility of the other members of society (Corbacho et al., 2016). The findings are also supported by the collective action theory which predicts that people will engage in corrupt acts if they know that others are corrupt. This is because "it doesn't make sense to be the only honest person in a corrupt system" (Marquette and Peiffer, 2015; Persson et al, 2013).

It is not surprising that the importance of information in the fight against corruption is consistently emphasized as one way through which corruption can be managed (Stahl et al, 2017; Leszczynska & Falisse, 2017). However, whereas in behavior studies, the influence of information on corrupt and anti-corruption behavior has been tested empirically. Less is known about how information that brings about strong feelings of emotion on corruption such as feeling of guilt would affect behavior such as cheating. Although emotions is considered important in corrupt behavior, the studies on subject are few (Köbis et al 2016; Dupuy and Nese, 2018).

This is surprising given that emotions have proven to have a powerful, pervasive, and predictable influence on decision making (Lerner et al, 2014; Zhang et al, 2017). It is expected that the use of emotional framed corruption messages would affect corrupt behavior more significantly than the usual descriptive framed corruption messages. This is because emotional messages are associated with feeling of guilt

which may make it less likely for individuals to act corruptly (Dupuy and Nese, 2018)

To address this important empirical gap, a randomized lab-in-the-field experiment was designed to examine the role of emotionally framed messages in reducing corrupt behavior. An experimental manipulation was adopted to measure the immediate effect of corruption information framing on individual propensity to cheat in a mathematical quiz. Prior to playing the quiz, participants are randomized into three treatment groups. In the first treatment, participants watch a short video depicting the consequences of a corrupt act. A two minutes video portrays a life story of a medical student who paid his way through school by bribing the professors. In the video, the wife of the professor who accepted the bribe from the student gets sick and ends up in the hands of the same medical student, and because he was not adequately trained, the wife dies in the process. The video is considered a novel treatment because, apart from the emotional depiction of the wife's death and grief of the professor and his daughter, it demonstrates the linkage between a corrupt act and unanticipated consequences, which is often missing in most descriptive information campaigns on corruption.

In the second treatment, participants watch a short video clip depicting police officers

caught on camera soliciting and receiving bribes from motorists along the highway in Nairobi, Kenya. The video depicts a common episode disseminated about corruption in the police force, and is not meant to evoke an emotional reaction. For the third treatment group, participants watch a short video that has nothing to do with corruption about Kenya's tourism potential.

After watching the videos, participants are asked to perform a mathematical quiz where they are rewarded financially if they answer all questions rightly. The mathematical quiz has five questions, with four easy questions and one relatively hard question. The participants are told that the answers to questions are provided at end of quiz but it is not ethically right to check and look up the answers. The hard question added would be difficult for almost everyone to answer, and since participants are told the reward would be given only if all questions are answered correctly, the quiz provides an incentive to cheat and the answers provided give the participants the opportunity to cheat. How participants behave during the quiz after watching different videos will demonstrate whether emotionally framed corruption messages discourage corrupt behavior more significantly than the usual descriptive framed corruption messages.

## References

- Corbacho, A., Gingerich, D. W., Oliveros, V., & Ruiz-Vega, M. (2016). Corruption as a self-fulfilling prophecy: evidence from a survey experiment in Costa Rica. *American Journal of Political Science*, 60(4), 1077-1092.
- Dupuy, K., & Nese, S. (2018). The cognitive psychology of corruption. *Micro-level Explanations for Unethical Behavior*, U4, (2018), 2.
- Köbis, N. C., Van Prooijen, J. W., Righetti, F., & Van Lange, P. A. (2015). "Who doesn't?"—The impact of descriptive norms on corruption. *PloS one*, 10(6).
- Lerner, Jennifer S., et al. "Emotion and decision making." *Annual review of psychology* 66 (2015): 799-823.
- Leszczynska, N & J, B Falisse (2016). 'I am not corrupt': targeted awareness messages to fight corruption. Bingham Centre for the Rule of Law, *Global Rule of Law Exchange Papers*.
- Marquette, H., & Peiffer, C. (2015). Corruption and collective action. DLP Research Paper.
- Persson, A., Rothstein, B., & Teorell, J. (2013). Why anticorruption reforms fail— systemic corruption as a collective action problem. *Governance*, 26(3), 449-471.
- Stahl, C., Kassa, S., & Baez-Camargo, C. (2017). EARF Corruption, Social Norms and Behaviors in East Africa. Drivers of Petty Corruption and Anti-Corruption Interventions in Developing Countries—a Semi-Systematic Review.

## BIOGRAPHY



## Stuart Russell

**Affiliation**

Massachusetts Institute of  
Technology

**Why I participated in the Busara/MIT course**

I participated in the course to better understand a unique research design: lab-in-the-field behavioral games. I gained an understanding of the method, but I also gained a deeper appreciation for the careful planning and practical design choices that are needed for any rigorous field research. Throughout the course, I also greatly enjoyed interacting with and learning from a diverse group of researchers from the United States and East Africa.

**Research question**

Why do voters in the Global South vote for incumbent politicians even when they know incumbents have performed poorly? To answer this question, we designed a novel voting game, in which we provide participants with information about a hypothetical local politician. Participants also receive a series of small payouts to represent this hypothetical politician's help to themselves and to their community. At the end of the game, they choose whether to retain their "incumbent" or vote for a hypothetical challenger.

**Background information**

Stuart Russell is a PhD candidate studying comparative politics and quantitative methodology in the MIT political science department. His research interests include bureaucracies, public goods, and social services in countries with weak state capacity, particularly those in sub-Saharan Africa.

Prior to MIT, Stuart was a Princeton in Africa fellow in Dakar, Senegal with the public health NGO Population Services International. He also previously worked at the Center for International Development at Harvard University. Stuart graduated from Swarthmore College with high honors in political science and economics.



## BIOGRAPHY



Nicole Wilson

**Affiliation**

Massachusetts Institute of  
Technology

**Why I participated in the Busara/MIT course**

I wanted to take part in this course to learn more about the use of behavioral games, which I didn't have much exposure to before. I was also excited to get the hands-on implementation experience with the experts at Busara. I came away with a greater appreciation for the importance of contextualization -- making sure that the game you design actually resonates with participants. I also came away with more tools for doing that contextualization well.

**Research question**

Why do voters in the Global South vote for incumbent politicians even when they know incumbents have performed poorly? To answer this question, we designed a novel voting game, in which we provide participants with information about a hypothetical local politician. Participants also receive a series of small payouts to represent this hypothetical politician's help to themselves and to their community. At the end of the game, they choose whether to retain their "incumbent" or vote for a hypothetical challenger.

**Background information**

Nicole Wilson is a PhD student in the Department of Political Science at MIT, where she studies comparative politics and methods. Her research interests include urban property rights and citizen-state relations, with a regional focus on West Africa. Before coming to MIT, Nicole spent a year working as a research assistant on a study of informal trade in Lagos, Nigeria. She has a master's degree in Justice, Law, and Society from American University and a BA in sociology from the University of Georgia. With MIT GOV/LAB, Nicole has worked on a project exploring informal settlements in Lagos, including administering a survey about eviction threats and political participation.

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# Motivated Voters: Barriers to accountability in Kenya



ARTICLE BY STUART RUSSELL & NICOLE WILSON

## Why do citizens vote for their incumbent local politicians, even when they learn of their poor performance?

Ask a typical Kenyan how they feel about politicians in their country and they are likely to start by telling you that they are corrupt. While we might expect that citizens should vote out these poor performers, voters often opt to retain incumbent politicians. One common explanation is that voters are not fully informed about the performance of their own politicians and are therefore unable to hold politicians to account. Accountability interventions in Kenya and other developing countries have followed this thinking and sought to make government more transparent.<sup>1,2</sup>



Machakos Town, Stuart Russell, 2020

However, the fact that Kenyan voters freely admit their politicians are corrupt suggests they are not actually uninformed about poor performance. Further, evidence from [seven randomized controlled trials across six different countries](#) indicates that —on average —

<sup>1</sup>Pande, R. (2011). Can Informed Voters Enforce Better Governance? Experiments in Low Income Democracies. *Annual Review of Economics* 3(1):215–237.

<sup>2</sup>Humphreys, M. and Weinstein, J. (2012). Citizen Empowerment and Political Accountability in Uganda -- Preliminary Analysis. International Growth Center Working Paper S-5021-UGA-1.

providing information about the performance of incumbents does not change vote choice.<sup>3</sup> These seven coordinated studies indicate that voters in a variety of different contexts opted to retain incumbents even after receiving “bad news” about how their leaders have used or managed public resources in office. Why do voters — in Kenya and elsewhere — retain these leaders even in the face of negative information about their performance?

Political scientists have many explanations for how poorly performing politicians stay in office — such as vote-buying or ethnic voting — but we theorize that at least part of the answer lies with how voters process the information they receive about incumbent politicians. Theories of motivated reasoning in American politics suggest that voters incorporate political information differently based on their prior beliefs and group identities.<sup>4,5</sup> For instance, Democratic voters discount negative information about Democratic incumbents but weigh negative information about Republican incumbents more heavily. “Motivated” here refers to how voters defend their prior beliefs by ignoring or discounting contradictory information. We expected that Kenyan voters may act similarly.

With the help of the Busara Center for Behavioral Economics in Nairobi, Kenya, we designed a behavioral game and survey to explore motivated reasoning among Kenyan voters. The study was part of a four-week course organized by Busara and MIT GOV/LAB on behavioral games and lab-in-the-field

experiments in social sciences research.

We spent much of the course interviewing voters in Machakos, Kenya — the small city where the study would be conducted— about how they think about their incumbents.

When talking with voters, we found that they spoke differently of politicians in Kenya in general than their own Member of County Assembly (MCA), their representative in the county legislature. When asked to rate politicians in Kenya on a scale of 0-10, where zero was very corrupt and ten was trustworthy and helpful, many pointed to zero without much hesitation. They placed their own representative significantly higher, citing his contributions to their savings groups, his help with events in the community (such as funerals), and the bursaries he gives to help them pay for their children’s education. One voter even said he considers his own MCA “a friend,” even though he didn’t know him before he came into office.

While existing work primarily focuses on motivated reasoning on the basis of group identities, such as partisanship or ethnicity, we expect that these individual personal relationships also condition how voters process new information about politician performance. We found that people did not deny that vote buying is prevalent, and a few even admitted that their politicians might be involved in corruption. Yet, many citizens seemed willing to overlook or justify this. Another voter told us that one needs to weigh corruption allegations along with all the other things an MCA has

<sup>3</sup> Dunning, T., Grossman, G., Humphreys, M., Hyde, S.D., McIntosh, C., and Nellis, G., eds. (2019). *Information, Accountability, and Cumulative Learning: Lessons from Metaketa I*. United Kingdom: Cambridge University Press.

<sup>4</sup> Lodge, M. and Taber, C. (2013). *The Rationalizing Voter* (Cambridge Studies in Public Opinion and Political Psychology). Cambridge: Cambridge University Press.

<sup>5</sup> Druckman, J. and McGrath, M. (2019). The evidence for motivated reasoning in climate change preference formation. *Nature Climate Change* 9: 111–119.

done. In other words, it may be worth tolerating some corruption from someone who otherwise is providing benefits like school fees or road maintenance.

Understanding the particular ways in which voters' biases drive their responses to information is important for designing interventions that encourage accountability. Many recent studies on accountability provide information about local-level politicians, with whom voters may have personal relationships and receive personal aid.<sup>3</sup> If these personal relationships induce motivated reasoning, then providing information about corruption is unlikely to be persuasive.

### References

- Corbacho, A., Gingerich, D. W., Oliveros, V., & Ruiz-Vega, M. (2016). Corruption as a self-fulfilling prophecy: evidence from a survey experiment in Costa Rica. *American Journal of Political Science*, 60(4), 1077-1092.
- Dupuy, K., & Neset, S. (2018). The cognitive psychology of corruption. *Micro-level Explanations for Unethical Behavior*, U4, (2018), 2.
- Köbis, N. C., Van Prooijen, J. W., Righetti, F., & Van Lange, P. A. (2015). "Who doesn't?"—The impact of descriptive norms on corruption. *PloS one*, 10(6).
- Lerner, Jennifer S., et al. "Emotion and decision making." *Annual review of psychology* 66 (2015): 799-823.
- Leszczynska, N & J, B Falisse (2016). 'I am not corrupt': targeted awareness messages to fight corruption. Bingham Centre for the Rule of Law, Global Rule of Law Exchange Papers.
- Marquette, H., & Peiffer, C. (2015). Corruption and collective action. DLP Research Paper.
- Persson, A., Rothstein, B., & Teorell, J. (2013). Why anticorruption reforms fail— systemic corruption as a collective action problem. *Governance*, 26(3), 449-471.
- Stahl, C., Kassa, S., & Baez-Camargo, C. (2017). EARF Corruption, Social Norms and Behaviors in East Africa. Drivers of Petty Corruption and Anti-Corruption Interventions in Developing Countries—a Semi-Systematic Review.

## BIOGRAPHY



## Aidan Milliff

**Affiliation**

Massachusetts Institute of  
Technology

**Why I participated in the Busara/MIT course**

I participated in the Busara/MIT Behavioral Science Course to learn how to use behavioral games and lab studies for my research on violence. I learned how to design and plan for lab studies and lab-in-the-field studies.

**Research question**

My research asks how people make safety-seeking decisions when they are confronted with violence. Why, given an identical situation, do some people prefer to fight back, while others choose to evade danger, and others try to adapt to the situation? What cognitive, social, and political processes do people use to form opinions and make decisions in complex, violent environments? Motivated by these fundamental themes, I apply a wide range of computational social science methods and qualitative tools to answer questions about civilians enduring conflict, forced migration, the legacies of violence, and the security politics of South Asia.

**Background information**

Aidan Milliff is a Ph.D. Candidate in Political Science at the Massachusetts Institute of Technology, a predoctoral fellow at the Institute for Security and Conflict Studies at George Washington University, and a 2021-2022 USIP/Minerva Peace and Security Scholar. He is an affiliate of the MIT Security Studies Program and the Harvard Lakshmi Mittal and Family South Asia Institute, and was a 2016-7 MIT Presidential Fellow. Aidan combines computational social science and qualitative tools to answer questions about the cognitive, emotional, and social forces that shape political violence, migration, post-violence politics, and the politics of South Asia. His work appears or is forthcoming in journals and proceedings including AAI, Journal of Peace Research, Political Behavior, as well as popular outlets including the Washington Post Monkey Cage Blog, War on the Rocks, and India's Hindustan Times.

Before MIT, Aidan was a James C. Gaither Junior Fellow in the South Asia Program at the Carnegie Endowment for International Peace. He holds a BA in political science and MA in international relations from the University of Chicago. He was born and raised in Colorado.

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# Realism within reason: how to study life or death decisions



ARTICLE BY AIDAN MILLIFF

## **Finding locally-relevant scenarios of violence and danger can help social scientists build realistic experiments to study sensitive topics**

Behavioral science often focuses on understanding the everyday decisions we make when interacting with each other, how we engage with the government and choose to spend our time and money. But behavioral science tools can also be used to study the sorts of decisions that people hope they will never face: decisions about how to stay safe during violence.

Studying how people respond to violence, during wartime, riots, or criminal violence, can be challenging to replicate in a controlled setting. Exposing people to real dangers or real threats of violence like the kind we want to study would be unethical because it could harm participants physically or psychologically. How

can experiments help us learn about things, like violence, that we should not or cannot recreate in a laboratory?

One powerful tool that social scientists use to study decisions is simulated realism —making the choices as realistic as possible to encourage people to act normally, as if they were not taking part in a study. Some studies make decisions realistic by giving them real consequences, for example, studies about investment behaviors, for instance, might ask participants to “invest” the money they earned by participating in the experiment into different financial products, which could either gain or lose them real money. Researchers studying behavior during violence, however, cannot design studies around real choices with real consequences. It would be hard to get volunteers to participate, and more importantly, it would be unethical to try.

Some social scientists study behavior during violence using abstractions, measuring individual decisions or inter-group conflict using [lotteries that measure risk tolerance](#) (Mironova et al., 2019) or [games that elicit cooperation and punishment behavior](#) (Zeitzoff, 2016). These

designs make behavior easy to measure, and they ensure that experiments are physically and emotionally safe for participants, but whether choices about sharing or stealing small sums of money tell us much about behavior during violence is an open question. Others, in a decades long tradition of conflict research, focus on [telling the stories of individual survivors of violence](#) (Pearlman, 2018) through either interviews or surveys and [using those survivors' recollections to understand how they made decisions](#) (Arjona and Kalyvas, 2012). These experiences are, of course, as real as it gets, but we know that the way people explain choices in retrospect is not necessarily the same as the way they make them in the moment. People keep thinking about important life experiences like escaping from violence after the fact, and the way they re-consider a choice they made in the past affects how they explain that choice to other people.

So, how can behavioral researchers studying violence make their experiments as realistic as possible, but still safe and ethical? In a new study, I draw on [insights from psychology](#) (Lerner et al., 2007) and from the tradition of [simulation training in military decision-making](#) (Bartels, 2020) to create decision-making scenarios that realistically capture the aspects of violence that life or death decisions different from other types of decisions, but do so while minimizing physical and psychological risk to participants.

First, I worked with the team at Busara to create a violence scenario that would seem plausible or realistic to participants in the experiment. We started by asking people in Machakos, the place we will ultimately run the study, to tell us about their own experiences of violence in their daily lives, and we then wrote scenarios based

on what people described to us. We refined the scenarios for the study--a domestic violence incident and a mugging incident--through two weeks of interviews in Machakos. We chose types of violence that are common specifically in those communities, and tailored the scenarios based on feedback from interviewees about similar stories they had heard from their own communities.

Second, we used tools borrowed from psychology studies to introduce different feelings to participants---feelings like uncertainty, fear, or agency---before they had to make decisions about how to respond to our hypothetical scenarios. By programming different settings (basically, different difficulty levels and different rules) into a [space-invaders style](#) game that participants play before making decisions about how to respond to a violence scenario, it is possible to make participants feel like they have more or less control over things that happen to them, more or less ability to predict what will happen next, and more or less fear.

By sending participants into the realistic, locally relevant decision-making scenarios with these feelings at top-of-mind we create "realism within reason," simulating some of the psychological aspects of decision-making during violence to generate better data about how people make life-and-death decisions. By understanding the building blocks of these important decisions, which are very hard to measure in the real world and very difficult to re-create in a controlled setting, we can learn more about how people choose to do things---like become a refugee, join an armed movement, or cooperate with the government---with consequences that extend far beyond them as individuals.

## References

- Lerner, Jennifer M., Seunghee Han and Dacher Keltner. "Feelings and Consumer Decision Making: Extending the AppraisalTendency Framework," *Journal of Consumer Psychology* 17, no. 3 (2007): 181--187.
- Mironova, Vera, Mrie Loubna and Sam Whitt. "Risk Tolerance during Conflict: Evidence from Aleppo, Syria," *Journal of Peace Research*, (Forthcoming).
- Perlman, Wendy. *We Crossed a Bridge and it Trembled: Voices from Syria*. New York: Harper Collins, 2018.
- Zeitsoff, Thomas. "Anger, Legacies of Violence, and Group Conflict: An Experiment in post-riot Acre, Israel," *Conflict Management and Peace Science* 35, no. 4 (2018): 402--423.

## BIOGRAPHY



Lynda  
Nakalawa

**Affiliation**  
Makerere University

### Why I participated in the Busara/MIT course

As a psychology teacher and practitioner in Uganda, I had never had an opportunity to carry out practical behavioral experiments, due to resource limitations and training gaps. During the course, I learned that behavioral experiments can be creatively adapted to be run in resource limited settings as long as one understood the underlying scientific theory and its rationale; the course further highlighted the importance of keeping contextual issues in mind both at theory and practice.

### Research question


My experiment is about whether youth can be influenced to engage in critical thinking through a single shot online message that targets different aspects which discourage critical thinking among young people such as peer pressure and poor role models. My game is the Raven's Progressive Matrices, a non-verbal test usually used to estimate intelligence with literate and non-literate populations. Each matrix is a pattern with a missing part, and the participant is provided various options from which to choose the possible match and complete the pattern.

### Background information

Lynda has an abiding interest in youth empowerment, and how it is limited by the youth's ability to engage in critical thinking. This limitation is driven by a series of social-cultural and historical factors that are so often ignored. It however affects youth across a range of life situations, such as careers, livelihood activities, or even adherence to life saving Anti-retroviral medication. Lynda's current PhD research is on youth mindsets in the context of empowerment.



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# Can a single shot online message increase youth's willingness to engage in critical thinking?



ARTICLE BY LYNDA NAKALAWA

## **A Description of how a behavioral experiment was set up in collaboration with youth in Kampala and Machakos, with eye-opening lessons in simple statements.**

"Youth don't think...No, in fact Kenyans don't think!" This is what Mark (Not real name) a 25-year-old male in Machakos county laughingly told me as we discussed whether young people in Kenya were willing to engage in critical thinking. Another young man, we shall call him Peter, expressed similar sentiments, "This is why these betting companies make a lot of money, they have made it so easy, the instructions are all there, you do not have to think!" He said.

"Betting companies" are essentially online gambling houses providing an opportunity to place bets on different types of sports in the hope of a large win.

It is on this background that I propose to carry out an experiment that explores whether youth can be encouraged through an online message to expend cognitive energy; to apply themselves to thinking through issues before acting. A group of about 300 Machakos youth will be randomized into two groups. One group will receive a message that motivates them to engage in critical thinking for example about what they can do to better their life situation instead of waiting for a handout from the government. The other group will receive a neutral message about how clouds make rain. Both groups will then be presented with a puzzle game (Raven's Matrices as explained above) and an endowment of 50 KSHS. Their choice is simple, to "play or pay", they could either play

the presented puzzle, or pay 10 KSHS, to get out of playing.

My prediction is that participants who received the message that motivates them to engage in critical thinking, will be more likely to “play”, and their counterparts who received a neutral message will be more likely to “pay”. The assumption here is that youth have been molded by their situations to avoid expending cognitive energy whenever possible, as Mark and Peter above assert. It is my hope however that this default mode can be influenced, that youth can be nudged, through online messaging to engage in critical thinking.

It is a rather big and erroneous assumption (in this and other behavioral experiments with human beings) that participants walk into lab experiments as empty slates, devoid of personal experiences, wishes and influences; ready to be influenced only by the experiment. To counter this limitation of experiments and have a better understanding of the participants’ reality therefore, I propose to have one qualitative exit question: why did you choose to pay or play? A quick pilot of this experiment (carried out with a small sample of residents from Machakos county) however quickly revealed multiple problems with obtaining these qualitative responses. Participants were not able to record their responses without distracting other participants and challenges with literacy made it difficult for them to write their responses.

To overcome this challenge, I had an opportunity to run an adjusted version of the experiment with 35 undergraduate community psychology students at Makerere University in Kampala, Uganda. This was done in February 2020, after the Behavioral Science Course. The adjustment to the experiment was that at the “play” or “pay” step, participants were first asked what they would choose, and then in groups of five, discussed whether they thought their

peers, given a similar situation would choose whether to “pay” or “play”. Their responses provided a list of multiple choice options that will be incorporated into the lab experiment in Machakos, to replace the qualitative piece at the end.

#### **Here are some of the reasons given for “Playing”**

*“To challenge myself”*

*“Paying (to opt out of playing the puzzle) is sign of cowardice”*

*“To enhance my mental thinking”*

#### **Some reasons advanced for “Paying”**

*“I don’t want to overthink”*

*“Fear of failure”*

*“Because I hate getting involved in complex activities at times”*

These responses also resonate with the ideas that Mark and Peter in Machakos put forward. I hope to put forward some lessons for helping youth in East Africa become more willing to exercise their mental muscle for their own improvement. This is because critical thinking, like a muscle can only be developed as a skill by continuous practice and challenging oneself, hopefully to come up with ideas on how to improve one’s life situation

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# Photos from the course



