

Faculty: Zarin Machanda, Assistant Professor, School of Arts & Sciences

Project Locations: Medford, MA and Kibale National Park, Uganda

Dates: mid-May – early August, 2019 (flexible)

Project Title: Do education programs influence children's investment in conservation?

Project Details: Professor Machanda serves as one of the directors of both the Kibale Chimpanzee Project (KCP) and the Kasiisi Project. Together, these two organizations work towards the conservation of Kibale National Park, Uganda through programs that support education, health, and care for the environment in local government primary schools. Currently, there are almost 1500 wild chimpanzees living in Kibale National Park; however, this habitat is threatened by the pressure caused by increased human population growth around the park boundaries. These anthropogenic factors are predicted to cause the extinction of all wild apes including chimpanzees by 2100 (Nishida et al. 2001). Effective conservation activities are necessary to save this species. Kasiisi Project works in 16 primary schools that are all located within 5km of the border of Kibale National Park. We service over 10,000 children and our philosophy is that we offer a diverse set of programs to make these schools as wonderful as possible. We believe that we need to give students the resources they need to succeed in order to pursue a future that does not rely on cutting down Kibale National Park for subsistence farming. Along with programs on health, nutrition, reading, art, drama, and photography (to name a few), we also have several programs that teach the students about conservation and the environment. Unlike our education programs which can be measured by improved standardized test scores, the effectiveness of our conservation programs is much harder to measure. To date, most of our evaluations have centered on conducting surveys to assess whether or not attitudes to the forest and chimpanzees have changed before and after conservation programming. From these surveys, we know that students are more likely to say that they have more positive feelings and use more positive language about the park and its wild inhabitants. While these data suggest a shift in attitudes from the conservation programs, our students often suffer from survey fatigue and we often worry that our students respond in ways that they think will match our expectations. Therefore, it would be ideal if we could measure a behavioral rather than an attitudinal shift. In order to measure whether our conservation program result in behavioral change, we will be using an experimental design borrowed from studies of development psychology. The research assistants will work in our two newest schools who joined the Kasiisi Project network in the last year which have not had the same kind of extensive conservation programming of our other schools. Children (aged 7-11) from these schools will be divided into an experimental group and a control group, each with 60 children. Our research assistants will then run a donation game with the children. Each child will be given 10 tokens and then asked if they want to donate their tokens to either conserving chimpanzees or towards buying biscuits for their class. We chose this kind of game because both options involve a donation to a public good. After this round of baseline trials, the students in the experimental group will engage in conservation programming with the snare removal team from the Kibale Chimpanzee Project. The students in the control group will do another non-conservation activity such as playing soccer. Following this, the research assistants will then run a second round of donation games with the children and will then compare these values with the baseline set by each child. The expectation is that children in the experimental condition should show an increase in the donations to chimpanzees whereas the control group should show no difference. Data from this project will provide valuable information about whether our conservation programs elicit behavioral rather than simply attitudinal change. We will be able to refine and improve our conservation education strategies with this data. This will also be of great interest to any NGO that engages in conservation education since almost all studies that assess the efficacy of conservation education programs have relied on survey data. Not only do these studies measure attitudinal

rather than behavioral change, they are also subject to problems given the language barrier that we sometimes face working with young children. Finally, there is value to this study for developmental psychologists since it will illuminate aspects of how children make decisions, especially those relating to the risk of investing in future outcomes versus more immediate outcomes. To date, we have designed the study and are working on getting approval from the IRB. The existing infrastructure of the Kasiisi Project will allow students to start working on this research as soon as they arrive in Uganda.

Tasks and Responsibilities of Research Assistant:

1. Training with Dr. Zarin Machanda and Dr. Katherine McAuliffe on how to run the donation task
2. Running the donation task with either the control group or the experimental group (before and after the conservation activity)
3. Assisting the Kibale Chimpanzee Project snare removal team with a conservation activity for the experimental group -design and implement a non-conservation activity for the control group
4. Assist the current conservation teams in planning their programming for the summer

Qualifications:

The student does not need any special skills other than strong word and data processing on a computer. The student should have a deep interest in learning about different cultures and be comfortable traveling to a part of the world without first world amenities like running water and reliable electricity. Student should be extremely adaptable, patient and understand that they will need to listen to and follow directions that might not make sense to them given their cultural background. Student should have an interest in conservation in the developing world and enjoy working with children. It would be a bonus if the student has experience conducting psychology research.

Description of Field Site:

Students will be living in rural Uganda, about a 20 minute car ride from the closest town. There is no running water, so students should be prepared to have bucket showers and use pit latrines. Drinking water comes from boiled and filtered rain water. There is electricity to charge laptops and phones but there are frequent outages. A generator is available at the office for emergencies.

Housing in Uganda:

Students will stay in project owned accommodation built to house volunteers. They will share the house with at least 3 and up to 5 other American volunteers and interns, likely with their own room but this is not guaranteed. The house has pit latrines and bucket showers. All drinking water is from rain barrels and is boiled and filtered. The house is surrounded by a fence with a barbed wire top and a locked metal gate. During the day, there is a cook on site and at night there is a security guard. The local supervisor lives 8 km from the volunteer house. For the duration of this study, there will be an Assistant Field Director on site. The house has a safe for valuables.