Does Participation in Group Decision-Making Increase Investment in Public Goods?

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Prepared for the Association for Public Policy Analysis & Management
Annual Fall Research Conference
November 2018

ABSTRACT

Stakeholder participation in decision-making is widely encouraged in international development policy, management and research. Instances of “participatory development” (understood as involvement in decision-making of those people meant to benefit from development aid interventions) can be found all over the world, and public participation in decision-making is formally encouraged in the Kenyan constitution. While there are normative reasons to encourage more inclusive decision-making processes, costly and time-intensive group decision-making processes are often justified on the grounds that they may also improve outcomes. Yet despite myriad claims about the beneficial effects of group decision-making, empirical evidence remains weak, largely due to a lack of specificity regarding the causal mechanisms through which particular types of participation should affect outcomes. This research involves controlled laboratory experiments conducted in Nairobi, and it examines the hypothesis that when individuals are engaged in group decision-making regarding the creation of a public good, they will be more willing to invest in that good. I find that participation in group decision-making involving deliberation (but not a simple majority vote) does result in greater contributions to the public good. However, this effect is not achieved through greater effort exerted, but rather through better strategic decision-making that minimizes the costs associated with contributions.

Acknowledgements: I wish to thank the staff at Busara Center for Behavioral Economics for their support and feedback in preparing the experiment for implementation, in particular Jennifer Adhiambo, Mary Chebet, Joseph Kimani, Kelvin Kihindas and Chaning Jang. For helpful input into the research design, I would like to acknowledge Jay McCann, Mike Touchton, Brian Wampler, and Richard Zeckhauser. This experiment was implemented thanks to financial support from the Exploratory Research in the Social Sciences Grant from Purdue University’s College of Liberal Arts, and early work on this project was supported by the Harvard Law School Project on Negotiations’ Graduate Student Grants Program.
INTRODUCTION

Participation in decision-making by citizens and stakeholders has been widely lauded as a method for improving outcomes in environmental management (Koontz & Thomas, 2006; Reed, 2008), international development (Mansuri & Rao, 2004, 2012), democratic governance (Fung & Wright, 2001), and sustainability science (Mielke et al., 2016), among other areas. The World Bank alone has invested billions of dollars in the implementation of community-driven development, which emphasizes the participation of beneficiaries in decision-making around development projects (Mansuri & Rao, 2004). The United Nations Economic Commission for Europe recognized “the right to participate in environmental decision-making” in its 1998 Aarhus Convention, and public participation in decision-making is formally encouraged in several national constitutions (Bolivia, 2009; Kenya, 2010).

One hypothesized effect of deliberative decision-making is that participants are more likely to value outcomes of the decision-making, and thereby more likely to invest in, maintain or comply with those outcomes. If group decision-making can be thought to enhance feelings of autonomy or perceptions of fairness among participants, then prior psychological research offers quite a bit of empirical evidence that this effect is plausible. If the decision outcome in question relates to a public good, and if this effect extends to that good, then this has the potential to mitigate the free rider problem and encourage individuals to increase public good contributions – with implications for many areas of public policy.

While there are compelling, normative reasons to encourage more inclusive decision-making independent of results, costly and time-intensive group decision-making processes are often justified on the grounds that they may also improve outcomes. Yet despite myriad claims about the beneficial effects of group decision-making, many have observed that the empirical evidence in support of participatory decision-making remains weak (Bäckstrand, Khan, Kronsell & Lövbrand, 2010; Duit & Hall, 2014, Koontz & Thomas, 2006; Birnbaum, 2016). Studies largely take the form of either individual case studies or meta-analyses and literature reviews attempting to synthesize those case studies (Beierle & Cayford, 2002; Irvin & Stansbury, 2004; Koontz & Thomas, 2006; Reed, 2008).

There is surprisingly little experimental evidence on group decision-making and its potential effects on long-run behavior change in particular. Some field experiments claim to measure participation, but use a conceptualization of the term that does not actually involve decision-making (Björkman & Svensson, 2009; Banerjee et al., 2010). One unpublished field experiment in Bangladesh did evaluate participatory decision-making regarding a safe drinking water program, and found that group decision-making resulted in better outcomes if it involved unanimous consensus (Madjewicz, et al., 2017). However, this research did not vary the form of participation and made little effort to disentangle the causal mechanisms underlying this effect, limiting its generalizability to other settings.

The empirical evidence for the beneficial effects of participation remains both weak and imprecise. Prior studies either focus on a particular case without specifying which aspects of participation were crucial for achieving outcomes, or they take the form of meta-analyses of prior cases, drawing general conclusions about the effectiveness of participation in general. The research could benefit greatly from (1) a focus on rigorous testing of hypotheses regarding the effects of specific design features of participatory decision-making, and (2) a greater engagement with prior literature, particularly in psychology, which sheds light on potential causal mechanisms underlying hypothesized effects.
LITERATURE REVIEW

Participatory decision-making
The idea that participation in decision-making processes may change people’s beliefs, preferences and behaviors has a long history in political theory (Mansbridge 1999). Complicating empirical work on participatory decision-making is the fact that, in practice, group decision-making processes may take many different forms. Various scholars have offered typologies to help distinguish between different varieties of participation in decision-making. The foundational work in this area was Arnstein’s (1969) “Ladder of Political Participation”, which conceptualized participation on a single scale varying from non-participation and tokenism, on the one hand, to full citizen control on the other. Many later efforts built on this ladder, providing alternate ways of depicting the degrees of participant engagement, but without questioning the linear and unidirectional form of the framework (Biggs, 1989; Pretty 1994, 1995; Farrington, 1998; Lawrence 2006). Others sought to deconstruct the ladder. Davidson (1998) suggested that it should rather be understood as a ‘wheel’, with different levels of engagement considered appropriate in different settings. Rowe and Frewer (2000) departed from the exclusive focus on level of engagement, providing a list of nine criteria by which to assess participation, including concepts such as representativeness, transparency, influence, early involvement, structured decision-making and cost-effectiveness. Fung (2006b) converted Arnstein’s ladder into a cube, with forms of participation varying along three key dimensions: the inclusiveness of participant selection, the level of authority given to decision outcomes, and the method of communication used to arrive at decisions.

The effects of participation are likely to vary depending on the particulars of the methods used in practice. Deliberative discussion, in particular, is believed to be more transformative than a mere aggregation of individual preferences. According to democratic theorists, deliberation involves “reason-based decision-making,” in which participants try to persuade each other of a course of action using reasons that appeal to others, such as fairness, group-mindedness or logic regarding effectiveness (Fung & Wright 2003). The use of “deliberative contestation” in participatory processes may help marginalized groups to challenge capture by narrow interests (Gibson & Woolcock 2008). Notably, the deliberative ideal does not require the absence of self-interest, but rather suggests that self-interest can be constrained by deliberation (Mansbridge et al. 2010). Scholars have demonstrated that deliberation results in shifts of opinion (Luskin, Fishkin, and Jowell 2002), but the empirical literature has had little to say about the quality of the resulting opinions (Fung 2006a), which are understandably difficult to specify in most real-world situations, or their influence on later behavior change.

Thus, in order for empirical work to provide generalizable insights on this topic, it is necessary to selectively vary design aspects of the participatory decision process. In this study, I take advantage of a controlled laboratory setting to assess differences between commonly used approaches to group decision-making. I differentiate groups that rely on a simple majority vote (likely to successfully aggregate preferences, but unlikely to achieve more transformative change) vs. a deliberative discussion resulting in a consensus-based decision (a more intensive and time-consuming form of decision-making, but one more likely to have bigger effects on outcomes). I also differentiate between processes that make use of secret ballot voting vs. those that use a public vote procedure.

Procedural utility and procedural justice
In testing these hypotheses, it is also essential to distinguish between distinct causal mechanisms, relating to effects on decision outcomes and effects on participants. Preference alignment, rooted in rational choice theory (taking preferences as fixed), suggests simply that when individuals participate
in decisions, the outcomes are more likely to reflect what they valued in the first place. Simple voting procedures should be sufficient to aggregate preferences accurately, so intensive participatory practices are likely not necessary to invoke this mechanism. Procedural utility or procedural justice mechanisms, on the other hand, are behavioral in nature, and suggest that preferences over outcomes actually change as a result of the process leading to them, and that these altered preferences drive later changes in individual decision-making and behavior. On this topic, studies on participation in decision-making processes would benefit from engagement with related bodies of literature in psychology, neuroscience, and behavioral economics.

Work on procedural utility has confirmed that individuals value not only outcomes, but also the processes that lead to them (Frey and Stutzer 2004) and may value the same product more if they themselves participate in creating it (Norton et al 2011). They may therefore also be more likely to invest in, maintain or comply with those outcomes over the long-run. Relatedly, a large body of literature in psychology has established that self-determined choice can, under the right circumstances, improve motivation, effort, and task performance, even when choice is irrelevant to task difficulty (Patall et al. 2008; Leotti et al 2010). In addition to enhancing performance, decision-making is associated with increased activity in a brain region (Murayama et al 2013) that is also linked to the valuation of goods and willingness to pay for them (Plassman et al 2007; Chib et al 2009).

However, the aforementioned studies involve individual decision-making in which the participant has full authority over the outcome of the decision. Self-determination theory (Deci, 1980; Ryan & Deci, 2000) may explain such findings, as it suggests that an individual’s motivation to act is strongest when their perceived autonomy remains intact. In group decision-making, however, such as that used in stakeholder participation processes, no individual has full control over the outcome, and no individual is guaranteed to receive their preferred outcome. It is thus unclear whether the psychological benefits of choice and autonomy extend to such group decision-making processes. A review article concluded that the psychological desirability of decision-making has a biological basis, rather than being learned through cultural influence (Leotti et al 2010). This implies that such findings are likely generalizable to different settings, making their extension to group decision-making processes an ideal topic for experimental research.

The notion that group decision-making may increase compliance finds potential support within the procedural justice literature, where it is argued that people are more willing to accept a decision if they believe it was fairly determined (Tyler, 1990; Lind & Tyler, 1988). For example, survey data from several hundred employees suggests that individuals are more likely to engage in discretionary cooperative behavior if they believe their organization makes decisions fairly (Tyler & Blader, 2000). In particular, several scholars have argued that providing an individual with “voice” (understood as an opportunity to share their views on a decision) is associated with greater procedural justice and therefore acceptance of related outcomes (Thibaut & Walker, 1975; Price et al., 2001). By some accounts, the effect of providing “voice” may lead to higher performance even compared with “choice” - providing direct control over a decision (Earley & Lind, 1987). However, the procedural justice literature primarily relies on survey and observational data from workplace or courtroom settings, whereas experimental work on the behavioral effects of decision-making is almost exclusively focused on individual decisions, with little attention paid to whether group decision-making processes may lead to similar outcomes.

A few isolated studies do look at the effects of group decision-making on hypothetical behavior. In a field setting, voting on selection of a public good increased self-reported willingness-to-pay for
maintenance of that good (Olken 2010), and a recent laboratory experiment evaluated the role of psychological ownership on self-reported intentions to promote sustainability (Aga, et al., 2017). But self-reported measures are subject to desirability bias and may not correspond to actual behavior when real incentives are at play. This effect of group-level decision-making on post-hoc effort and compliance has not been experimentally tested with respect to actual observable behavior. My research moves beyond self-reported intentions to measure actual behavior within an incentivized behavioral game.

**RESEARCH DESIGN**

Prior research on the effects of group decision-making lacks rigorous experimental testing of the causal mechanisms underlying hypothesized effects of participation. Research on procedural utility has established one potential mechanism (a behavioral effect of increased autonomy), but it has focused exclusively on individual decision-making, and it is unclear whether those effects can be replicated in a group decision setting. Work on procedural justice has looked at the behavioral effects of group decision-making, but lacks clear causal inference.

This study provides a rigorous experimental test of whether participation in group decision-making processes increases contributions to a related public good. The research design described below was registered as a Pre-Analysis Plan in the EGAP (Evidence in Governance and Politics) repository.

**Setting**

This experiment took place at Busara Behavioral Lab in Nairobi, Kenya. Busara staff (Kenyan citizens) implemented the experimental protocol in Swahili. We conducted all aspects of the experimental protocol using z-Tree software (Fischbacher, 2007), except for the decision-making treatments, which occurred in a smaller room outside of the computer lab, with facilitators following a protocol programmed into Qualtrics.

Kenya ratified a new constitution in 2010 by popular referendum. The new constitution sets up a federal system, granting greater authority to the county governments, and it includes requirements for citizen participation in government decision-making: “A county assembly shall… facilitate public participation and involvement in the legislative and other business of the assembly and its committees (Constitution of Kenya, p.119).” However, the specific method of public engagement was left largely to the discretion of the county governments, and many were still struggling to develop a public participation plan when I conducted key informant interviews with county officials in 2014.

**Participants**

Busara draws its research subjects primarily from the Kibera slum, a low-income population for whom local collective action may be a prominent source of public good provision. This experiment included 585 participants, spread across four treatments and one control group. Sixty-three percent of the participants were female, 35% had never been married, and 74% report having engaged in some sort of real-world collective action in their communities within the past month. The participants were, on average, 34 years old with 2 children and with 10 years of education (the equivalent of having completed some secondary school). (See Appendix A for a full table of descriptive statistics.) A larger percentage of participants were assigned to the control group in order to increase statistical power. Of

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1 The pre-analysis plan for this project has the EGAP ID number 20180720AA , and it is available at: https://egap.org/registration/4963
the 585 total participants, 210 were assigned to the control group and the remainder were split evenly across the four treatment groups.

Experimental design

This experiment involved a modified public good game in which contributions to the public good were determined by performance in an effort task. Participants had the opportunity to earn actual cash incentives, greatly reducing concerns over reporting bias. Participants engaged in a group decision-making process that determined which of several real-effort tasks they would participate in to earn money toward a public good. The form that this decision-making process took depended on the treatment group assignment.

There were four overlapping treatment groups and a control group. Participants engaged in a group decision-making process that determined which of several real-effort tasks they participated in during a later part of the experiment. Depending on the randomly assigned treatment group, this decision was made through either a majority rules voting process or through deliberative discussion leading to a full consensus. In the deliberation treatments, each participant was asked to state their preference and give the reason for their preference, and then subjects were free to discuss the options with each other until they felt they had arrived at a consensus. The treatment groups also varied according to whether vote tallying took place through secret ballot or a public show-of-hands. In the control group, participants were simply introduced to their teammates and then randomly assigned one of the tasks.

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<th>Table 1: Overlapping Treatment Groups</th>
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<tr>
<td>Private Vote (Secret Ballot)</td>
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<td>Public Vote (Show of Hands)</td>
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The experiment took place in four stages:

1. Pre-Treatment Survey & Effort Task Practice Rounds:

Prior to treatment, I captured some information about the real-world activities of participants. Next, all participants were given an opportunity to briefly test out each of three effort tasks: the Letter Counting Task, the Sliders Task, and the Stroop Task. In the Letter Counting task, participants are shown a string of letters and numbers and asked to count the number of times a particular letter appears in the sequence. In the Sliders task, participants are given a target number between 0 and 100 and asked to move an on-screen slider to that number. In the Stroop task, an arrow appears on screen and participants must tap the side of the screen that the arrow points to or the side of the screen that the arrow points from, depending on the color of the arrow. All are previously vetted real effort tasks.

The practice rounds were incentivized based on individual performance, so that they could be used to control for ability. Participants were told that they would later be given an opportunity to participate in one of these activities in order to earn money as a team. They were then asked to fill out a survey, which asked them to rate the three effort tasks according to enjoyment, difficulty, and overall
preference. This survey allows me to compare results across individuals who had the same initial preferences.

2. Decision-Making Treatment.

Individuals were randomly assigned to teams of five for completion of an effort task. Teams were then asked to meet in a separate room and introduce themselves to each other. Depending on the treatment group, they were then asked to engage in their respective decision-making processes (majority rule or deliberative consensus combined with either secret ballot or show-of-hands voting) in order to select the task that their team would perform for a chance to earn money in the next step of the experiment. In the control group, a random number generator was used to assign a task to each team without reference to individual preferences. During this stage of the experiment, the facilitator took notes about the results of the decision-making process and noted whether any team members knew each other before the experiment.

3. Effort-based Public Good Game:

Teams then had an opportunity to earn more compensation by performing the task selected in Step 2. Participants were then invited to complete as many iterations of the activity as they could within 10 minutes, and they would earn 5 shillings per point earned (which would go to a team pot). Before the task began, we also asked participants to guess how well their team would perform on the task – a measure of expectations regarding the contributions of others. At the end of the activity, the money earned by the team would be evenly split across the team members. This portion of the experiment resembled a public good game, in which individual task performance earned money for an aggregate team pot, such that there was an opportunity for free-riding off the effort of others.

To make the opportunity for free-riding more realistic, we reminded participants that they were not required to participate in the task, and we provided an activity sheet and a short story to allow for a realistic alternative to participation. (This aspect of the design does not appear in the original Pre-Analysis Plan, but was added after initial piloting suggested that little free-riding was occurring. The rest of the study protocol is identical to that included as an appendix to the Pre-Analysis Plan.)

4. Post-Treatment Survey:

After the activity was completed, participants were told how well they performed, how much money the team earned in total, and what their share of the winnings is. They were then asked to once again rate the enjoyment and difficulty of the task, and they were also asked questions to assess their perceptions regarding autonomy, fairness, agreement with the outcomes, willingness to work with the team again, etc. Finally, they were also given an opportunity to “reinvest” some of their earnings back into the team pot, which will be multiplied before being redistributed evenly across the team, as in a more traditional public good game. This was intended to be a measure of complementary investment.

The full experimental protocol documents are attached as Appendix E.

Analytic Methods
My main analyses use performance on the effort task (contribution to the public good) as the primary dependent variable, with the decision-making treatment as the key explanatory variable. As specified in the Pre-Analysis Plan, these are poisson models (to account for the bounded nature of the outcome
variable) with robust standard errors clustered by team (the randomly assigned five-person group with which individuals generated their public good). The models all include key demographic controls (the subject’s age, level of education, gender, marital status and number of children), as well as some team-related co-variates (gender composition and number of co-ethnics on one’s team). I also control for real world collective action (based on a survey question about whether they have participated in community projects, barambees, or fundraisers within the past month).

The standard session included 15 participants randomly assigned to one of three teams, but in a few cases, too few participants showed up at the scheduled time, and sessions had to be conducted with 10 participants instead (with make-up sessions of 5 participants conducted later to reach the desired sample size). To account for potential bias resulting from this unplanned variation across sessions, I also control for the size of the session.

To see whether any increased public good contribution is due to a psychological effect on effort expended (related to procedural utility or procedural justice explanations) rather than due to alternate explanations, I also selectively add additional explanatory variables. These include task-fixed effects, as well as controls for (i) preference alignment (based on whether the initial individual task preference identified in the pre-treatment survey matches with the ultimate task selected by the team) and (ii) ability (based on performance on a pre-treatment practice session for each task, which was incentivized based on individual performance, unrelated to a public good).

RESULTS

Main analyses
Participation in group decision-making (when that decision-making takes the form of deliberation leading to a consensus-based decision) does result in increased investment in the public good. Individuals in the two deliberation treatments perform significantly better, on average, than their counterparts in the control group, based on the basic main model (See Figure 1). The effect is particularly significant for Treatment #4 (DelPub), which combined deliberation with a public vote (p<0.01), and is reasonably significant for Treatment #3 (DelSec), the deliberation group that used a secret ballot (p<0.05). The result for the deliberation plus public vote group is robust to controlling for whether the individual got their first choice of task, and to adding task fixed effects to the model.
However, it retains only marginal significance (p<0.10) when expanding the basic model to include a control for task-specific ability (performance on the individual pay version of the task). The significance disappears completely when the control for ability is combined with task fixed effects (See Appendix B for full model output). This strongly suggests that, while those in the deliberation treatments do generate more contributions to the public good, the difference is likely due to ability or task selection, as opposed to effort.

**Exploratory analyses**
The main model results demonstrate that deliberative decision-making did result in greater contributions to the public good, even for those participants who did not get their preferred outcome. But this effect does not occur through the hypothesized procedural utility/justice mechanism. Rather, it is driven by some combination of ability and task selection.

However, since endogenous task selection is explicitly part of the research design, this bears further examination and explanation. There are two potential explanations for the combination of results described above: (1) the individuals in the deliberation groups happened to be more skillful at these tasks than those in other groups, or (2) the individuals in the deliberation groups were more likely to strategically choose the easiest task (i.e., the task at which they were most skillful).

When I model ability on each of the three tasks, I find no statistically significant advantage in the deliberation groups for any of the three tasks (See Figure 2 below), and in fact, the raw mean of ability in the deliberation groups is slightly lower than in the control group for two of the three tasks. The deliberation group is slightly better on average (though not statistically significantly so) only on the Stroop task. (See Appendix C for full model output relating to task-specific ability.)

![Figure 2: Task-Specific Ability by Treatment Group](image)

Thus, pre-treatment variation in ability does not explain the superior outcomes in the deliberation groups. Instead, the deliberation groups are more likely to choose the task that gives their particular
team a competitive advantage. To validate this further, I constructed a new variable that indicates whether a team chose the task for which they would have earned the most money based on their collective ability in the individually compensated practice rounds. Modeling this new variable, “Chose Best Option for Team”, reveals that being in one of the deliberation treatments is a statistically significant predictor (p<0.01). (See Figure 3 below.)

In terms of raw data, more than 70% of deliberation treatment groups choose the task that their teammates performed collectively best on during the practice rounds. Unsurprisingly, in the control group, where the tasks were randomly assigned, only around 30% of groups happened to be assigned the task that they were best at. However, in the two majority rule treatment groups, teams chose the task they were best at in fewer than 40% of cases. Deliberation served the purpose of allowing teammates to share relevant information about ability and therefore make better decisions than they would have through individual calculation. By “better decisions,” I mean the decision that allowed them to maximize total contributions to the public good, achieving the socially optimal outcome.

I also find that those in the deliberation groups are more likely to change their individual preferences over the tasks after the treatment. In other words, their stated preference in the post-treatment survey is more likely to be different from their stated preference in the pre-treatment survey. (This was a pre-registered secondary outcome variable.) This result is only marginally statistically significant, and does not seem related to differences in actual public good contributions, but it provides some weak support for claims by political theorists that deliberation may transform preferences, rather than merely aggregate them or coerce agreement. (See Appendix D for full model output relating to both better choices and preference change.)

CONCLUSIONS

The experimental results demonstrate that groups who deliberate successfully contribute more to a related public good. However, teams appear to achieve improved outcomes not through greater effort exerted, but rather through better strategic decision-making to select the task on which they have the greatest ex-ante ability. This suggests that while deliberation may not lead to improved outcomes
through increased compliance with resulting decisions, it does indeed lead to better decisions being made in the first place.

One major contribution of this work is to bring the democratic theory and public policy literatures on deliberative decision-making into dialogue with experimental work from political psychology and behavioral economics, which provide important insights into causal mechanisms. I find no support for either of the commonly invoked mechanisms described earlier. Preference alignment alone does not appear to improve outcomes, as evidenced by the lack of impact in the majority rule treatments. Procedural utility/justice also fails to increase exertions of effort. Instead, I find evidence for a third mechanism: that deliberative discussion improves the quality of decisions beyond a mere aggregation of individual preferences. Group deliberation leads to decision-making that is more than the sum of its parts.

Some specific features of the study context may limit the generalizability of the findings. First, although I made efforts in the study design to make the opportunity for freeriding more realistic, the realism is inherently limited by the laboratory setting. Although we provided alternate activities to participants, there is arguably no realistic opportunity cost to their participation in the effort task. Since they have already planned to spend this time in the lab setting, the additional cost of participating in the activity may be negligible to them. (Relatedly, only about 2% of participants contribute nothing to the public good and the majority of these also failed to complete any tasks during the individually compensated task.)

Second, the study participants are a highly cooperative group. More than 70% report having been involved in some form of real world collective action (participating in a community project or fundraiser event) within the past month. In my measure of complementary effort – the standard voluntary contribution mechanism version of the public good game – more than 70% of participants contribute at least half of their endowment, despite a more realistic opportunity cost (because the portion of the individual endowment not contributed may be kept).

If the majority of participants are already prone to exert their maximum effort, then that limits my ability to observe meaningful variation across the treatment groups. This would imply that ability, not willingness to contribute, is the main constraint on public good provision. This may be true to the setting of resource-constrained communities in developing countries, in which case, the finding that deliberation allows for improvements through better strategic decision-making may have direct relevance for policy-makers.

Given the limitations of the laboratory setting and the cooperative nature of the study context, I would consider this a particularly hard test of the effects of deliberation. Thus, the observable impact on net contributions through improved decision-making is noteworthy. Combined with the marginal effect on preference change, I view these results as supportive of further research into the potentially transformative effects of deliberation. In particular, future research should aim to replicate this experimental design to the extent possible in a field setting in multiple contexts which vary based on pre-study predisposition to cooperation.
References


Koontz, T. M., & Thomas, C. W. (2006). What do we know and need to know about the environmental outcomes of collaborative management?. Public administration review, 66(s1), 111-121.


### Appendix A – Descriptive Statistics

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## Appendix B – Regression Results Modeling Effort / Performance on Group Task

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<td><strong>T1: Majority Rule</strong></td>
<td>0.0548</td>
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<tr>
<td>+ Secret Ballot</td>
<td>(0.0525)</td>
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<td>(0.0493)</td>
<td>(0.0516)</td>
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<tr>
<td><strong>T2: Majority Rule</strong></td>
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<td>+ Show of Hands</td>
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<td>(0.0453)</td>
<td>(0.0359)</td>
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<tr>
<td><strong>T3: Deliberation</strong></td>
<td>0.0929*</td>
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<td>0.0678</td>
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<td>+ Secret Ballot</td>
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<td>(0.0452)</td>
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<td>(0.0476)</td>
<td>(0.0458)</td>
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<td><strong>T4: Deliberation</strong></td>
<td>0.159**</td>
<td>0.139**</td>
<td>0.0611*</td>
<td>0.145**</td>
<td>0.127**</td>
<td>0.0455</td>
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<tr>
<td>+ Show of Hands</td>
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<td>-0.101**</td>
<td>-0.0120</td>
<td>-0.112**</td>
<td>-0.101**</td>
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<td>(0.0359)</td>
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<td>(0.0359)</td>
<td>(0.0291)</td>
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<td>0.0370***</td>
<td>0.0154*</td>
<td>0.0375***</td>
<td>0.0354***</td>
<td>0.0154*</td>
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<td>Ever Married</td>
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<td>Prop. Female</td>
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<td>-0.0234**</td>
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<td>(0.0416)</td>
<td>(0.0408)</td>
<td>(0.0316)</td>
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<td>Got Preference</td>
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<td>Task Fixed Effects?</td>
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<td>No</td>
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<td>4.208***</td>
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Standard errors in parentheses

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001
## Appendix C: Regression Results Modeling Ability / Performance on Individual Task

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<tr>
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<th>(1) Letter Counting Task</th>
<th>(2) Sliders Task</th>
<th>(3) Stroop Task</th>
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</thead>
<tbody>
<tr>
<td><strong>T1: Majority Rule</strong></td>
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<td></td>
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<tr>
<td>+ Secret Ballot</td>
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<td></td>
<td>(0.323)</td>
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<td><strong>T2: Majority Rule</strong></td>
<td>-0.615+</td>
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<td>+ Show of Hands</td>
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<td><strong>T3: Deliberation</strong></td>
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<td>+ Secret Ballot</td>
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<td>(0.449)</td>
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<td><strong>T4: Deliberation</strong></td>
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<td>(0.317)</td>
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<td><strong>Female</strong></td>
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<td>-1.733***</td>
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<td></td>
<td>(0.242)</td>
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<td>-0.883**</td>
<td>-1.655***</td>
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<td>(0.278)</td>
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<td><strong>Collective Action</strong></td>
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Standard errors in parentheses

+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Appendix D – Regression Results: Modeling Choices & Preferences

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<th>(2) Individual Changed Preference</th>
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<tr>
<td>Majority Vote</td>
<td>0.364 (0.481)</td>
<td>0.139 (0.217)</td>
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<tr>
<td>Deliberation</td>
<td>1.606** (0.492)</td>
<td>0.400* (0.216)</td>
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<tr>
<td>Female</td>
<td>-0.123 (0.0752)</td>
<td>-0.0851 (0.212)</td>
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<td>Age</td>
<td>-0.0154 (0.0109)</td>
<td>-0.00770 (0.00917)</td>
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<td>Education</td>
<td>0.0356 (0.0410)</td>
<td>-0.0327 (0.0423)</td>
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<tr>
<td>Ever Married</td>
<td>0.290 (0.249)</td>
<td>0.0966 (0.198)</td>
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<td>No. of Children</td>
<td>0.0618 (0.0772)</td>
<td>0.102 (0.0675)</td>
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<tr>
<td>Collective Action</td>
<td>-0.402* (0.198)</td>
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<tr>
<td>Prop. Female</td>
<td>1.369 (0.953)</td>
<td>-0.0354 (0.459)</td>
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<tr>
<td>No. Coethnics</td>
<td>0.0574 (0.122)</td>
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<td>0.0861 (0.116)</td>
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<td>Constant</td>
<td>-2.875 (1.972)</td>
<td>-0.288 (0.960)</td>
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Standard errors in parentheses

* $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Appendix E – Laboratory Protocol (z-Tree)

**Overview**

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<th>Welcome</th>
<th>Time</th>
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<td>General Explanation</td>
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<table>
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<th>In the lab</th>
<th>I. Get consent</th>
<th>5 min</th>
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<tr>
<td>II. Activities Trial and Belief Assessment</td>
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<tr>
<td>III. Pre-Treatment Survey</td>
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<tr>
<td>IV. Assignment of Task</td>
<td>25 min</td>
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</tr>
<tr>
<td>a. Majority rule - secret ballot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Majority rule - show of hands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Consensus - secret ballot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Consensus - show of hands</td>
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<tr>
<td>E. Random assignment</td>
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<td>V. Explanation of Public Goods Game &amp; Comprehension Questions</td>
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<td>VI. Task Instructions &amp; Beliefs</td>
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<td>VI. Task</td>
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<td>V. Announcement of Results</td>
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<tr>
<td>VI. Post-Treatment Survey</td>
<td>10 min</td>
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<tr>
<td>VI. Opportunity for Complementary Effort (PG Contribution) + Follow-up Questions</td>
<td>15 min</td>
<td></td>
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</table>

| Total Time:                      | 2 hours |
In the waiting room

Good day! A warm welcome to the Busara Center for Behavioral Economics. I see all participants are present. We’ll soon go to the testing room, where I will give you exact information about the study. You will get paid Ksh 200 for your participation and transport today; in addition, you can earn some extra money in the tasks you will do. This money will be transferred to the phone number you gave us when you came in.


Before we start, I request three things. First, please turn off your mobile phones now, and leave them turned off until the end of the session. This is so you are not distracted from doing the tasks. Second, while seated in the computer lab, you are not allowed to talk to other participants. If you talk to other participants, we will have to send you home. If you have questions, please raise your hand and one of the researchers will come and talk to you. Third, please do not touch the computers before we tell you to do so.


Are everyone’s phones off? Ok. We will now go to the computer room, where I will give you more information about the study.

Je, simu ya kila mtu imezimwa? Sawa. Sasa tutaelekea katika chumba cha kompyuta, ambapo nitakupa habari zaidi kuhusu somo la leo.

Finally, please use the bathroom now before you enter the lab, or we will request that you wait until the session is over. It may, therefore, be a good idea to go now, even if it is not urgent.

Mwisho, tafadhali tumia msala sasa kabla ya kuingia chumba cha utafiti, ama tutakuomba kungoja hadi utafiti umalizike. Inaweza kuwa ni wazo nzuri, hata kama hauhisi kuwa na haja.

{Allow time to go to the bathroom as they move upstairs before entering the lab}

In the computer room

1. Consent

Please find the computer with the number of your placecard, and sit down. Again remember that you are not allowed to speak to each other from now on, and please do not touch the computers until we tell you to do so.

Tafadhali tafuta kompyuta iliyo na nambari ya kadi iliyo pewa na uketi. Pia kumbuka hamurahusiwi kuongeleshana kuanzia sasa, na tafadhali usiguzi kompyuta hadi tutakapo kueleza ufanye hivyo.
Welcome again to Busara. You are about to participate in a research study which seeks to understand better how people make decisions. In front of you there is a consent form that explains the purpose of this research and your rights. It says that this study is for research purposes only; your responses are strictly confidential and will not be shared along with your name with anyone other than the researchers. You have the right to leave at any time. We would like to ask for your consent to participate by signing at the back of this form. So please look at the form now and sign it at the back. If you have questions please raise your hand and someone will come to assist you.


(Lead: Collect consent forms and not placecards)

Before we start with the experiment we will be reading the instructions out loud. If at any time you have any questions or concerns, please raise your hand and I will come by and assist you.

Kabla ya kuanza utafiti tutakuwa tukisoma maelezo kwa sauti. Kama kwa wakati wowote uko na maswali au wasiwasi, tafadhali inua mkono na nitakuja kukusaidia.

You will be using touch screen computers, to operate, use the fleshy part of your finger. Please do not hit or push the the computer.

Utakua ukitumia kompyuta ya touch screen, tumia kidole chako sehemu iliyono nyama. Tafadhali, usigonge au kusukuma kompyuta.

This experiment will last approximately 2 hours and every section will be explained to you in detail. To begin with the first part of the experiment, press the “Continue button”.

Utafiti huu utachukua takriban masa 2 na utaelezewa kwa kina kila sehemu. Ili kuanza sehemu ya kwanzao, tafadhali bonyeza “continue”.

[Next screen]
Before we begin we’d like to get some sense for how you spend your time. Please tell us if you have done any of the following activities within the past year:

Kabla hatuja anza, tungependa kuwa na ufahamu wa vile unavyo tumia muda wako. Tafadhali tueleze iwapo umefanya moja wapo wa shughuli hizi mwaka mmoja uliyo pita:

Have you done any of the following in the past year?

Umfanya mojawapo ya haya mwaka mmoja uliyo pita?

a. Have you travelled outside Nairobi in the past year?  
Yes No

Je, umesafiri nje ya Nairobi mwaka mmoja uliopita?  
Ndio La

b. Have you attended a family gathering in the past year?  
Yes No

Je, umehudhuria sherehe za kifamilia mwaka mmoja uliopita?  
Ndio La

c. Have you served as a member of a community group (CBO, NGO, clubs, etc.) in the past year?  
Yes No

Je, umeshiriki kama mwanachama wa kikundi cha jamii katika mwaka mmoja uliopita(CBO, NGO, clubs, etc.)?  
Yes No

d. Have you attended a wedding in the past year?  
Yes No

Je, umehudhuria harusi mwaka mmoja uliopita?  
Ndio La

e. Have you visited a doctor/been to hospital in the past year?  
Yes No

Je, umemwona daktari/enda hospitalini mwaka mmoja uliopita?  
Ndio La

f. Have you exercised/gone to the gym in the past year?  
Yes No

Je, umefanya mazoezi/ kuenda gym mwaka mmoja uliopita?  
Ndio La

g. Have you bought a lottery ticket in the past year?  
Yes No

Je, umenunua tiketi ya mchezo wa bahati na sibu mwaka mmoja uliopita?  
Ndio La

h. Have you contributed to a harambee or community fundraiser in the past year?  
Yes No

Je, umechanga kwa harambee au michango ya jamii mwaka mmoja uliopita?  
Ndio La

i. Have you volunteered to work on a community project in the past year?  
Yes No

Je, umejitolea kufanya kazi kwa mradi wa jamii bila malipo mwaka mmoja uliopita?  
Ndio La

j. Have you been to a football game in the past year?  
Yes No
Je, umeenda mchuano wa kandanda mwaka mmoja uliopita?  Ndio       La

k.  Have you been to church or mosque in the past year?  Yes      No

Je, umeenda kanisani au msikiti mwaka mmoja uliopita?  Ndio       La

l.  Have you played a game or solved a puzzle in the past year?  Yes      No

Je, umeshiriki mchezo au kusuluhisha “puzzle” mwaka mmoja ulipita?  Ndio       La

[Next screen]

Have you done any of the following within the last month?
Ume fanya moja wapo ya haya mwezi mmoja uliyo pita?

[The only questions that should appear here are those for which they answered YES to the previous version about if they’ve done it in the past year. If they answered YES, just repeat the question here but changing year to month?]

a.  Have you travelled outside Nairobi within the past one month?  Yes No

Je, umesafiri nje ya Nairobi mwezi mmoja uliopita?  Ndio       La

b.  Have you attended a family gathering within the past one month?  Yes No

Je, umehudhuria sherehe za kifamilia mwezi mmoja uliopita?  Ndio       La

c.  Have you served as a member of a community group (CBO, NGO, clubs, etc.) within the past one month?  Yes No

Je, umeshiriki kama mwanachama wa kikundi cha jamii katika mwezi mmoja uliopita(CBO, NGO, clubs, etc.)?  Ndio       La

d.  Have you attended a wedding within the past one month?  Yes No

Je, umehudhuria harusi mwezi mmoja uliopita?  Ndio       La

e.  Have you visited a doctor/been to hospital within the past one month?  Yes No

Je, umemwona daktari/enda hospitalini mwezi mmoja uliopita?  Ndio       La

f.  Have you exercised/gone to the gym within the past one month?  Yes No

Je, umefanya mazoezi/ kuenda gym mwezi mmoja uliopita?  Ndio       La

g.  Have you bought a lottery ticket within the past one month?  Yes No

Je, umenunua tiketi ya mchezo wa bahati na sibu mwezi mmoja uliopita?  Ndio       La

h.  Have you contributed to a harambee or community fundraiser within the past one month?  Yes No
Je, umechanga kwa harambee au michango ya jamii mwezi mmoja uliopita?

Ndio La

i. Have you volunteered to work on a community project within the past one month? Yes No

Je, umafitolea kufanya kazi kwa mradi wa jamii bila malipo mwezi mmoja uliopita?

Ndio La

j. Have you been to a football game within the past one month? Yes No

Je, umaenda mchuano wa kandanda mwezi mmoja uliopita? Ndio La

k. Have you been to church or mosque within the past one month? Yes No

Je, umaenda kanisani au msikiti mwezi mmoja uliopita? Ndio La

l. Have you played a game or solved a puzzle within the past one month? Yes No

Je, umeshiriki mchezo au kusuluhisha “puzzle” mwezi mmoja uliopita? Ndio La

[Next screen]

II. Activities Trial and Belief Assessment

Practice Instructions

In today’s experiment, you will be divided into teams, each of which will be assigned an activity to perform. Depending on how well you perform the activity, you will earn money for your team, which will then be divided evenly amongst the 5 team members.

Katika jaribio la leo, mtawekwa kwenye teams, kila moja itapewa shughuli ya kufanya. Utapata pesa kulingana na vile bora utakavyo fanya kwa shughuli hizo, utapata pesa kwa team yako, ambayo itagawanywa visawa kati ya washiriki 5 kwenye team.

The three tasks that you may be asked to perform today include: Task 1 (Letter Counting Task), Task 2 (Sliders Task), and Task 3 (Stroop Task). First, we will give you a chance to try out each of the tasks. This is just a practice round, but you will have a chance to earn some money as an individual for the number of tasks you complete during a 90-second practice round.

Shughuli tatu ambazo unazo elezwa kufanya hivi leo, ni pamoja na: shughuli 1 (Letter Counting Task), shughuli 2 (Sliders Task), na shughuli 3 (Stroop Task). Mwanzo tutakupa nafasi ya kujaribu kila moja ya hizi shughuli. Hii ni raundi la jaribio tu, lakini utakupa na nafasi ya kupata pesa kibinafsi katika sekunde 90 ya raundi ya jaribio.

[Next screen]

Now you will have an opportunity to try out the three tasks that you may perform later on in the experiment.
Sasa utakua na nafasi ya kujaribu shughuli tatu ambazo utafanya baadaye katika utafiti.

You will have 90 seconds to try out each task: the **Letter Counting Task (Task 1)**, the **Slider Task** (Task 2) and the **Stroop Task (Task 3)**.

Utakuwa na sekunde 90 ya kujaribu kila shughuli: shughuli ya **Letter Counting Task (Shughuli ya 1)**, shughuli ya **Slider Task** (shughuli ya 2) na shughuli ya **Stroop Task (shughuli ya 3)**.

Remember, this is just a practice round to introduce you to each task and learn how they work. You'll get to try each task first, and then you will do a full 90-second practice round. After you have completed a 90-second practice round for all three tasks, we will randomly select one task and pay you 5 shillings per point you earned during the practice round for that task.

Kumbuka, hii ni raundi la jaribio ili kukufahamisha kila shughuli na kuelewa jinsi zina fanywa.

Utajaribu kila shughuli kwanza, kisha utafanya jaribio la sekunde 90. Baada ya kukamilisha sekunde 90 ya raundi ya jaribio katika shughuli zote tatu, tutchagua shughuli moja bila mpangilio na utalipwa shillingi 5 kwa kila point uliyo pata katika raundi ya jaribio ya shughuli hiyo.

If you have any questions, please raise your hand and an experimenter will come to you.

Kama una swali, tafadhali inua mkono wako na msaidizi wa utafiti atakuja kwako.

If you do not have any questions, please press the “Continue”-Button.

Kama hauna swali lolote, tafadhali bonyeza “continue”

**RUN 02 Practice Letter Counting Task**

In Task 1, the Letter Counting Task, you will be asked to count the number of times letter “A” occurs in a sentence.

Katika shughuli ya 1, Letter Counting Task, utaulizwa kuhesabu ni mara ngapi herufi “A” inapatikana katika sentensi.

Try to correctly count the number of letter “A” in as many sentences as you can within the allotted time.

Jaribu kuhesabu herufi “A” inapatikana mara ngapi, katika sentensi nyingi iwezekanavyo.

If you have any questions, please raise your hand and the experimenter will come to you.

Kama una swali lolote, tafadhali inua mkono wako na msaidizi wa utafiti atakuja kwako.

If you do not have any questions, please press the “Continue”-Button to try out the task.

Kama hauna swali lolote, tafadhali bonyeza “continue-button” ili kujaribu shughuli.

[Next screen]
In this practice round, you will see an “OK” button if you complete the task correctly (whether you
correctly counted the number of times the letter “A” appeared). We will complete the first 2 practice rounds
together. No money will be earned for these first two practice rounds -- they are just to help you learn how
it works. Now please press the “Continue Button”

Katika raundi hii ya jaribio, utaona “OK” ikiwa utakamilishila shughuli yako vyema, kumaanisha, ikiwa
umehesabu visawa ni mara ngapi herufi A inapatikana ). Tuta kamilisha raundi mbili za kwanza za jaribio
pamoja. Hakuna pesa utakayo pata katika raundi hizi mbili za jaribio. Ni za kukusaidia kuelewa jinsi shughuli
inavyo fanywa. Sasa tafadhali bonyeza continue.

How many times does letter “A” occur in the above sequence?

[Lead: Walk around to ensure all participants understand the task]

Ni mara ngapi herufi “A” inapatikana katika sentensi iliyo hapo juu?

[Next Screen]

We will do another practice round together to make sure you understand.

Tutafanya raundi nyingine la jaribio pamoja ili kuhakikisha umelewana.

You will count the number of times letter “A” occur in the sequence

Utahesabu ni mara ngapi herufi “A” inapatikana katika sentensi iliyo hapo juu?

[Next Screen]

How many times does letter “A” occur in the above sequence?

Ni mara ngapi herufi “A” inapatikana katika sentensi iliyo hapo juu?

[Next Screen]

Now that you’ve tried the task out, do you have any questions?

Sasa kwa vile umejaribu shughuli hii, una swali lolote?

Hopefully you are getting the hang of the task.

You will now play a complete practice round. You will have 90 seconds to complete as many tasks as you
can. Remember, after you have completed a 90-second practice round for all three tasks, we will randomly
select one task and pay you 5 shillings per point you earned during the practice round for that task.
Natumai kuwa unaelewa jinsi shughuli inafanywa.

Sasa uta kamilisha raundi kamilifu ya shughuli. Utakua na sekunde 90 ya kukamilisha shughuli nyingi iwezekanavyo. Kumbuka, baada ya kukamilisha sekunde 90 ya raundi ya jaribio katika shughuli zote tatu, tutachagua shughuli moja bila mpangilio na utalipwa shillingi 5 kwa kila point uliyo pata katika raundi ya jaribio ya shughuli hiyo.

When you are ready to start the full 90-second practice round, please press “Continue”.

Ukiwa tayari kuanza raundi kamili la sekunde 90 la jaribio, tafadhali bonyeza “continue”

[After 90 seconds]

Ranking

Now, please guess how you ranked in this task in comparison to all other players in the room.

A rank of 1 means that you completed the most tasks correctly compared to everyone else in the room today. A rank of 3 means you were the third highest performer in the game -- meaning that only 2 people in the room completed more tasks than you did. If there are 10 people in the room today, then a rank of 10 means that you completed fewer tasks than everyone else in the room.

If you guess your rank correctly (+/- 1), you will get paid 25 Shillings extra.


Ikiwa jibu lako litakuwa sahihi (+/- 1), utalipwa shillingi 25 zaidi.

[Facilitator can remind everyone here of how many people are actually in the room that day --- Usually this should be 15, but in case it is different, please make sure they know what the highest number is that they can choose for a rank]

RUN_ 03 Practice Sliders Task.ztt

In Task 2, the Sliders Task, you will be asked to move a slider to match the goal number given to you.
In this practice round, you will see a “Confirm” button if you complete the task correctly (whether you correctly matched the slider to the goal number). We will complete the first 2 practice rounds together. No money will be earned for these first two practice rounds -- they are just to help you learn how it works. Now please press the “Continue Button”

[Next Screen]

Katika raundi hii ya jaribio, uatona “confirm” ikiwa utakamalisha shughuli hii vyema (hii ni kumaanisha, kama ume fananisha “slider” vyema na nambari ya “goal”). Tuta kamilisha raundi za kwanza mbili pamoja. Hakuna pesa utakayo pata katika raundi hizi mbili za jaribio, ni ya kukusaidia tu kuelewa jinsi shughuli inavyo fanywa. Sasa tafadhali bonyeza “Continue”

VERBAL INSTRUCTIONS ONLY [NOT TO BE INCLUDED IN THE ZTREE FILE]:

Touch your finger to any portion of the colored slider. A V should appear to indicate your current position on the slider. Above the slider, text will appear to tell you what number you have currently selected. If that number matches the Goal number, then you have finished the task correctly then press “Confirm”. If your number does not match the goal number than you can touch the slider again to move it closer to the goal. If your current number is less than the goal number, you should click to the right of the V to move closer to the goal. If your current number is greater than the goal number, then you should click somewhere to the left of the V to move closer to the goal.

Guza sehemu yoyote katika mstari uliyo na rangi. Utaona herufi “V” ambayo inakujulisha uko katika nambari gani katika slider. Juu ya slider, utaona nambari ambayo itakueleza nambari uliyo chagua. Ikiwa nambari hiyo ina fanana na ile ya goal, basi utakua umekamilisha shughuli hiyo vyema na unaweza bonyeza confirm. Ikiwa nambari yako hai fanani na ya goal, unaweza guza slider tena ili kukaribia nambari ya goal. Ikiwa nambari uliyo guza ni ndogo kuliko nambari ya goal, bonyeza upande wa kulia wa “v” ili kukaribia goal. Ikiwa nambari uliyo guza ni kubwa kuliko goal number, bonyeza upande wa kushoto wa “v” ili kukaribia nambari uliyo kwa goal.
For this practice round, move the slider to match goal 30.
Katika raundi hii ya jaribio, songesha slider ili ifanane na goal nambari ya 30.
Once you have selected the number 30, press “Confirm” to continue.
Ukisha pata namari 30, tafadhali bonyeza confirm ili kuendelea.

[Lead: Walk around to ensure all participants understand the task]
Press continue button to move to the next screen.
Bonyeza continue ili kuendelea kwenye skirini inayo fuata.

[Next Screen]

We will do another practice round together to make sure you understand.
Tutafanya raundi nyingine ya jaribio ili kuhakikisha umelewa.
You will move the slider to match the goal number indicated.
Uta songesha slider ili kufananisha na goal uliyo pewa.
Move the slider to match goal 67.
Songsesha slider ifanane na goal ya nambari 67.
Once you have selected the number 67, press “Confirm” to continue.
ukisha chagua 67, bonyeza confirm ili kuendelea.

[Next Screen]

Now that you’ve tried the task out, do you have any questions?
Sasa kwa vile umejaribu shughuli hii, una swali lolote?

Hopefully you are getting the hang of the task.
You will now play a complete practice round. You will have 90 seconds to complete as many tasks as you can. Remember, after you have completed a 90-second practice round for all three tasks, we will randomly select one task and pay you 5 shillings per point you earned during the practice round for that task.
Natumai kuwa unaelewa jinsi shughuli inafanywa.
Sasa uta kamilisha raundi kamilifu ya shughuli. Utakua na sekunde 90 ya kukamilisha shughuli nyingi iwezekanavyo. Kumbuka, baada ya kukamilisha sekunde 90 ya raundi ya jaribio katika shughuli zote tatu, tutachagua shughuli moja bila mpangilio na utalipwa shillingi 5 kwa kila point uliyo pata katika raundi ya jaribio ya shughuli hiyo. When you are ready to start the full 90 second practice round, please press “Continue”.

Ukiwa tayari kuanza raundi ya sekunde 90 ya jaribio, tafadhali bonyeza “continue”

**[After 90 seconds]**

**Ranking**

Now, please guess how you ranked in this task in comparison to all other players in the room. A rank of 1 means that you completed the most tasks correctly of anyone else in the room today. A rank of 3 means you were the third highest performer in the game -- meaning that only 2 people in the room completed more tasks than you did. If there are 10 people in the room today, then a rank of 10 means that you completed fewer tasks than everyone else in the room. If you guess your rank correctly (+/- 1), you will get paid 25 Shillings extra.


[Facilitator can remind everyone here of how many people are actually in the room that day --- Usually this should be 15, but in case it is different, please make sure they know what the highest number is that they can choose for a rank]

**RUN_04 Practice Stroop Task.**

In Task 3, you will see an arrow on the screen.

Katika shughuli ya 3, utaona mshale katika skrini yako.

When the arrow is red, touch the green rectangle to the side of the screen that the arrow points to. For example, if the arrow points to the left, then you would click on the green rectangle on the left of the screen.

Mshale ukiwa nyekundu, bonyeza upande ule mshale unaangalia katika sehemu ya green iliyo kando ya skrini. Kwa mfano, kama mshale unaangalia kushoto, basi utabonyeza katika kisanduku cha green iliyo kushoto.

When the arrow is blue, touch the green rectangle to the opposite side of the screen (not the side that the arrow points to). For example, if the arrow is blue and points to the left, then you would touch the green rectangle on the right side of the screen since it is opposite.
Mshale ukiwa blue, bonyeza upande ule mwingine wa kule inaangalia katika schemu ya green ilio kando ya skrini. Kwa mfano, kama mshale ni ya blue na inaangalia kushoto, basi utabonyeza katika kisanduku cha green ilio kulia.

You should hold your hands on each side of the screen near the green rectangles to allow yourself to make answers as fast as possible.

Unapaswa kushikilia skrini yako kwa mikono yote miwili ili kukuwezesha kujibu maswali haraka iwezekanavyo.

If you have any questions, please raise your hand and the experimenter will come to you. kama una swali lolote, tafadhali inua mkono wako na msaidizi wa utafiti atakuja kwako.

If you do not have any questions, please press the “Continue”-Button to try out the task. kama hauna swali lolote, tafadhali bonyeza “continue” ili kujaribu hiyo shughuli.

[Next Screen]

In this practice set, you will only proceed if you complete the task correctly (meaning you correctly tapped the side of the screen indicated by the color and direction of the arrow).

We will complete the first practice set (including 4 arrows) together. Remember, a set consists of four arrows, and you must complete all 4 correctly in order to earn one point. No money will be earned for this first practice set -- it is just to help you learn how it works.

Now please press the “Continue Button”

Katika raundi hii ya jaribio, Kompyuta itakueleza ikiwa umekamilisha shughuli vyema (hii ni kumaanisha kama ulibonyeza upande ilivyo ashiriwa na rangi na upande wa mshale”). Tufanya kwa pamoja seti ya jaribio ya kwanza (ambayo inajumuisha arrows 4). Kumbuka, seti ina arrows 4 na ni lazima ukamilishe zote visahii ili kupata point moja. Hakuna pesa utakazo pata katika seti ya kwanza ya jaribio-- ni ya kukusaidia kuelewa jinsi shughuli inavyo fanywa. Sasa, tafadhali bonyeza “Continue Button”.

[Next Screen]
We will first practice with the red arrow, remember when the arrow is red, tap the green rectangle to the side of the screen that the arrow points to.

Now please press the “Continue Button”.

Mwanzo tutajifunza na mshale mwekundu, kumbuka mshale ukiwa mwekundu, guza kisanduku cha green iliyo upande mshale inaangalia.

Sasa, tafadhali bonyeza “Continue Button”.

(Tap the side of the screen indicated by the color and direction of the arrow)

Guza upande wa skrini ilivyo ashiriwa na rangi na upande wa mshale.

[Lead: Walk around to ensure all participants understand the task]

[This first practice round/set should include FOUR arrows, so that they learn that four complete a set.]

[Next Screen]

We will do another practice set together with the blue arrow. Remember when the arrow is blue, tap the green rectangle to the opposite side of the screen.

You will tap the side of the screen indicated by the color and direction of the arrow.

Tutafanya seti nyingine la jaribio kwa pamoja na mshale wa blue. kumbuka mshale ukiwa wa blue, guza kisanduku cha green kinyume na mahali mshale inaangalia.

Sasa, tafadhali guza upande wa skrini ilivyo ashiriwa na rangi na upande wa mshale.

[This second practice round/set should also include FOUR arrows, so that they learn that four complete a set.]

Sometimes, the same arrow may appear twice in a row. It might look like the computer is frozen, but really you just need to touch the same rectangle again.

Wakati mwingine, mshale ule ule unaweza kuwa zaidi ya mara moja ikiangalia upande mmoja. Utaweza fikiria kompyuta haifanyi kazi, lakini utakuwa tu unapaswa kuguza kisanduku hicho mara nyingine.
Now that you've tried the task out, do you have any questions?
Sasa kwa vile umejaribu shughuli hii, una swali lolote?

Hopefully you are getting the hang of the task.
You will now play a complete 90-second practice round with a mix of red and blue arrows. You will have 90 seconds to complete as many sets as you can. Remember, a full set consists of four arrows, and you must complete all four correctly to earn one point for the set. Remember, after you have completed a 90-second practice round for all three tasks, we will randomly select one task and pay you 5 shillings per point you earned during the practice round for that task.

Natumai unaelewa jinsi shughuli hii inafanywa. Sasa uta kamilisha raundi ya jaribio ya sekunde 90. Utakua na sekunde 90 ya kukamilisha shughuli nyingi iwezekanavyo. Kumbuka, seti moja ina arrows 4 na ni lazima ukamilishe zote 4 visahii ili kupata point moja kwa hiyo seti. Utapata shilingi 5 kwa kilo seti utakayo kamilihanvi visahii. Kumbuka, baada ya kukamilisha sekunde 90 ya raundi ya jaribio katika shughuli zote tatu, tutachagua shughuli moja bila mpangilio na utalipwa shilingi 5 kwa kilo point uliyo pata katika raundi ya jaribio ya shughuli hiyo

When you are ready to start the practice round, please press “Continue”.
Ukiwa tayari kuanza raundi ya jaribio, tafadhali bonyeza “continue”

[After 90 seconds]

Ranking
Now, please guess how you ranked in this task in comparison to all other players in the room. A rank of 1 means that you completed the most tasks correctly of anyone else in the room today. A rank of 3 means you were the third highest performer in the game — meaning that only 2 people in the room completed more tasks than you did. If there are 10 people in the room today, then a rank of 10 means that you completed fewer tasks than everyone else in the room. If you guess your rank correctly (+/- 1), you will get paid 25 Shillings extra.


[Facilitator can remind everyone here of how many people are actually in the room that day -- Usually this should be 15, but in case it is different, please make sure they know what the highest number is that they can choose for a rank]
III. Pre-treatment Survey

Before we begin, we'd like to know how you feel about these different tasks. Please answer the short questions that will appear on your screen.

Kabla ya kuanza, tungependa kujua jinsi unavyo hisi kuhusu shughuli hizi tofauti. Tafadhali jibu maswali fupi yatakaotoke kwenye skrini yako.

Please rate the Letter Counting task in terms of your own enjoyment. (1 being not enjoyable at all, 5 being very enjoyable)

Tafadhali elezea umefurahishwa kwa kiwango gani na shughuli ya Letter counting? (1 ikiwa hauja furahishwa hata kidogo na 5 ikiwa umefurahishwa sana)

Task 1 - Letter Counting
1 – very much disliked the task
2 – somewhat disliked the task
3 – neither liked nor disliked the task
4 – somewhat enjoyed the task
5 – very much enjoyed the task

1-sijafurahishwa kabisa na shughuli
2-sijafurahishwa kiasi na shughuli
3- katikati
4-nimefurahishwa kiasi na shughuli
5. nimefurahishwa sana na shughuli.
Please rate the Sliders Task in terms of your own enjoyment. (1 being not enjoyable at all, 5 being very enjoyable)

Tafadhali elezea umefurahishwa kwa kiwango gani na shughuli ya Sliders? (1 ikiwa hauja furahishwa hata kidogo na 5 ikiwa umefurahishwa sana)

**Task 2 - Sliders**

1 – very much disliked the task
2 – somewhat disliked the task
3 – neither liked nor disliked the task
4 – somewhat enjoyed the task
5 – very much enjoyed the task

1. sijafurahishwa kabisa na shughuli
2. sijafurahishwa kiasi na shughuli
3. katikati
4. nimefurahishwa kiasi na shughuli
5. nimefurahishwa sana na shughuli.

[Next Screen]

Please rate the Stroop Task in terms of your own enjoyment. (1 being not enjoyable at all, 5 being very enjoyable)

Tafadhali elezea umefurahishwa kwa kiwango gani na shughuli ya Stroop? (1 ikiwa hauja furahishwa hata kidogo na 5 ikiwa umefurahishwa sana)

**Task 3 - Stroop**

1 – very much disliked the task
2 – somewhat disliked the task
3 – neither liked nor disliked the task
4 – somewhat enjoyed the task
5 – very much enjoyed the task

1. sijafurahishwa kabisa na shughuli
2-sijafurahishwa kiasi na shughuli
3- katikati
4-nimefurahishwa kiasi na shughuli
5. nimefurahishwa sana na shughuli.

Now, Please rank the following tasks in terms of your own enjoyment.
Tafadhali “rank” kulingana na vile ulifurahishwa na shughli zifuatazo.

Which did you enjoy the most?
Task 1 - Letter Counting, Task 2 - Slider, Task 3 - Stroop
Ni shughuli ipi iliyo kufurahisha sana?
Shughuli 1 - Letter Counting, Shughuli 2 - Slider, Shughuli 3 - Stroop

Which did you enjoy the least?
Task 1 - Letter Counting, Task 2 - Slider, Task 3 - Stroop
Ni shughuli ipi haiku kufurahisha kabisa?
Shughuli 1 - Letter Counting, Shughuli 2 - Slider, Shughuli 3 - Stroop

Now, we will rate the tasks based on how difficult they were to complete.
Sasa, elezea ni kwa kiwango kipi shughuli hizi zilikuwa ngumu kwako kukamilisha
Please rate the Letter Counting tasks in terms of DIFFICULTY. (1 being very easy, 5 being very difficult)

Tafadhali, elezea ni kwa kiwango kipi shughuli ya Letter Counting ilikua NGUMU kwako. (1 ikiwa rahisi sana, 5 ikiwa ngumu sana)

Task 1 - Letter Counting
very easy, somewhat easy, not easy nor difficult, somewhat difficult, very difficult

Shughuli ya 1- Letter Counting
Rahisi sana, rahisi kiasi, katikati, ngumu kiasi, ngumu sana.

[Next Screen]

Please rate the Sliders Task in terms of DIFFICULTY. (1 being very easy, 5 being very difficult)

Tafadhali, elezea ni kwa kiwango kipi shughuli ya Sliders ilikua NGUMU kwako. (1 ikiwa rahisi sana, 5 ikiwa ngumu sana)

Task 2 - Slider
very easy, somewhat easy, not easy nor difficult, somewhat difficult, very difficult

Shughuli 2- Slider
Rahisi sana, rahisi kiasi, katikati, ngumu kiasi, ngumu sana.

[Next Screen]

Please rate the Stroop Task in terms of DIFFICULTY. (1 being very easy, 5 being very difficult)

Tafadhali, elezea ni kwa kiwango kipi shughuli ya Stroop ilikua NGUMU kwako. (1 ikiwa rahisi sana, 5 ikiwa ngumu sana)

Task 3 - Stroop
very easy, somewhat easy, not easy nor difficult, somewhat difficult, very difficult

Shughuli 3- Stroop
Rahisi sana, rahisi kiasi, katikati, ngumu kiasi, ngumu sana.
Now, please rank the following tasks in terms of difficulty.
Sasa tafadhali, “rank” shughuli zifuatazo kulingana na ugumu.

Which did you find the most difficult?
Task 1 - Letter Counting, Task 2 - Slider, Task 3 - Stroop
Ni ipi ilikua ngumu zaidi?
Shughuli 1- Letter counting, Shughuli 2- Slider, Shughuli 3- Stroop

[Next Screen]

Which did you find the least difficult?
Task 1 - Letter Counting, Task 2 - Slider, Task 3 - Stroop
Ni ipi ilikua na urahisi kidogo?
Shughuli 1- letter counting, Shughuli 2- slider, Shughuli 3- stroop

[Next Screen]

Soon, you will be asked to complete one of these tasks in order to earn money for your team. You will have 10 minutes to complete as many of the task as you can. The money you earn will depend on how many tasks you complete as a team during the time allotted.

If given the choice, which of these tasks would you most prefer to perform today?

Utaelezwa kukamilisha mojawapo ya shughuli hizo ili team yako iweze kupata pesa. Utakuwa na dakika 10 ili kukamilisha shughuli nyingi uwezavyo. Pesa utakazo pata itategema ni shughuli ngapi mliweza kukamilisha kama team kwa muda mulio pewa.
Ikiwa ungepewa nafasi ya kuchagua, ni shughuli ipi kati ya hizi ambayo ungefanya leo?

Task 1 - Letter Counting, Task 2 - Slider, Task 3 - Stroop

Shughuli 1- Letter counting, Shughuli 2- Slider, Shughuli 3- Stroop

RUN 06_Group Assignment.ztt

Now we will break into teams of 5 people each, and each team will meet in a side room for further instructions. Your team number will appear on the screen. When I call your number, please come forward to meet with your team. Press continue button to see your team number.

Sasa mtagawanyika katika team ya watu 5, na kila team ita kutana kwenyewe chumba kilicho kando ili kupokea maelezo zaidi. Utaona nambari ya team yako kwenyewe skrini yako. Nikiita nambari yako, tafadhali kuja mbele upatane na team yako.

Tafadhali bonyeza continue ili kuona nambari ya team yako.

You have been assigned to team number : ______

Please remember your team number, and wait until your team number is called.

Umewekwa katika team nambari : ______

Tafadhali kumbuka nambari yako ya team, na usubiri hadi nambari ya team yako itakapo itwa.

[There should be no Continue button on this screen -- just keep the team number on the screen until groups have been organized, and then end the ztree file manually.]

[Remind them to wear their namecards as they break out in groups. Facilitators should fill in the first page of the Qualtrics protocol before calling their group into the other room. Double-check that the people called into the room are the same who are assigned to your group according to the zTree file. At this point, participants move to different rooms calling one group at a time to avoid mix up]

IV. Task Assignment/Selection (varies by treatment group)
[According to selections/assignment for each team, the lab lead must now manually enter in the tasks for each team BEFORE running the zTree file. You will have to go into the zTree file and edit the first subjects.do program. Where you see “AssignedTask = 0;”]

// Assign Tasks Here:

// If Letter Counting Task: AssignedTask == 1
// If Sliders Task: AssignedTask == 2
// If Stroop Task: AssignedTask == 3

AssignedTask = 999 // Leave this

if (Group == 1) {
    AssignedTask = 0; // change
}
else if (Group==2) {
    AssignedTask = 0; // change
}
else if (Group==3) {
    AssignedTask = 0; // change
}
else if (Group==4) {
    AssignedTask = 0; // change
}

RUN 07_Task Assignment.ztt
When everyone is seated once again. Make sure they seat on their earlier seat numbers

Confirm that you have selected the correct treatment group in zTree, as it was assigned to this session.

Now you will see on the screen the task that your team will complete based on earlier decisions.

Sasa utaona shughuli ambayo team yako itakamilisha kulingana na maamuzi ya hapo awali.

Press the continue button to see the task.

Tafadhali bonyeza continue ili kuona shughuli.

[If the session is the VOTE or CONSENSUS treatment, screen should display:]

Your group members have decided to do:
Team yako ime amua kufanya shughuli ya:
Task ______

[If the session is the CONTROL group, screen should display:]

Your team has been assigned to do:
Team yako ime chaguliwa kufanya Shughuli ya:
Task ______

V. Explanation of Public Goods Game & Comprehension Questions

RUN 08_PG Instructions and Comprehension Questions.ztt

Now each of you will be asked to perform the task chosen for your team. For each point you earn, your team will earn 5 shillings. The better you perform on the task, the more money your team will earn. The money earned by your team will then be distributed evenly among the team members, regardless of how well individual members performed.

Sasa kila mmoja wenyu ataulizwa kufanya shughuli zilichaguliwa team yako. Team yako itapata shillingi 5 Kwa kila point utakazo pata. Vile utakavyo fanya vyema katika shughuli hizi, ndivyo team yako itakavyo pata
pesa zaidi. Pesa mtakazo pata kwenye team itagawanywa visawasawa kati ya washiriki kwenye team, bila kujali kila mmoja alivyo fanya.

Your performance on this task will be completely anonymous. Your team members will not know how well or how badly you performed. Even if you fail to complete any tasks correctly (or if you decide not to complete any tasks at all), you will receive an equal share of what was earned by the team as a whole.

Hakuna atakaye julishwa ulivyofanya katika shughuli hii. Washiriki wenzako hawatajua kama ulifanya vyema au vibaya. Hata kama hautafanya shughuli yoyote vyema au kuama kutofanya shughuli hizo kabisa, utapata mgawo sawa kutoka kwa pesa zilizopatwa na team kwa jumla.

If you have any questions, please raise your hand and an experimenter will come to you.

kama una swali lolote, tafadhali inua mkono na msaidizi wa utafiti atakuja kwako.

On the next screen, we will ask you some questions to make sure you have understood the rules.

Kwa skrini ifuatayo, tutakuuliza maswali kuhakikisha umeelewa maelezo.

Comprehension Questions

Now we will ask you some questions to ensure that you’ve understood the instructions.

Sasa tutakuuliza maswali ili kuhakikisha umeelewa maelezo.

Once you have answered each question, press confirm to check whether your answer is correct. Then press continue to move on to the next question.

Ukikamilisha kujibu maswali, tafadhali bonyeza confirm kudhibitisha kama jibu lako liko sawa. Kisha bonyeza continue kuenda kwa swali lifuatalo.

Press Continue to start.

Bonyeza “Continue” ili kuanza.

For each task you complete correctly, you will earn 5 shillings. This money…

● is paid out to you individually.
● is paid to your team as a group.

Kwa kila shughuli utakayo kamilisha sahihi, utapata shillingi 5. Pesa hii.

● Ina lipwa kwako kibinafsi
● Ina lipwa kwa team yako kama kikundi

Remember that the total money your team earns will be divided evenly amongst the five team Members. If your team earns a total of 500 shillings, how much money will you receive?
Kumbuka jumla ya pesa mtakazopata kama team itagawanywa kwa usawa kati ya washiriki 5 kwenye team. Ikiwa team yako itapata jumla ya shilingi 500, je, wewe utapokea pesa ngapi?

- 500 shillings
- 250 shillings
- 100 shillings

TRUE or FALSE: After the task is completed, you will be able to see which members of your team completed the most tasks.

UKWELI au UONGO: Baada ya kukamilisha shughuli, utaweza kuona waliokamilisha shughuli nyingi zaidi.

- TRUE UKWELI
- FALSE UONGO

TRUE or FALSE: Even if you don’t bother to complete any tasks, you will still receive an equal share of what the team earns as a whole.

UKWELI au UONGO: Hata kama hautashughulika kukamilisha kazi yoyote, utapata bado mgawo sawa wa kile team inapata kwa ujumla.

- TRUE UKWELI
- FALSE UONGO

VI. Effort Task

Now, please guess how well your team will perform on this task.

Sasa, tafadhali fikiria  jinsi team yako itafanya kwa  shughuli hii.

There are five members on your team and each will have 10 minutes to complete tasks. Please guess how many points your team will earn (in total, including the performance of all five team members) during this 10 minute period.

Kuna watu watano kwenye team yako na kila mmoja atakuwa na dakika 10 ya kukamilisha shughuli. Tafadhali unadhani team yako itapata pointi ngapi (kwa jumla, ikiwa ni pamoja na utendakazi wa watu wote kwenye team) kwa hiki kipindi cha dakika 10.
If you guess your team’s performance correctly (within +/- 5), you will get paid 50 Shillings extra.

Iwapo utaguess utendakazi wa team visahii ( kati ya +/- 5 ) utalipwa shillingi 50 zaidi.

10. Effort tasks introduction

[Remind participants of the instructions for the task they have been assigned and give them a chance to ask questions.]

Your team will be playing the task being shown on the screen. The instructions will appear on the following screen. We will go over the instructions once more. Press “Continue-button”.

Team yako ita fanya shughuli inayo onyeshwa kwene yskrini. Maelezo yataonekana kwene yskrini inayofuata. Tuta pitia maelezo mara nyingine tena. Bonyeza “Continue-button”.

[Lead to go over instructions for each of the three tasks. Instructions will appear on individual screens depending on the task selected]

If your team will be playing the **Letter Counting Task**, you will be asked to count the number of times letter “A” occurs in a sentence.

Ikiwa team yako itafanya shughuli ya **Letter Counting**, utaulizwa kuhesabu ni mara ngapi herufi "A" inapatikana kwa sentensi.

Try to correctly count the number of letter “A” in as many sentences as you can within the allotted time.

Jaribu kuhesabu visawasawa herufi “A” ni ngapi katika sentensi nyingi iwezekanavyo kwa muda uliyo pewa.

If your team will be playing the **Sliders Task**, you will be asked to move a slider to match the goal number given to you.

Ikiwa team yako itafanya shughuli ya slider, utaulizwa kusongesha slider ili ifanane na nambari ya goal uliyo pewa.

Try to correctly match the number to the goal as many times as you can within the time allotted.

Jaribu kufananisha sliders nyingi iwezekanavyo kwa muda uliyo pewa.

If your team will be playing the **Stroop Task**, you will see an arrow on the screen.

Ikiwa team yako itafanya shughuli ya **Stroop**, utaona mshale kwene yskrini yako.
When the arrow is red, touch the green rectangle to the side of the screen that the arrow points to. For example, if the arrow points to the left, then you would click on the green rectangle on the left of the screen.

Mshale ukiwa red, guza sanduku ya green upande ule mshale una angalia. Kwa mfano, ikiwa mshale unaangalia kushoto, unapaswa kuguza sanduku ya green iliyo upande wa kushoto wa skirini yako.

When the arrow is blue, touch the green rectangle to the opposite side of the screen (NOT the side that the arrow points to). For example, if the arrow is blue and points to the left, then you would touch the green rectangle on the right side of the screen since it is opposite.

Mshale ukiwa blue, guza sanduku ya green upande wa sinyume ya kule ina angalia (sio upande ule mshale inaangalia) kwa mfano, ikiwa mshale ni wa blue na una angalia kushoto, basi, unapaswa kuguza sanduku ya green iliyo upande wa kulia wa skirini yako, kwa vile ndiyo opposite.

Remember, a full set consists of four arrows, and you must complete all four correctly to earn one point for the set.

Kumbuka, seti nzima ina mishale nne, na lazima ukamilishe zote nne visawa ili kupata pointi moja kwa hiyo seti.

You should hold your hands on each side of the screen near the green rectangles to allow yourself to make answers as fast as possible.

Unapaswa kuweka mikono yako miwili karibu na visanduku vya green ili kukuruhusu kujibu haraka iwezekanavyo.

Do you have any questions?

Je una swali lolote?

When you are ready to begin, please press “Continue”.

Ukiwa tayari tafadhali bonyeza “continue”

[Next Screen]

"Nobody is required to do the task, and so we will now provide some activities to do and a short story to read in case you prefer not to participate. But, as a reminder, if you do not do the task, your team will earn less money. You will also be able to take the activity sheet and short story home with you at the end of the day."
Hakuna ambaye anatarajiwa kufanya shughuli hizi, kwa hivyo utawekewa shughuli zingine za kufanya na hadithi fupi ya kusoma ikiwa ungingendera kuto shiriki. Lakini, kukumbusha, ikiwa hautafanya shughuli za team, team yako itapata pesa kidogo. Utaweza pia kubeba nyumbani karatasi ya shughuli na hadithi mwisho wa utafiti.

[Next Screen]

For the next task, you will be playing as a team, you will now have 10 minutes to complete as many tasks as you can. The more tasks you complete, the more money you will earn for your team. The timer will start as soon as all of your team members have clicked “Continue”.

Kwa shughuli inayo fuata mutakuwa munacheza kama team, Mutakuwa na dakika 10 ya kukamilisha shughuli nyingi iwezekanavyo. Mutapata pesa nyingi kwa kukamilisha shughuli nyingi iwezekanavyo. Saa itaanza kujihesabu pindi tu utakapo bonyeza “continue”

11. Effort tasks

[Games start]

[After 10 minutes]

Announcement of Results

Now you will see on your screen how well you performed on the task, how much money you earned for the team, how much money the team earned as a whole, and how much money you will take home as your share.

Sasa utaona ulivyofanya katika shughuli na upata pesa ngapi ya team, ni pesa ngapi upata kutoka kwa team kwa ujumla, na ni pesa ngapi zako utakazo enda nazo nyumbani.

Total number of points you earned for the team =

Points ambazo umepata binafsi =

Total number of points earned by all members of your team =

Points ambazo mumepata kwa team yako kwa ujumla =
Total team earnings = 
Pesa yote kwa ujumla ya team =

Your share of the team earnings = 
Pesa yako kutoka kwa team =

Your earnings for correctly guessing your team’s performance = 
Pesa yako kwa kujibu visawa unavyo dhania team yako ilifanya shughuli.

VII. Post-Treatment Survey:

Now we would like to see if your opinion of this task has changed now that you’ve had more experience with it.

Sasa tungependa kukuuliza maswali ili kuona kama maoni yako ya shughuli hii imebadilika vile sasa umekuwa na uzoefu zaidi.

[Next Screen]

Please rate the task you completed in terms of your own enjoyment. (1 being not enjoyable at all, 5 being very enjoyable)

Tafadhali elezea ni kwa kiwango gani ulifurahishwa na shughuli ulizo kamilisha(1 ikiwa hauja furashishwa kabisa na 5 ikiwa ume furahishwa sana)

Task (will depend on the task they just played as team)

1 – very much disliked the task
1 -- siku furahishwa sana na shughuli
2 -- somewhat disliked the task
2 -- siku furahishwa kiasi na shughuli
3 – neither liked nor disliked the task
3 -- Katikati
4- somewhat enjoyed the task
4 -- Nili furahishwa kiasi na shughuli
5 -- very much enjoyed the task
5 -- Nili furahishwa sana na shughuli.

[Next Screen]

Now, please rank the following tasks in terms of enjoyment.
Tafadhali “rank” kulingana na vile ulifurahishwa na shughli zifuatazo.

Which is the most enjoyable?
Ni ipi ili kufurahisha sana?
Task 1 - Counting Task 2 - Slider 3 - Stroop

[Next Screen]

[Now only the two remaining tasks -- not selected in the previous question -- should appear as options]

Which is the least enjoyable?
Ni ipi haiku kufurahisha?
Task 1 - Counting Task 2 - Colors Task 3 - Sliders

[Next Screen]

Please rate the task you completed in terms of difficulty. (1 being very easy, 5 being very difficult)
Tafadhali elezea ni kwa kiwango kipi shughuli uliyo kamilisha ilikuwa ngumu kwako. (1.ikiwa rahisi sana , 5 ikiwa ngumu sana)
Task (will depend on the task they just played as team)
very easy, somewhat easy, not easy nor difficult, somewhat difficult, very difficult
Rahisi sana, rahisi kiasi, katikati, ngumu kiasi, ngumu sana.

[Next Screen]
Please rank the tasks in terms of difficulty.
Sasa tafadhali, “rank” shughuli zifuatazo kulingana na ugumu.

Which is the most difficult?
Ni ipi iliyo ngumu zaidi?
Task 1 - Counting Task 2 - Colors Task 3 - Sliders

[Next Screen]
[Now only the two remaining tasks -- not selected in the previous question -- should appear as options]

Which is the least difficult?
Ni ipi ilikuwa rahisi?
Task 1 - Counting Task 2 - Colors Task 3 - Sliders

[Next Screen]
If you could participate in this experiment again, which of these tasks would you want to perform?
Ikiwa unge shiriki tena katika utafiti huu, unge pendelea kufanya shughuli ipi?
Task 1 - Counting Task 2 - Colors Task 3 - Sliders

[Next Screen]
There were three tasks presented to you earlier, but only one was chosen for your team. How much did you
AGREE with the final decision?
Kulikuwa na shughuli tatu ambazo ulipewa mwanzoni, lakini moja tu ndiyo iliyo chaguliwa kwa team yako. MuliKUBALIANA kwa kiwango gani na maamuzi ya mwisho?
Completely disagree, partly disagree, neither agree nor disagree, partly agree, completely agree
Kutokubaliana kabisa, Kutokubaliana kiasi, Katikati, Kukubaliana kiasi, Kukubaliana kabisa

There were three tasks presented to you earlier, but only one was chosen for your team. How FAIR do you think the decision was to choose a task for your team?
Kulikuwa na shughuli tatu ambazo ulipewa mwanzoni, lakini moja tu ndiyo iliyo chaguliwa kwa team yako. Unadhani kuchaguliwa shughuli kwa team yako ulikuwa wa HAKI kwa kiwango gani?

Completely unfair, partly unfair, neutral: neither fair nor unfair, partly fair, completely fair
Si wa haki kabisa, si wa haki kiasi, katikati, wa haki kiasi, wa haki kabisa.

[Next Screen]

[This question should appear for all treatment groups, but NOT the control group:]

How much did you feel that you were able to have an influence on the decision-making process?
Ulihisi uliweza kuwa na ushawishi wa kiwango gani katika maamuzi?
   Not at all, A little bit, Somewhat, Very much
   Hakuna kabisa, kidogo kiasi, kiasi flani, sana kabisa

[Next Screen]

[This question should appear for all treatment groups (1-4), but NOT the control group:]

Did you feel that everyone’s opinion was equally important in the decision-making process?
Je, uli hisi maoni ya kila mtu ilikuwa muhimu katika maamuzi?
   No   Yes
   Hapana ndiyo

[Next Screen]

[This question should only appear for the consensus/deliberation groups (Treatment 3 & 4):]
Did you feel that people listened to your individual opinion during the discussion to select a task for your team?  
No  Yes

Je uli hisi watu wali sikiza maoni yako binafsi wakati wa majadiliano ya kuchagua shughuli kwa team yako?  
Hapana Ndiyo.

If Yes to previous question →

Did you feel that everyone’s voice was heard during the discussion to select a task for your team?  
No  Yes

Je , ulihisi kila mmoja ali sikizwa wakati wa majadiliano ya kuchagua shughuli kwa team yako?  
Hapana Ndiyo.

If No to either of two previous questions →

Did you feel that there was one person who dominated the discussion and had excessive influence on the outcome relative to others?  
No  Yes

Je, ulihisi ya kwamba kuna mtu mmoja aliye tawala majadiliano hayo na alikuwa na ushawishi mkubwa kwa matokco akilinganishwa na wengine?  
Hapana Ndiyo

[End File]

Now you will have one more chance to contribute to your team pot. You will each be given an additional 100 shillings. You can choose to keep this money for yourself, or contribute any amount between 0 and 100 to your team fund. Any amount that is contributed to your team fund will be multiplied by 3 and then distributed evenly amongst all of the team members.

Sasa utakuwa na nafasi moja zaidi ya kuchanga pesa kwenye kikapu cha team. Kila mmoja ataongezewa shillingi 100. Unaweza chagua kujiweka pesa hizi,ama kuchanga kiwango chochote kati ya 0 na 100 kwenye kikapu cha team. Kiwango chochote kitakacho changwa kwenye kikapu cha team yako, kitaongezeka mara tatu kisha kugawiwa kila mmoja viswasawa kwenye team.

[Next Screen]

Comprehension Questions

First, we will ask you some questions to ensure that you’ve understood the instructions.
Mwanzo, tutakuuliza maswali ili kuhakikisha umelewa maelezo.

Remember that the total amount contributed to the group fund will be multiplied by 3 and then divided amongst the 5 team members.

Kumbuka yakuwa pesa zote zitakazo kuwa zimechangwa katika kikapu cha team kita ongezeka mara 3 kisha kugawiwa kila mmoja wa watu 5 kwenye team.

[Next Screen]

We will do the first one together as an example.

Tutafanya ya kwanza kama mfano kwa pamoja

If you contribute all 100 shillings to the group fund, and nobody else contributes anything (meaning the total amount of money contributed to the group fund is 100 shillings), how much money will you earn?*

Iwapo uta changa pesa yote shilling 100 kwenye kikapu cha team, na hakuna mtu yeyote mwingine atakaye changa chochote (ku maanisha pesa yote itakayo changwa kwa kikapu cha team ni shillingi 100), utapata pesa ngapi?

0 shillings

  ● 60 shillings  [Correct answer]
  ● 100 shillings
  ● 300 shillings

So, since you have contributed 100 shillings but nobody else has contributed, the total amount going into the group fund is 100 shillings. That amount will be multiplied by 3, meaning that the group fund generates 300 shillings in total. Then that money will be divided equally across the 5 team members. 300 divided amongst 5 is 60 shillings. And since you didn’t keep anything for yourself, your total earnings in this period will be 60 shillings.

So, please select the answer that says 60 shillings.

Kwa vile uli changa 100 na hakuna yeyote mwingine aliyechanga isipokuwa wewe, pesa zote kwa jumla zilizo kwa kikapu cha team ni shillingi 100. Pesa hizo zita ongezeka mara 3, ku maanisha kikapu hicho kita kuwa na shillingi 300 kwa jumla. Kisha pesa hizo zita gawiwa visawa watu 5 kwenye team. 300 iki gawiwa watu 5 itakuwa shilingi 60. Na kwa vile haukuwa umejibakishia chochote, pesa zako zote kwa jumla kwa kipindi hiki itakuwa shilingi 60.

So, please select the answer that says 60 shillings.

Kwa hivyo tafadhali chagua jibu lililo andikwa shilingi 60 Sasa bonyeza continue ili kuendelea

[Next Screen]
If you contribute all 100 shillings to the group fund, and every other member of your team does as well (meaning the total amount of money contributed to the group fund is 500 shillings), how much money will you earn?

Iwapo uta changa shilingi 100 kwa kikapu cha team, na kila mtu kwenywe team pia achange 100 (kuanisha pesa zote kwa jumla kwenywe kikapu cha team ni shilingi 500) Ni pesa ngapi uatapata?

- 100 shillings
- 300 shillings [Correct answer]
- 500 shillings
- 1000 shillings

[Next Screen]

If you contribute nothing to the group fund (keeping 100 shillings for yourself) and every other member of your team also contributes nothing, how much money will you earn?

Iwapo hauta changa chochote kwa kikapu cha team,(umejiweka shilingi 100) na kila mtu mwingine kweye team yako pia achange chochote, utapokea pesa ngapi?

- 0 shillings
- 100 shillings [correct answer]
- 300 shillings
- 500 shillings

[Next Screen]

If you contribute nothing to the group fund (keeping 100 shillings for yourself) and every other member of your team contributes 100 shillings (for a total of 400 shillings contributed to the team fund), how much money will you earn?

Iwapo hauta changa chochote kwa kikapu cha team,(umejiweka shilingi 100) na kila mtu mwingine kweye team yako achange shilingi 100 (kwa jumla itakuwa shilingi 400 iliyo changwa katika kikapu cha team) utapokea pesa ngapi?

- 100 shillings
- 240 shillings
- 340 shillings [correct answer]
- 400 shillings

[Next Screen]
Remember that you can choose to contribute any amount between 0 and 100. Whatever you do not contribute, you will get to keep for yourself.

Kumbuka yakwamba unaweza chagua kuchanga idadi yoyote ya pesa kati ya 0 na 100, echochote ambacho hauta changa, itakuwa pesa yako utakayo jiwekea.

Your endowment: 100 Shillings

Umepewa: shilingi 100

How much would you like to contribute to the team pot? _____________

Unge penda kuchanga pesa ngapi katika kikapu cha team? _____________

[Next Screen]

Your contribution to the group fund:

Pesa uliyo changa katika kikapu cha team:

Sum of all contributions to the group fund:

Pesa kwa jumla iliyo kwa kikapu cha team:

Your earnings in this period:

Pesa zako binafsi katika kipindi hiki:

[Next Screen]

If you were invited back to Busara for another chance to earn money through a group activity, would you prefer to be paired with your same group from today again or to be paired with a new group?

a) I would like to be reunited with my group from today

b) I am indifferent about the group I work with

c) I would prefer to be paired with a new team

d) I would not return to Busara for another group activity

Ikiwa ningekualika tena Busara kwa nafasi nyingine ya kupata malipo kupitia shughuli za team, ungependelea kupewa team ie ile ya leo tena au team mpya?

a) Ningependa kupewa team yangu ya leo

b) Sina mapendeleo na team nitakayo pewa

c) Ningependelea kupewa team mpya

d) Singependa kurudi Busara kwa shughuli ya team.
When we asked if you would be paired with your same group again, you responded: [INSERT ANSWER FROM PREVIOUS QUESTION AS A REMINDER HERE]

Tulipo kuuliza ikiwa ungependelea kupewa team yako tena, ulijibu: [INSERT ANSWER FROM PREVIOUS QUESTION AS A REMINDER HERE]

Why did you choose the response you selected in the previous question

Kwanini ulichagua jibu ulilo chagua katika swali la awali?

___________________________________________________

[End file]

14. Final Profits

You will now see on the screen how much money you made in the entire session today. This does not include the Ksh 200 for your participation and transport (plus Ksh 50 if you have arrived on time), which you will receive separately.

Sasa utaona pesa zako ulizo pata kwa muda wote umekuwa hapa leo. Hii sio pamoja na shilingi 200 ya kushiriki na transport (na kuongeza sh 50 ikiwa uliwa ulifika mapema) ambayo utapokea kando.

This includes only the additional money you have earned throughout all of the activities you performed today. You will receive this money as an MPesa transfer to the phone number you registered with when you came in.

Hii ni pamoja na pesa zote ulizo pata kwa shughuli zote za leo. Uta pokea pesa hizi kupitia Mpesa kwa nambari uliyo tupatia.

The amount will be transferred to you within 48 hours

[Next Screen]

For guessing your rank on the practice tasks, you earned:

Kwa ku guess rank katika raundi za shughuli za jaribio, ume pata
From the randomly selected practice task, you earned:
Kutoka kwa shughuli iliyochaguliwa kwa jaribio, umepata:

For guessing your team’s performance on the main task, you earned:
Kwa ku guess utendaji wa team yako katika shughuli kuu, umepata:

Your share of the team earnings from the task:
Mgawo wako kutoka kwa mapato ya shughuli ya team:

Of the 100 shilling contribution, you kept:
Kutoka kwa mchango wa shilingi 100, ulijiwekea:

Your share of the group fund contributions:
Mgawo wako kutoka kwa mchango wa kikapu cha team:

YOUR TOTAL EARNINGS ARE:
MAPATO YAKO KWA UJUMLA:

[Next Screen]

Thank you very much for your time!
Asante sana kwa muda wako!
Appendix F – Decision Treatment Protocol (Qualtrics)

Start of Block: Basic Session Information

Q55 Name of facilitator. Please choose your own name from the drop-down list.

▼ Chebet (1) ... Other (4)

Q1 Enter the DATE of the session, month and day, below:

Q2 Month:

- June (1)
- July (2)
- August (3)
- September (4)
- October (5)

Q4 Day:

- $(Q2/ChoiceGroup/SelectedChoices) (1) ________________________________

Q109 Session

- Session Number: (1) ________________________________

Q5 Choose the treatment assignment for this session.
Make sure you have chosen the treatment that was randomly assigned to this session prior to the start of the session!

▼ Treatment 1: Majority Rule, Secret Vote (1) ... CONTROL (5)

End of Block: Basic Session Information

Start of Block: Group & Participant Codes
Q16 "First, we’d like each person to introduce themselves so that you know your teammates. When it is your turn, please state your name, and also tell us one thing about yourself, for example, where you are from or what you like to do in your spare time." "Mwanzo, tungependa kila mtu ajitambulishe ili muweze kujuana na wenye kikundi chako. Ukifikiwa, tafadhali taja jina lako, na pia tuambie jambo kukuhusu, kwa mfano, umetoka wapi, au kile unacho penda kufanya wakati haufanyi kazi." [As each person introduces themselves, enter the group number and participant codes below.]

Q6 Group number:

- 1 (4)
- 2 (5)
- 3 (6)

Q7 Enter the participant codes

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)

End of Block: Group & Participant Codes

Start of Block: PriorAcquaintance

Q17 "Did any of you know each other before arriving to the lab today?" "Kuna wale walikuwa wanajuana kabla ya kufika hapa kweye lab leo?"
Q8 [For each participant listed below, mark whether they knew any of the other participants before today's session. If yes, please fill in the code of the other participant that they knew.]

<table>
<thead>
<tr>
<th></th>
<th>NO</th>
<th>NE</th>
<th>NE</th>
<th>NE</th>
<th>NE</th>
<th>NE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

End of Block: PriorAcquaintance

Start of Block: Intro

Q18 "Today your team will have a chance to earn money by working on one of the three tasks we introduced you to earlier. Everyone on your team must perform the same task in order to earn money for the team. For each task you complete correctly, we will add 5 shillings to a team fund. At the end of 10 minutes, we will take the amount of money earned by your team in total and divide it evenly across the five team members."

"Leo, team yako itakua na nafasi ya kupata pesa kwa kufanya moja wapo ya shughuli tulizo kufahamisha hapo awali. Kila mtu kwa team yako atafanya shughuli hiyo hiyo ili kupata pesa ya team. Kwa kila shughuli utakayo kamiliki visaihi, tutaongeza shilingi 5 kwa kikapu cha team. Baada ya dakika 10, tutachukua pesa zote team yako iliipata kwa ujumla, kisha kugawiwa kilo mmoja wa washiriki watano kwenye team."

End of Block: Intro

Start of Block: CONTROL GROUP RANDOM NUMBER

Display This Question:

If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = CONTROL

Q20 Enter the following number into the box below: # ${rand://int/1:3}

- Repeat number here: (1) ________________________________

End of Block: CONTROL GROUP RANDOM NUMBER
Q19 "We have randomly selected the task that your team will work on, using a random number generator. " "Today, your group will work on Task #1: The Letter Counting Task." "Kompynuta imechagua bila mpangilio shughuli ambayo team yako itafanya." 

"Leo, team yako itafanya shughuli ya #1: The Letter Counting." Make a note to remind yourself that the task assigned to this group was LETTER COUNTING. In a moment, you will need to share this information with the main facilitator so that it can be entered into ztree!!

Q21 "We have randomly selected the task that your team will work on. "

"Today, your group will work on Task #2: The Sliders Task. "

"Kompynuta imechagua bila mpangilio shughuli ambayo team yako itafanya." 

"Leo, team yako itafanya shughuli ya #2: The Sliders." Make a note to remind yourself that the task assigned to this group was SLIDERS. In a moment, you will need to share this information with the main facilitator so that it can be entered into ztree!!

Q22 "We have randomly selected the task that your team will work on." 

"Today, your group will work on Task #3: The Stroop Task. "

"Kompynuta imechagua bila mpangilio shughuli ambayo team yako itafanya." 

"Leo, team yako itafanya shughuli ya #3: The Stroop Task." Make a note to remind yourself that the task assigned to this group was STROOP. In a moment, you will need to share this information with the main facilitator so that it can be entered into ztree!!
Display This Question:

If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 1: Majority Rule, Secret Vote

Or Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 3: Deliberation, Secret Vote

Or Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 2: Majority Rule, Public Vote

Or Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 4: Deliberation, Public Vote

Q33 “Now your team will have the opportunity to select which of the three tasks you will work on today.” "Sasa team yako itakuwa na nafasi ya kuchagua mojawapo ya shughuli hizi tatu mutakayo fanya leo."

End of Block: Choice Treatments

Display This Question:

If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 3: Deliberation, Secret Vote

Or Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 4: Deliberation, Public Vote

Q79 Enter the following number into the box below: # ${rand://int/1:5}$

Repeat number here: (1) ________________________________

End of Block: Deliberation Random Number Generator

Display This Question:

If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 3: Deliberation, Secret Vote

Or Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 4: Deliberation, Public Vote

Q10 DELIBERATION QUESTIONS

"First, I will call on each person in turn. Each person will state their preference and explain why they think the team should perform that activity. Then we will give you 10 minutes to discuss the options and come to a consensus as to what activity the group will perform. When you think you have arrived at a consensus, we will hold a vote to make sure that everyone agrees on a single task."

"Mwanzo nitaita kila mmoja kwa wakati wake. Kila mmoja atasema mapendeleo yake na kuelezea

Display This Question:

If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 3: Deliberation, Secret Vote

Or Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 4: Deliberation, Public Vote

Q80 "I will randomly choose someone to start, and then call on each person in turn to share their choice."

"Nitachagua mtu mmoja bila mpangilio wowote ili kuanzia, kisha kuita kila mmoja kwa wake wake kupeana chaguo lao."

Display This Question:

If "I will randomly choose someone to start, and then call on each person in turn to share their choice... Is Displayed
And Enter the following number into the box below: # ${rand://int/1:5} Repeat number here: Is Equal to 1

Q81 "We will begin with participant ${Q7/ChoiceTextEntryValue/1}. Please tell us which task you think the group should perform and give your reason why."

Tutaanza na mshiriki ${Q7/ChoiceTextEntryValue/1}. Tafadhali tuambie ni shughulyi ipi unafiki mnafaa kufanya kama kikundi na kisha utupe sababu yako.

Display This Question:

If "I will randomly choose someone to start, and then call on each person in turn to share their choice... Is Displayed
And Enter the following number into the box below: # ${rand://int/1:5} Repeat number here: Is Equal to 2

Q83 "We will begin with participant ${Q7/ChoiceTextEntryValue/2}. Please tell us which task you think the group should perform and give your reason why."

Tutaanza na mshiriki ${Q7/ChoiceTextEntryValue/2}. Tafadhali tuambie ni shughulyi ipi unafiki mnafaa kufanya kama kikundi na kisha utupe sababu yako.

Display This Question:

If "I will randomly choose someone to start, and then call on each person in turn to share their choice... Is Displayed
And Enter the following number into the box below: # ${rand://int/1:5} Repeat number here: Is Equal to 3

Q84 "We will begin with participant ${Q7/ChoiceTextEntryValue/3}. Please tell us which task you think the group should perform and give your reason why."

Tutaanza na mshiriki ${Q7/ChoiceTextEntryValue/3}. Tafadhali tuambie ni shughulyi ipi unafiki mnafaa kufanya kama kikundi na kisha utupe sababu yako.
Q86 "We will begin with participant ${Q7/ChoiceTextEntryValue/4}. Please tell us which task you think the group should perform and give your reason why."

Tutaanza na mshiriki ${Q7/ChoiceTextEntryValue/4}. Tafadhali tuambie ni shughuli ipi unafiki mnafaa kufanya kama kikundi na kisha utupe sababu yako.

Q87 "We will begin with participant ${Q7/ChoiceTextEntryValue/5}. Please tell us which task you think the group should perform and give your reason why."

Tutaanza na mshiriki ${Q7/ChoiceTextEntryValue/5}. Tafadhali tuambie ni shughuli ipi unafiki mnafaa kufanya kama kikundi na kisha utupe sababu yako.

Q88 [Starting from the first participant that was selected randomly, and then following the downward order of the list below, ask each participant to state his/her preference and give the reason for it.]

[Note all of their responses in the text boxes below.]

Q102 For each participant (making sure to use the right participant code), please record which task they argue for and what are the reasons they give.

<table>
<thead>
<tr>
<th>Choice of Task</th>
<th>Reasons Given</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter Counting (1)</td>
<td>Sliders (2)</td>
</tr>
</tbody>
</table>
If “I will randomly choose someone to start, and then call on each person in turn to share their cho... Is Displayed

Q89

"Now I will give you some time to discuss the options amongst yourselves and try to agree on a single choice. When you think you have arrived at a consensus, let me know and we will hold a brief vote to confirm that everyone is in agreement."

"Sasa nitawapea muda kidogo ili kujadiliana kivyenyu na mujaribu kukubaliana na chaguo moja. mutakapo ona mumefikia makubaliano, nijulishe kisha tuta piga kura ili kuhakikisha nyote mumekubaliana."

[While the group is discussing, fill in the notes below.]

[Wait until the group thinks it has reached a consensus. When they think they have reached a consensus, go to the next screen for the vote protocol.]
[If 10 minutes has gone by and they have not reached a consensus, tell them they have 5 more minutes to try to reach a consensus.]

[If 15 minutes has elapsed without the group calling for a vote, tell them that we will now take a vote to see where people stand.]

### Display This Question:

**If “I will randomly choose someone to start, and then call on each person in turn to share their choices...** Is Displayed

Q103 For each participant (making sure to use the right participant code), please record how much they spoke during the deliberative discussion.

<table>
<thead>
<tr>
<th>Participant Code</th>
<th>How much did they TALK during deliberation?</th>
<th>How much did they seem to LISTEN to others?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all (1)</td>
<td>A little bit (2)</td>
</tr>
<tr>
<td>$(Q7/ChoiceTextEntryValue/1)$</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>$(Q7/ChoiceTextEntryValue/2)$</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>$(Q7/ChoiceTextEntryValue/3)$</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>$(Q7/ChoiceTextEntryValue/4)$</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>$(Q7/ChoiceTextEntryValue/5)$</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

### Display This Question:

**If “I will randomly choose someone to start, and then call on each person in turn to share their choices...** Is Displayed

Q106 Which participant spoke the most during the deliberative discussions?

▼$(Q7/ChoiceTextEntryValue/1)$ (1) ... All spoke an equal amount (6)
Q96 Did any participant seem to dominate the discussion?

▼Yes, #${Q7/ChoiceTextEntryValue/1} dominated the discussion. (1) ... No, no participant dominated the discussion. (6)

Q107 Did you feel that each participant's voice was heard?

- No (1)
- Yes (2)

Q108 How much did the participants try to persuade each other using arguments about the good of the group, as opposed to individual preferences?

- Mostly talked about personal preferences (I/Me/My) (1)
- Talked equally about personal preferences and the good of the group (2)
- Mostly talked about the good of the group (We/Us/Our) (3)

End of Block: Notes on Deliberation

Start of Block: PUBLIC VOTE BLOCK

Q56 "You will decide on a task using a vote by show of hands."

"Muta amua shughuli kwa kura ya kuinua mkono." "When I call out the name of each task, raise your hand if you would like to vote for it." "Nikitaja jina la kila shughuli, inua mkono wako ikiwa ungependa kuipigia kura."

"Please vote for one activity and one activity only. The activity that receives a majority vote from your team will be the activity that you will all work on in order to have a chance to earn more money for the team."
"Tafadhali pigia kura shughuli moja tu. Shughuli itakayo pokea kura nyingi kutoka kwa team yako, ndiyo itakayo kuwa shughuli mutakayoifanya nyote ili kupata nafasi ya kupata pesa ya team."

"How many for the Letter Counting Task?" "Wangapi kwa shughuli ya Letter Counting?" [Record who voted for the Letter Counting Task below]

"How many for the Sliders Task?" "Wangapi kwa shughuli ya Slider?" [Record who voted for the Sliders Task below]

"How many for the Stroop Task?" "Wangapi kwa shughuli ya Stoop?" [Record who voted for the Stroop Task below]

**Display This Question:**

*If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 4: Deliberation, Public Vote*

Q57 "Now we will confirm that there is consensus over the task selection using a vote by show of hands." "Sasa tutahakikisha kuwa kumekua na makubaliano katika shughuli itakayo fanywa kwa kupiga kura kwa kuinua mkono." "When I call out the name of each task, raise your hand if you would like to vote for it." "Nikitaja jina la kila shughuli, inua mkono wako ikiwa ungependa kuipigia kura.

"Please vote for one activity and one activity only. The activity that receives all five votes from your team will be the activity that you will all work on in order to have a chance to earn more money for the team." "Tafadhali pigia kura shughuli moja tu. Shughuli itakayo pokea kura zote tano kutoka kwa team yako, ndiyo itakayo kuwa shughuli mutakayoifanya nyote ili kupata nafasi ya kupata pesa ya team."

"How many for the Letter Counting Task?" "Wangapi kwa shughuli ya Letter Counting?" [Record who voted for the Letter Counting Task below]

"How many for the Sliders Task?" "Wangapi kwa shughuli ya Slider?" [Record who voted for the Sliders Task below]

"How many for the Stroop Task?" "Wangapi kwa shughuli ya Stoop?" [Record who voted for the Stroop Task below]
Q11 PUBLIC VOTE RESULTS

<table>
<thead>
<tr>
<th></th>
<th>Letter Counting (1)</th>
<th>Sliders (2)</th>
<th>Stroop (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>${Q7/ChoiceTextEntryValue/1} (1)</td>
<td>○</td>
<td></td>
<td></td>
</tr>
<tr>
<td>${Q7/ChoiceTextEntryValue/2} (2)</td>
<td>○</td>
<td></td>
<td></td>
</tr>
<tr>
<td>${Q7/ChoiceTextEntryValue/3} (3)</td>
<td>○</td>
<td></td>
<td></td>
</tr>
<tr>
<td>${Q7/ChoiceTextEntryValue/4} (4)</td>
<td>○</td>
<td></td>
<td></td>
</tr>
<tr>
<td>${Q7/ChoiceTextEntryValue/5} (5)</td>
<td>○</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

End of Block: PUBLIC VOTE BLOCK

Start of Block: PUBLIC VOTE: Vote Results Block

Q62 "By majority vote, your team has selected the Letter Counting Task. You will now have an opportunity to earn money as a team by playing the Letter Counting Task."

"Kupitia kura nyingi zilizo pigwa, team yako ime chagua shughuli ya Letter Counting. Utakuwa sasa na nafasi ya kupata pesa kwa kufanya shughuli ya Letter Counting."

Q63 "By majority vote, your team has selected the Sliders Task. You will now have an opportunity to earn money as a team by playing the Sliders Task."
"Kupitia kura nyingi zilizo pigwa, team yako ime chagua shughuli ya Sliders. Utakuwa sasa na nafasi ya kupata pesa kwa kufanya shughuli ya Sliders."

Display This Question:

If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 2: Majority Rule, Public Vote
And PUBLIC VOTE RESULTS [Stroop] (Count) >= 3

Q64 "By majority vote, your team has selected the Stroop Task. You will now have an opportunity to earn money as a team by playing the Stroop Task."

"Kupitia kura nyingi zilizo pigwa, team yako ime chagua shughuli ya Stroop. Utakuwa sasa na nafasi ya kupata pesa kwa kufanya shughuli ya Stroop."

Display This Question:

If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 4: Deliberation, Public Vote
And PUBLIC VOTE RESULTS [Letter Counting] (Count) >= 5

Q65 "By full consensus, your team has selected the Letter Counting Task. You will now have an opportunity to earn money as a team by playing the Letter Counting Task."


Display This Question:

If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 4: Deliberation, Public Vote
And PUBLIC VOTE RESULTS [Sliders] (Count) >= 5

Q66 "By full consensus, your team has selected the Sliders Task. You will now have an opportunity to earn money as a team by playing the Sliders Task."

"Kupitia makubaliano kamili, team yako ime chagua shughuli ya Sliders. Utakuwa sasa na nafasi ya kupata pesa kwa kufanya shughuli ya Sliders."

Display This Question:

If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 4: Deliberation, Public Vote
And PUBLIC VOTE RESULTS [Stroop] (Count) >= 5

Q67 "By full consensus, your team has selected the Stroop Task. You will now have an opportunity to earn money as a team by playing the Stroop Task."

70
"Kupitia makubaliano kamili, team yako ime chagua shughuli ya Stroop. Utakuwa sasa na nafasi ya kupata pesa kwa kufanya shughuli ya Stroop."

End of Block: PUBLIC VOTE: Vote Results Block

Start of Block: Public Vote Round 2

Display This Question:

If PUBLIC VOTE RESULTS [ Letter Counting] (Count) < 3
And PUBLIC VOTE RESULTS [ Sliders] (Count) < 3
And PUBLIC VOTE RESULTS [ Stroop] (Count) < 3
And Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 2: Majority Rule, Public Vote

Q25 [THERE IS NO MAJORITY IN PUBLIC VOTE ]

"Since no choice received a majority of the votes, we will do one more round of voting, but this time we will eliminate the option that received the fewest votes in the first vote."

"Kwa vile hakuna shughuli iliyo pokea kura nyingi zaidi,tutafanya raundi nyingine ya kupiga kura, lakini sasa, tuta ondoa shughuli ambayo ilikua na kura chache Zaidi katika kura ya kwanza."

"When I call out the name of each task, raise your hand if you would like to vote for it." "Nikitaja jina la kila shughuli,inua mkono wako ikiwa ungependa kuipigia kura."

"Please vote for one activity and one activity only. The activity that receives a majority vote from your team will be the activity that you will all work on in order to have a chance to earn more money for the team." "Tafadhali pigia kura shughuli moja tu. Shughuli itakayo pokea kura nyingi kutoka kwa team yako,ndiyo itakayo kuwa shughuli mutakayoifanya nyote ili kupata nafasi ya kupata pesa ya team."

[Only read out the two tasks that were tied -- do not read out the question about the task that received the fewest votes in Round 1.]

Display This Question:

If PUBLIC VOTE RESULTS [ Letter Counting] (Count) < 3
And PUBLIC VOTE RESULTS [ Sliders] (Count) < 3
And PUBLIC VOTE RESULTS [ Stroop] (Count) < 3
And PUBLIC VOTE RESULTS [ Letter Counting] (Count) <= 1
And Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 2: Majority Rule, Public Vote

Q115
"How many for the Sliders Task?" "Wangapi kwa shughuli ya Sliders ?" [Record who voted for the Sliders Task below]

"How many for the Stroop Task?" "Wangapi kwa shughuli ya Stroop ?" [Record who voted for the Stroop Task below]
If PUBLIC VOTE RESULTS [Letter Counting] (Count) < 3
And PUBLIC VOTE RESULTS [Sliders] (Count) < 3
And PUBLIC VOTE RESULTS [Stroop] (Count) < 3
And PUBLIC VOTE RESULTS [Sliders] (Count) <= 1
And Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment

Q116
"How many for the Letter Counting Task?"  
"Wangapi kwa shughuli ya Letter Counting ?"  
[Record who voted for the Letter Counting Task below]  
"How many for the Stroop Task?"  
"Wangapi kwa shughuli ya Stroop ?"  
[Record who voted for the Stroop Task below]

If PUBLIC VOTE RESULTS [Letter Counting] (Count) < 3
And PUBLIC VOTE RESULTS [Sliders] (Count) < 3
And PUBLIC VOTE RESULTS [Stroop] (Count) <= 1
And Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment

Q117
"How many for the Letter Counting Task?"  
"Wangapi kwa shughuli ya Letter Counting ?"  
[Record who voted for the Letter Counting Task below]  
"How many for the Sliders Task?"  
"Wangapi kwa shughuli ya Sliders ?"  
[Record who voted for the Sliders Task below]

Q68 [THERE IS NO CONSENSUS IN PUBLIC VOTE]

"Since no choice received all of the votes, we will give you some more time to discuss and arrive at a true consensus, and then we will do another round of voting. It is very important that all team members are in agreement about the task that they will perform."
"Kwa vile hakuna shughuli iliyo pokea kura zote, tutawapa muda zaidi kujadiliana na kufikia makubaliano ya ukweli, kisha tutafanya raundi nyingine ya kupiga kura. Ni muhimu kila mmoja kwenye team akubaliane na shughuli ambayo mutafanya."

[Before you re-do the vote, allow them to discuss the choices again until either they have come to a true consensus or a total of 20 minutes has passed since the first deliberation began.]

"When I call out the name of each task, raise your hand if you would like to vote for it." "Nikitaja jina la kila shughuli, inua mkono wako ikiwa ungependa kuipigia kura." "Please vote for one activity and one activity only. The activity that receives all five votes from your team will be the activity that you will all work on in order to have a chance to earn more money for the team."

"Tafadhali pigia kura shughuli moja tu. Shughuli itakayo pokea kura zote tano kutoka kwa team yako, ndiyo itakayo kuwa shughuli mutakayoifanya nyote ili kupata nafasi ya kupata pesa ya team."

"How many for the Letter Counting Task?" "Wangapi kwa shughuli ya Letter Counting?" [Record who voted for the Letter Counting Task below]

"How many for the Sliders Task?" "Wangapi kwa shughuli ya Slider?" [Record who voted for the Sliders Task below]

"How many for the Stroop Task?" "Wangapi kwa shughuli ya Stroop?" [Record who voted for the Stroop Task below]

[Do not proceed unless either (1) the team has reached a true consensus or (2) 20 minutes has passed and the team has achieved a majority vote.]
Q69 PUBLIC VOTE RESULTS

<table>
<thead>
<tr>
<th></th>
<th>Letter Counting (1)</th>
<th>Sliders (2)</th>
<th>Stroop (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>${Q7/ChoiceTextEntryValue/1} (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>${Q7/ChoiceTextEntryValue/2} (2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>${Q7/ChoiceTextEntryValue/3} (3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>${Q7/ChoiceTextEntryValue/4} (4)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>${Q7/ChoiceTextEntryValue/5} (5)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

End of Block: Public Vote Round 2

Start of Block: PublicVoteResults2

Display This Question:
If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 2: Majority Rule, Public Vote
And PUBLIC VOTE RESULTS [ Letter Counting] (Count) >= 3

Q71 "By majority vote, your team has selected the Letter Counting Task. You will now have an opportunity to earn money as a team by playing the Letter Counting Task."


Display This Question:
If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 2: Majority Rule, Public Vote
And PUBLIC VOTE RESULTS [ Sliders] (Count) >= 3

Q72 "By majority vote, your team has selected the Sliders Task. You will now have an opportunity to earn money as a team by playing the Sliders Task."

"Kupitia kura nyingi zilizo pigwa , team yako ime chagua shughuli ya Sliders. Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya Sliders."
Q73 "By majority vote, your team has selected the Stroop Task. You will now have an opportunity to earn money as a team by playing the Stroop Task."

"Kupitia kura nyingi zilizo pigwa, team yako ime chagua shughuli ya Stroop. Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya Stroop."

Q118 ERROR! There is still no majority vote, which is impossible if you dropped the least popular task from the first round of voting. Hit the back button and re-do the voting, this time following the proper procedure. Do not include the lowest ranked task in the second round of voting. This should guarantee that there is a single task with a majority (at least 3) of the votes.

Q74 "By full consensus, your team has selected the Letter Counting Task. You will now have an opportunity to earn money as a team by playing the Letter Counting Task."


Q75 "By full consensus, your team has selected the Sliders Task. You will now have an opportunity to earn money as a team by playing the Sliders Task."

"Kupitia makubaliano kamili, team yako ime chagua shughuli ya Sliders. Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya Sliders."
Q76 "By full consensus, your team has selected the Stroop Task. You will now have an opportunity to earn money as a team by playing the Stroop Task."

"Kupitia makubaliano kamili , team yako ime chagua shughuli ya Stroop. Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya Stroop."
"So, by majority vote, your team has selected the **Sliders Task**. You will now have an opportunity to earn money as a team by playing the **Sliders Task**.

"Kwahivyo, kupitia kura nyingi zilizo pigwa, team yako ime chagua shughuli ya **Slider**. Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya **Slider**.

**Display This Question:**

**If Choose the treatment assignment for this session. Make sure you have chosen the treatment that...** = Treatment 4: Deliberation, Public Vote

**And PUBLIC VOTE RESULTS [ Letter Counting] (Count) < 5**

**And PUBLIC VOTE RESULTS [ Sliders] (Count) < 5**

**And PUBLIC VOTE RESULTS [ Stroop] (Count) < 5**

**And PUBLIC VOTE RESULTS [ Stroop] (Count) >= 3**

Q111 "Since your group has failed to reach a full consensus, but we have run out of time, we will use the majority preference."

"Kwa vile team yako imekosa kufikia makubaliano kabisa, lakini muda umeisha, tuta tumia mapendeleo ya wengi."

[Fill in the blank below with whichever task received the most votes in the latest round of voting.]

"So, by majority vote, your team has selected the **Stroop Task**. You will now have an opportunity to earn money as a team by playing the **Stroop Task**.

"Kwahivyo, kupitia kura nyingi zilizo pigwa, team yako ime chagua shughuli ya **Stroop**. Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya **Stroop**.

**End of Block: PublicVoteResults2**

**Start of Block: Secret Ballot Vote**

**Display This Question:**

**If Choose the treatment assignment for this session. Make sure you have chosen the treatment that...** = Treatment 1: Majority Rule, Secret Vote

Q36 "You will decide on a task using a vote by secret ballot." "Muta amua shughuli kwa kura ya siri." "Please vote for one activity and one activity only. The activity that receives a majority vote from your team will be the activity that you will all work on in order to have a chance to earn more money for the team." "Tafadhali pigia kura shughuli moja tu. Shughuli itakayo pokea kura nyingi kutoka kwa team yako, ndio itakayo kuwa shughuli mutakayoifanya nyote ili kupata nafasi ya kupata pesa ya team." [Pass out the ballot forms, which include a checkbox for each of the three tasks]
"Please use this ballot to privately note your preference for which task you will complete today. Please select only one of the tasks." "Tafadhali tumia kura hii kuchagua kwa siri shughuli unayo pendelea kukamilisha leo. Tafadhali chagua shughuli moja tu."

[Collect the ballot forms, privately tally up the scores.]

**Display This Question:**

- If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 3: Deliberation, Secret Vote

Q37 "Now we will confirm that there is consensus over the task selection using a vote by secret ballot." "Sasa tuta hakikisha kuwa kulikuwa na makubaliano katika uchaguzi wa shughuli kupitia kupiga kura ya siri." "Please vote for one activity and one activity only. The activity that receives all five votes from your team will be the activity that you will all work on in order to have a chance to earn more money for the team."

"Tafadhali pigia kura shughuli moja tu. Shughuli itakayo pokea kura zote tano kutoka kwa team yakondìyo itakayo kuwa shughuli mutakayoifanya nyote ili kupata na kupata pesa ya team." [Pass out the ballot forms, which include a checkbox for each of the three tasks]

"Please use this ballot to privately note your preference for which task you will complete today. Please select only one of the tasks." "Tafadhali tumia hii kwa siri ili kuchagua shughuli unayo pendelea kukamilisha leo. Tafadhali chagua moja ya shughuli hizi."

[Collect the ballot forms, privately tally up the scores.]

**Display This Question:**

- If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 1: Majority Rule, Secret Vote
- Or Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 3: Deliberation, Secret Vote

**Q12 SECRET VOTE RESULTS**
Enter the number of votes received by each task in the first round of voting.

Letter Counting : _______ (1)
Sliders : _______ (2)
Stroop : _______ (3)
Total : _______

End of Block: Secret Ballot Vote

Start of Block: SecretBallotVoteResults
If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 1: Majority Rule, Secret Vote
Or Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 3: Deliberation, Secret Vote

Display This Question:

Q31 "The vote results are as follows:

"The Letter Counting Task received \( \{Q12/ChoiceNumericEntryValue/1\} \) votes.
"The Sliders Task received \( \{Q12/ChoiceNumericEntryValue/2\} \) votes.
"The Stroop Task received \( \{Q12/ChoiceNumericEntryValue/3\} \) votes."

"Matokeo ya kura ni kama ifuatavyo:

"Shughuli ya Letter Counting imepata kura \( \{Q12/ChoiceNumericEntryValue/1\} \)."
"Shughuli ya Sliders imepata kura \( \{Q12/ChoiceNumericEntryValue/2\} \).
"Shughuli ya Stroop imepata kura \( \{Q12/ChoiceNumericEntryValue/3\} \)."

Q38 "By majority vote, your team has selected the Letter Counting Task. You will now have an opportunity to earn money as a team by playing the Letter Counting Task."


Q39 "By majority vote, your team has selected the Sliders Task. You will now have an opportunity to earn money as a team by playing the Sliders Task."

Kupitia kura nyingi zilizo pigwa, team yako ime chagua shughuli ya Slider. Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya Slider."
Q40 "By majority vote, your team has selected the Stroop Task. You will now have an opportunity to earn money as a team by playing the Stroop Task."

Kupitia kura nyingi zilizo pigwa, team yako ime chagua shughuli ya Stroop. Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya Stroop.

Q41 "By full consensus, your team has selected the Letter Counting Task. You will now have an opportunity to earn money as a team by playing the Letter Counting Task."


Q42 "By full consensus, your team has selected the Sliders Task. You will now have an opportunity to earn money as a team by playing the Sliders Task."

Kupitia makubaliano kamili, team yako ime chagua shughuli ya slider. Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya slider.

Q43 "By full consensus, your team has selected the Stroop Task. You will now have an opportunity to earn money as a team by playing the Stroop Task."

Kupitia makubaliano kamili, team yako ime chagua shughuli ya Stroop. Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya Stroop.

End of Block: SecretBallotVoteResults
Start of Block: SecretBallot Round 2

Display This Question:

If SECRET VOTE RESULTS Enter the number of votes received by each task in the first round of voting. [ Letter Counting ]
< 3
And SECRET VOTE RESULTS Enter the number of votes received by each task in the first round of voting. [ Sliders ] < 3
And SECRET VOTE RESULTS Enter the number of votes received by each task in the first round of voting. [ Stroop ] < 3
And Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 1: Majority Rule, Secret Vote

Q14
"Since no choice received a majority of the votes, we will do one more round of voting, but this time we will remove the least popular option."

Kwa vile hakuna shughuli iliyo pokea kura nyingi zaidi, tutafanya raundi nyongeza ya kupiga kura, lakini sasa, tuta ondoa shughuli ambayo ina umaarufu wa chini.

[Before you hand out the ballots, cross off the option that received the fewest votes in the first round of voting, which was: $\{(Q12/ChoiceGroup/ChoiceWithLowestValue)\}]

[Pass out the ballot forms] "Please use this ballot to privately note your preference for which task you will complete today. Please select only one of the tasks." Tafadhali tumia kura hii chagua ungependelea kukamilisha shughuli gani leo. Tafadhali chagua moja kati ya shughuli hizo. [Collect the ballot forms, privately tally up the scores.]

Display This Question:

If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 3: Deliberation, Secret Vote

And SECRET VOTE RESULTS Enter the number of votes received by each task in the first round of voting. [ Letter Counting ] < 5
And SECRET VOTE RESULTS Enter the number of votes received by each task in the first round of voting. [ Sliders ] < 5
And SECRET VOTE RESULTS Enter the number of votes received by each task in the first round of voting. [ Stroop ] < 5

Q46 "Since no choice received all of the votes, we will give you some more time to discuss and arrive at a true consensus, and then we will do another round of voting."

Kwa vile hakuna shughuli iliyo pokea kura zote, tutawapa muda zaidi kujadiliana na kufikia makubaliano ya ukweli, kisha tutafanya raundi nyongeza ya kupiga kura

[Before you hand out the ballots, allow them to discuss the choices again until either they think they are ready or a total of 15 minutes has passed since the first deliberation began.]

[Pass out the ballot forms] "Please use this ballot to privately note your preference for which task you will
complete today. Please select only one of the tasks.
Tafadhali tumia kura hii kwa siri ili kuchagua shughuli unayo pendelea kukamilsha leo. Tafadhali chagua moja ya shughuli hizi. [Collect the ballot forms, privately tally up the scores.] [Do not proceed unless either (1) the team has reached a true consensus or (2) 20 minutes has passed and the team has achieved a majority vote.]

Display This Question:
If "Since no choice received all of the votes, we will give you some more time to discuss and arrive... Is Displayed
Or "Since no choice received a majority of the votes, we will do one more round of voting, but this... Is Displayed

Q45 SECRET VOTE RESULTS
Enter the number of votes received by each task in the second round of voting.

Letter Counting : _______ (1)
Sliders : _______ (2)
Stroop : _______ (3)
Total : _______

End of Block: SecretBallot Round 2

Start of Block: SecretVote Results #2

Display This Question:
If "Since no choice received a majority of the votes, we will do one more round of voting, but this... Is Displayed
Or "Since no choice received all of the votes, we will give you some more time to discuss and arrive... Is Displayed

Q47 The second round of voting results are as follows:

"The Letter Counting Task received \${Q45/ChoiceNumericEntryValue/1} votes.
"The Sliders Task received \${Q45/ChoiceNumericEntryValue/2} votes.
"The Stroop Task received \${Q45/ChoiceNumericEntryValue/3} votes."

"Matokeo ya kura ya pili ni kama ifuatavyo:

"Shughuli ya Letter Counting imepata kura \${Q45/ChoiceNumericEntryValue/1}. "Shughuli ya Sliders imepata kura \${Q45/ChoiceNumericEntryValue/2}. "Shughuli ya Stroop imepata kura \${Q45/ChoiceNumericEntryValue/3}."
Q48 "By majority vote, your team has selected the **Letter Counting Task**. You will now have an opportunity to earn money as a team by playing the **Letter Counting Task**."

Kupitia kura nyingi zilizo pigwa, team yako ime chagua shughuli ya **Letter Counting** Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya **Letter Counting**.

---

Q49 "By majority vote, your team has selected the **Sliders Task**. You will now have an opportunity to earn money as a team by playing the **Sliders Task**."

Kupitia kura nyingi zilizo pigwa, team yako ime chagua shughuli ya **Sliders** Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya **Sliders**.

---

Q50 "By majority vote, your team has selected the **Stroop Task**. You will now have an opportunity to earn money as a team by playing the **Stroop Task**."

Kupitia kura nyingi zilizo pigwa, team yako ime chagua shughuli ya **Stroop** Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya **Stroop**.
If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 1: Majority Rule, Secret Vote
And SECRET VOTE RESULTS Enter the number of votes received by each task in the second round of voting. [Stroop] < 3
And SECRET VOTE RESULTS Enter the number of votes received by each task in the second round of voting. [Letter Counting] < 3
And SECRET VOTE RESULTS Enter the number of votes received by each task in the second round of voting. [Sliders] < 3

Q119 ERROR! There is still no majority vote, which is impossible if you dropped the least popular task from the first round of voting. Hit the back button and re-do the voting, this time following the proper procedure. Do not include the lowest ranked task in the second round of voting. This should guarantee that there is a single task with a majority (at least 3) of the votes.

Display This Question:
If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 3: Deliberation, Secret Vote
And SECRET VOTE RESULTS Enter the number of votes received by each task in the second round of voting. [Letter Counting] = 5

Q51 "By full consensus, your team has selected the Letter Counting Task. You will now have an opportunity to earn money as a team by playing the Letter Counting Task."


Display This Question:
If Choose the treatment assignment for this session. Make sure you have chosen the treatment that... = Treatment 3: Deliberation, Secret Vote
And SECRET VOTE RESULTS Enter the number of votes received by each task in the second round of voting. [Sliders] = 5

Q52 "By full consensus, your team has selected the Sliders Task. You will now have an opportunity to earn money as a team by playing the Sliders Task."

Kupitia makubaliano, team yako ime chagua shughuli ya Slider. Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya Slider.
Q53 "By full consensus, your team has selected the Stroop Task. You will now have an opportunity to earn money as a team by playing the Stroop Task."

Kupitia makubaliano, team yako ime chagua shughuli ya Stroop. Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya Stroop.

Q54 "Since your group has failed to reach a full consensus, but we have run out of time, we will use the majority preference."

Kwa vile team yako imekosa kufikia makubaliano kabisa, lakina muda umeisha, tuta tumia mapendeleo ya wengi.

"So, by majority vote, your team has selected the \{Q45/ChoiceGroup/ChoiceWithHighestValue\} task. You will now have an opportunity to earn money as a team by playing the \{Q45/ChoiceGroup/ChoiceWithHighestValue\} task."

"Kupitia kura nyingi zilizo pigwa, team yako ime chagua \{Q45/ChoiceGroup/ChoiceWithHighestValue\} task. Utakuwa sasa na nafasi ya kupata pesa kwa kwa kufanya shughuli ya \{Q45/ChoiceGroup/ChoiceWithHighestValue\} task."

End of Block: SecretVote Results #2

Start of Block: Return to Cubes

Q23 "Now you will return to your individual cubicles and await further instructions about the task. Remember that you may not speak with the other participants when you are inside the lab. Please make sure to sit in the
same cubicle as before." "Sasa tutarudi kwenye viti vyetu ndani ya Lab na kunjoja maelezo zaidi kuhusu shughuli. Kumbuka hauruhusiwi kuzungumza na washiriki wengine ukiwa ndani ya lab. Tafadhali hakikisha umeketi kwa nabari kama awali."

End of Block: Return to Cubes